The Lab
Global Innovation Lab for Climate Finance

TROPICAL RESILIENCE FUND (TREF)

INSTRUMENT ANALYSIS
OCTOBER 2025

Tropical Resilience Fund

LAB VEHICLE ANALYSIS

October 2025

The Lab identifies, develops, and launches sustainable finance vehicles that can drive billions to a low-carbon economy. The 2025 Lab cycle targets three thematic areas (mitigation, adaptation, and sustainable agriculture and food systems) and five geographic regions (Brazil, East & Southern Africa, India, Latin America & the Caribbean, and The Philippines).

AUTHORS AND ACKNOWLEDGEMENTS

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SUMMARY

The Tropical Resilience Fund (TREF) is a USD 100 million debt fund investing in early-stage nature ventures and projects across the tropical belt, building resilience to climate shocks, improving biodiversity outcomes, and improving communities' economic livelihoods. TREF meets the Global Innovation Lab for Climate Finance's 4 key criteria:

Innovative: TREF targets early-stage nature ventures in the "missing middle" financing gap through flexible debt instruments, including bridge loans, revenue-based loans, convertible loans, and ticket sizes ranging from USD 500,000 to USD 10 million. Enabled by the team's strong experience and local presence (they are the first impact investor to open an office in Belém, Brazil), TREF can reduce costs, while providing risk-tolerant capital tailored to early-stage business needs.

Actionable: TREF leverages the proven track record of the Impact Earth team. Impact Earth currently manages the Amazon Biodiversity Fund, with decades of experience deploying nature-focused investments at Mirova and Althelia Climate Fund. The Amazon Biodiversity Fund is on track to complete deployment by the end of 2025, leaving the Impact Earth team with ample pipeline to begin deploying for a second fund. TREF's structure is standard and tested, providing investors with confidence around the risk-return profile. TREF has a strong network across Latin America and Southeast Asia that supports further pipeline development.

Financially Sustainable: TREF's blended finance strategy is appropriate to de-risk investment into nature ventures and projects in emerging markets. The team will deploy a blended finance strategy of a first loss tranche and/or portfolio guarantee to de-risk investment and attract commercial investment into the fund. The fund anticipates a net 10% internal rate of return (IRR) which positions it to attract market-rate capital into its capital stack and helps prove the bankability of nature ventures and projects.

Catalytic: TREF aims to catalyze investments into nature projects, productive systems, and market catalyst businesses. With a first loss tranche of up to USD 30 million and a possible portfolio guarantee, TREF will catalyze USD 70 million in market-rate investments.

The Lab Secretariat recommends endorsing TREF based on its performance against the Lab criteria. Following Endorsement by the Lab, Impact Earth will engage with The International Climate Finance Accelerator (ICFA) to finalize legal structuring, work with the Alliance Bioversity International (CIAT) to develop the resilience scorecard and begin fundraising for a catalytic anchor investor.

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CONTEXT

Tropical ecosystems face unprecedented nature loss in part due to climate change. However, investments in nature historically fail to sufficiently account for climate risk. Consequently, financing for early- and growth-stage projects and ventures that both protect ecosystems and adapt to the impacts of climate change is needed.

Natural ecosystems are under unprecedented threat. In the past 50 years, nearly 20% of the Amazon has been deforested, and approximately 50% of Southeast Asia's tropical forests have been lost (Beuchle, 2022). This degradation accelerates climate tipping points, triggering cascading consequences for global ecosystems, human health, and economic stability.

Tropical forests in Latin America, Sub-Saharan Africa, and Southeast Asia are among the most affected (IPCC, 2022). The primary driver is unsustainable, often illegal, land-use change including agricultural expansion historically seen as essential for economic development and poverty alleviation (Benton, 2021). The health of tropical forests continues to diminish as these pressures intensify and as climate change accelerates biodiversity loss (increasing the likelihood of species extinction). At 2° Celsius of warming, the risk of large-scale ecosystem collapse increases significantly (IPCC, 2022).

There is now an urgent need for solutions that protect critical ecosystems while also supporting local economic development and improve resilience to climate impacts (IDB Invest, 2024). Although nature-positive investments have grown across Latin America and Southeast Asia over the last decade, many have not adequately accounted for climate risks. This shortfall threatens their long-term effectiveness and highlights the need to integrate resilience into investment design and implementation.

Financing Gap

A persistent financing gap limits the scale-up of nature-positive, climate-resilient solutions. While some capital is available for late-stage nature-based enterprises, early- and growth-stage ventures often face a lack of affordable and appropriately structured financing. High perceived risks, long payback periods, and relatively high transaction costs have discouraged commercial and impact investors from engaging at the early and growth stages.

The Tropical Resilience Fund (TREF)

The Tropical Resilience Fund (TREF) directly addresses this market failure by providing affordable, risk-tolerant capital to projects and enterprises that protect nature and strengthen resilience in climate vulnerable value chains. By leveraging local teams and targeting scalable solutions, TREF bridges the financing gap that has historically deterred investor engagement. It supports business models that not only deliver strong environmental outcomes but also generate meaningful economic opportunities for local communities.

DESIGN AND POSITIONING

1. INTRODUCTION TO THE VEHICLE

Debt fund investing into early and growth-stage projects and ventures in Latin America and Southeast Asia that conserve, restore, and protect biodiversity, while enhancing the resilience of investments.

1.1 **INVESTMENT THESIS:** IMPROVING AND CONSERVING THE RESILIENCE OF VALUE CHAINS, ECOSYSTEMS AND COMMUNITIES IN LATIN AMERICA AND SOUTHEAST ASIA

TREF invests in early-stage projects and ventures that conserve, restore, and protect natural ecosystems, while applying a resilience lens. The fund will primarily invest in Latin America, with a staggered expansion into Southeast Asia, and the option to later co-invest in Africa. The Fund targets a net internal rate of return (IRR) of 10% for its investors. TREF will invest in early-stage projects and ventures to address the missing middle finance gap in the nature-finance space, where there is significant capital for pilots and seed-stage, and capital for later-stage growth, but a gap in finance available for companies and projects to scale from seed to growth.

As illustrated in the Theory of Change included in the Annex below, the ultimate impact goal of TREF is to foster resilient, nature-based ventures and projects that conserve, restore, and enable the adaptive capacity of critical value chains, watersheds, vulnerable communities, and ecosystems.

TREF will deploy a variety of debt instruments— including bridge loans, revenue-based loans, and convertible notes—to provide flexible, risk-tolerant capital to ventures that otherwise cannot access capital through local financial institutions due to a lack of collateral and payback periods misaligned with the timelines of nature projects and activities. By providing technical assistance alongside these investments, TREF will improve access to capital, embed climate resilience into business models, and scale ventures and projects into the growth phase.

Geographies

TREF aims to be a global fund, investing across Latin America and Southeast Asia, with the ability to later co-invest in Africa depending on opportunities. Latin America is the primary focus, with up to 70% of funds allocated to the region including priority countries Brazil and Peru. Local teams are based in São Paulo, Belém, and Lima. Impact Earth's first fund, the Amazon Biodiversity Fund, invested in projects and businesses in the Brazilian Amazon, giving TREF an existing pipeline and relationships to rapidly deploy capital in the region. Secondary targets may include Colombia and Guyana.

TREF will then expand into its secondary geography, Southeast Asia, by allocating up to 30% of the fund. Priority countries will be Indonesia and Cambodia, with secondary targets including Viet Nam, Malaysia, Thailand, Laos, and the Philippines. Southeast Asia is a promising market given its similar risk profile and agricultural value chains to Latin America, as well as presenting strong opportunities to invest in blue carbon projects.

TREF reserves the right to co-invest in Africa, targeting countries in Africa's tropical belt with developed commodity markets such as Côte d'Ivoire, Gabon, Ghana, Kenya, Rwanda, Senegal, Tanzania, and Uganda. These would be a limited portion of the portfolio and only in cases where a trusted co-investor is leading the deal.

1.2 **VEHICLE MECHANICS:** BLENDED FUND PROVIDING BRIDGE LOANS, REVENUE-BASED LOANS, AND CONVERTIBLE DEBT TO EARLY- AND GROWTH-STAGE NATURE VENTURES

TREF is a USD 100 million closed-ended mezzanine debt fund. It provides revenue-based loans and convertible debt to early-and growth-stage ventures, as well as bridge loans to nature projects. Investment ticket sizes will range from USD 500 thousand to USD 10 million, with an average size of approximately USD 3 million. The fund will target ventures and projects typically underserved by conventional capital providers.

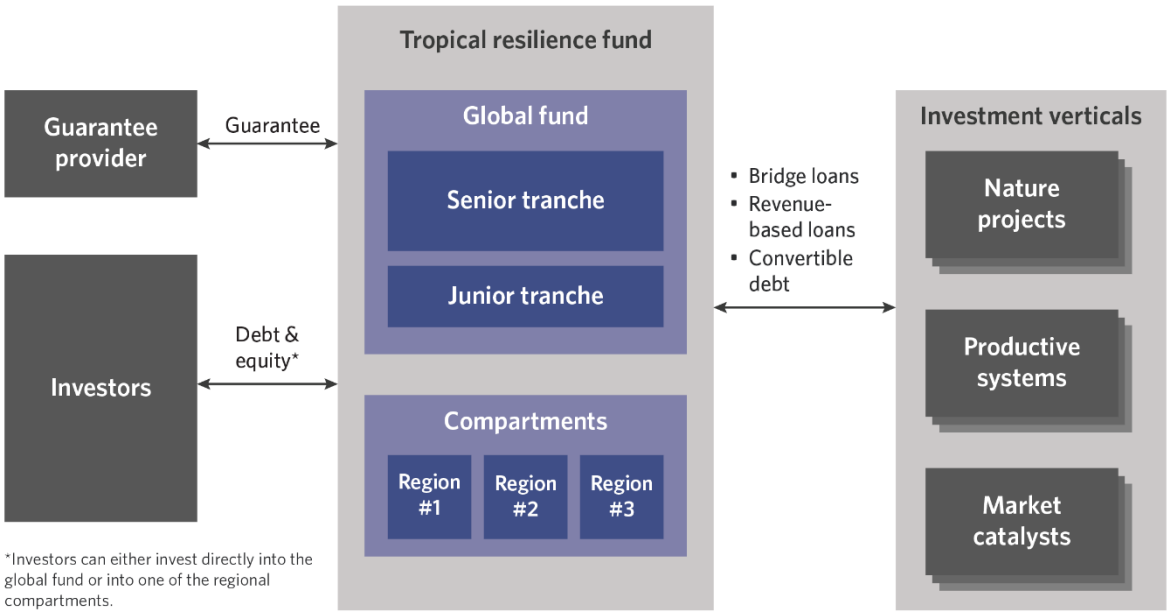
Investors may allocate capital to the global fund or through dedicated regional compartments, such as those focused on the Amazon Basin or Southeast Asian tropical forests. The fund has a 12-year term, with the option of two one-year extensions.

TREF will use a blended structure to crowd in commercial capital while managing risk. Senior tranche investors are expected to include institutional investors, development finance institutions (DFIs), and impact investors. The junior, first-loss tranche is expected to be anchored by philanthropies and governments, with the potential participation of DFIs. The anticipated capital split between senior and junior tranches is approximately 70 to 30, reflecting the structure used by the Amazon Biodiversity Fund which successfully mobilized a similar investor base.

To manage risk, TREF will rely on regional diversification, a subordinated first-loss tranche, and potentially a guarantee facility. The guarantee may apply to the entire portfolio or only to specific verticals, depending on the requirements of the senior tranche investors. Cash flows will be generated through loan repayments and equity conversions associated with the Fund's convertible debt. TREF targets a net IRR of 10% for its investors.

The Fund will be managed by Impact Earth and administered by a third-party service provider. It will likely be domiciled in Luxembourg and will operate through regional special purpose vehicles (SPVs) to facilitate local investment and regulatory compliance.

Figure 1



1.3 PIPELINE

Investment Verticals

To achieve its impact goals, TREF seeks to invest in opportunities across the nature-based solutions (NbS) sector and value chains. TREF takes a three-pronged approach to conserve, store, and enable resilient ecosystems across these value chains:

1. Nature Projects: Projects that protect ecosystems with revenues generated primarily from carbon credits as well as other payment for ecosystem service schemes. Examples of solutions that fall within this are conservation of natural ecosystems, restoration of degraded ecosystems, multifunctional resilient landscapes, and watershed management. For instance, a REDD+ project would be a potential investment. By investing in nature projects, TREF can achieve its impact goals of preserving, restoring, and increasing resilience of natural ecosystems, watersheds, and landscapes. To finance these projects, TREF will primarily deploy bridge loan instruments.

2. Productive Systems: This vertical contains businesses that sustainably produce materials and products using land- or ocean-based systems. The solution set under productive systems includes regenerative agriculture, sustainable fisheries, and innovative production systems. An example of investment could be a cacao agroforestry system operated by a company or cooperative or an aquaculture project. Regarding impact, productive systems provide enhanced food security and stable incomes to local communities, while climate resilience is strengthened and pressure on natural ecosystems, watersheds, and landscapes is reduced. Revenue-based loans and mezzanine debt will be the primary instruments used to finance this vertical.

3. Market Catalysts: This vertical consists of businesses involved in manufacturing, market access, and other enabling technologies and processes related to the value chains and investment types covered in TREF's first and second verticals. The market catalyst solution set includes crop inputs, processing, distribution, retail, smart logistics, insurance, and water management solutions. Examples include an açaí processing facility or a company designing biological inputs for coffee. Market catalysts achieve the impact objectives of bolstering the resilience of productive systems, nature projects, and communities, while unlocking economic opportunities for vulnerable communities. Instruments deployed for this vertical will include revenue-based finance and convertible loans.

TREF applies a value-chain approach, seeking investments in similar value chains across the verticals. By focusing on high-value commodities with strong reliance on nature and biodiversity, TREF aims to fill financing gaps and strengthen the resilience of these value chains, and the people and businesses that rely on them, to a range of shocks—including climate and economic. Examples of value chains that TREF will target include:

- *Carbon/forestry* – a priority value chain because of the linkage between carbon and forest/mangrove conservation and restoration. TREF will focus on high-integrity carbon projects that can sell for a premium, whether credits with large co-benefits, blue carbon, etc. Restoration and conservation projects related to carbon benefit strongly from resilience interventions. For instance, one study showed that carbon stability can be improved via resilient forest management and reduced fire severity by 78%, while increasing carbon storage by 6% at the end of a 25-year simulation (Elias et al, 2025).
- *Coffee* – a high-value commodity with increasing global demand. However, with that increasing demand, global production has increased yields via intensification and reliance on synthetic inputs (fertilizers, pesticides) which has resulted in the loss of biodiversity, shade trees, increased soil erosion, and high emissions. At the same time, coffee is highly climate vulnerable and without adequate adaptation measures. Viet Nam and Brazil could see a 40-70% reduction in land suitable for coffee growth (Gee et al, 2023). Along with this value chain, TREF could invest in agroforestry and regenerative agriculture systems that increase the resiliency of coffee farming.
- *Cacao* – Similar to coffee, cacao is another tropical commodity with high rates of deforestation and land use change related to its production. For instance, nearly a million hectares of forest have been converted into cacao farmland in Indonesia (Gusli et al, 2020). Cacao is also highly vulnerable to climate change, with droughts drastically reducing production in 2024. Opportunities for TREF investments in cacao could include integrated cacao agroforestry systems, large-scale intercropping & crop diversification, and cacao biological inputs.
- *Non-timber forest products (NTFPs)* – Products that grow naturally in forests, such as açaí, nuts, oils, and ingredients for perfumes. These are harvested and gathered without intensive agricultural management. NTFPs are critical for conservation as they are often niche, high-value products, creating alternative income sources compared to unsustainable forest practices (such as clearing land for agriculture or selling timber). TREF can invest in these value chains through supporting companies focused on market access/value addition, processing facilities, etc.

- *Rice*- An agricultural commodity expected to see growth in supply and demand. The 2024/2025 global rice production forecast is 3% higher than the previous year (USDA, 2025). Current rice production is highly intensive, due to the use of high-yielding hybrid seeds growth with chemical fertilizers. This intensification has led to depleted aquifers, reduction in the biodiversity of rice breeds planted, and high amounts of GHG emissions. Rice cultivation currently contributes to 2% of total global GHG emissions (Tubiello et al, 2021). With climate change, rice yields are expected to drop around 10% (Hasegawa et al, 2021). Potential investment opportunities for TREF could include rice production systems like alternate wetting and drying (AWD) as well as biological inputs for resilient rice, etc.
- *Fisheries* – Sustainable fisheries and aquaculture represent an additional potential value chain. These sectors are directly linked to the health of oceans and watersheds, and are highly vulnerable to climate change impacts, including ocean warming. Fisheries support coastal communities' livelihoods, especially in Southeast Asia where there are large numbers of small-scale fisheries. Additionally, more than 30% of aquaculture areas within that region are predicted to become unsuitable for production by 2050-2070. TREF can invest in sustainable fishery and aquaculture businesses and support companies that improve market access and processing opportunities for sustainably caught fish.

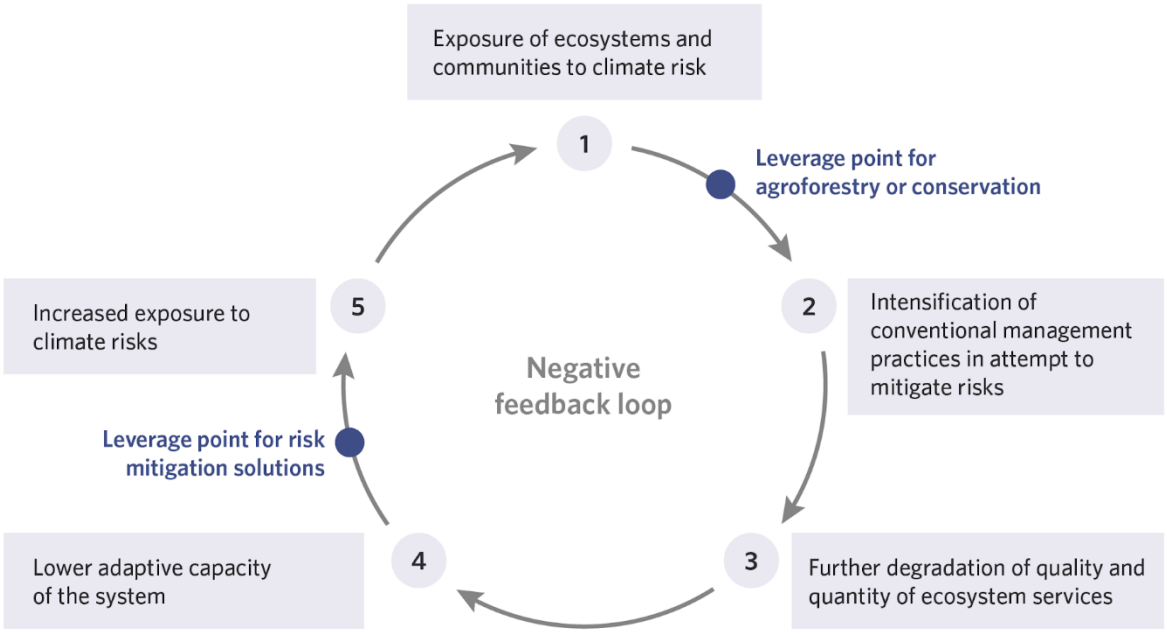
Pipeline Sourcing: Impact Earth will leverage its track record and existing relationships to source the adequate pipeline. They have an existing list of pipeline opportunities from their first fund, the Amazon Biodiversity Fund in Brazil. These opportunities are ready for investment but were not invested in due to the Fund's period of deployment coming to a close. TREF would be able to tap into this pipeline to find relevant opportunities and begin deploying capital almost immediately in Brazil. For the rest of Latin America, TREF will build pipelines through existing partnerships, with the team already engaging networks in Peru with formal partnerships to be finalized when resources allow. In Southeast Asia, TREF will source pipelines through establishing an on-the-ground presence by hiring, strengthening, and developing partnerships with incubators, accelerators, and venture studios. Similar to how Impact Earth built their pipeline when they launched ABF. For instance, TREF has an existing relationship with Terratai, a venture studio focused on nature in Southeast Asia. Impact Earth has also worked with the Restoration Seed Capital Facility which co-financed pipeline building efforts for the Amazon Biodiversity Fund.

TREF's Resilience Approach:

TREF is adopting a comprehensive approach to integrating resilience into its nature investments, in line with MDB adaptation finance criteria and the Adaptation and Resilience Investors Collaboration (ARIC) impact framework. Impact Earth recognizes that climate volatility increases future risks to value chains, nature, and communities in tropical regions. Key physical climate hazards impacting TREF's investment geographies include heat, wildfire, changing precipitation patterns, flooding, drought, sea level rise, and ocean acidification. As illustrated in Figure 2, there is a negative feedback loop between climate shocks, unsustainable land use practices, the degradation of natural ecosystems, biodiversity loss, and community resilience. TREF seeks to break the negative feedback loop early by selecting investments

that have the potential to enhance or maintain the resilience of value chains, communities, and nature to climate risk.

Figure 2



In line with the MDB adaptation finance criteria, TREF will employ a three-stage approach to resilience:

1. **Mapping Climate Risk Exposure | Screening Stage**
    - Comprehensive risk mapping, using location & activity data, will be made available by CIAT's Impact SF;
    - A specific Resilience Risk Score will be established for each opportunity.
2. **Embedding Resilience in Planned Activities | Due Diligence Stage**
    - Field visit and development of a model of the projected resilience of the planned activities over time, plus recommendations for improvements to the operating model;
    - A Resilient Operating Management Plan (ROMAP) will be agreed with the investee pre-investment.
3. **Committing to Measurement and Verification | Post Investment Closing**
    - Monitoring, Reporting and Verification of resilience using market-standard methodologies;
    - Efficiency of measures will be assessed, and the Resilience Risk Score or ROMAP adjusted as required.

1.4 DETAILED INVESTMENT STRATEGY

TREF will invest in nature-based ventures and projects with strong growth potential, typically neglected by traditional investors. These enterprises often face challenges accessing capital due to high perceived risk and high fixed costs of early-stage investments. TREF addresses these barriers by offering flexible mezzanine financing— including bridge loans, revenue-based loans, and convertible debt— tailored to

the cash flow needs and business models of each investee. The Fund targets ventures and projects with diversified revenue sources such as carbon credit sales, payment for ecosystem services, commodity market transactions, and business-to-business purchases.

- **Bridge loans** will typically average USD 3 million in size, with ticket sizes as low as USD 500,000 to support smaller scale nature projects. These loans will have a term of six years, with repayments expected in years five and six. These loans are designed to meet the immediate, upfront capital needs of carbon projects during the development phase of the project, helping to accelerate implementation before revenue begins to flow. The target IRR for bridge loans, before defaults and underperformance, is 26%.
- **Revenue-based loans** will also average USD 3 million, with repayment structured over a seven-year term. Payments will be made in years five, six, and seven, and will be linked to the revenue performance of the borrower. These instruments are primarily used to finance productive systems such as sustainable agriculture or forestry enterprises, offering the flexibility required by businesses with seasonal or variable income. The target IRR for revenue-based loans, before defaults and underperformance, is 17%.
- **Convertible debt instruments** will have an average size of USD 5 million, with terms of seven years and repayment anticipated in the final three years. Ticket sizes may go up to USD 10 million to capture growth opportunities. These investments will be used to support enabling businesses that improve ecosystem resilience, such as those offering processing, distribution, and retail services or smart logistics. Convertible debt provides downside protection while offering the potential for equity conversion if the enterprise performs strongly. The target IRR for convertible debt, before defaults and underperformance, is 26%.

TREF is expected to make between 18 and 22 investments, with a roughly balanced allocation across the three financing instruments. Ticket sizes will range from USD 500,000 to USD 10 million, with most investments averaging USD 3 million. These ticket sizes are optimized based on Impact Earth's experience with the Amazon Biodiversity Fund to support impactful deployment while covering transaction and monitoring costs effectively.

2. MARKET ADDITIONALITY ANALYSIS

TREF is the first global nature fund to lend to early- and growth-stage ventures across tropical ecosystems, while embedding adaptation & resilience at the core of its strategy.

As the impacts of climate change on natural ecosystems intensify and interest in NbS grows rapidly, there has been a sharp increase in the number of nature-focused funds and investment vehicles globally. However, TREF offers a differentiated model that fills persistent gaps in the current market landscape. An analysis of 81 nature-focused funds identified three defining characteristics that, in combination, distinguish TREF from existing instruments.

- First, TREF is one of the few nature-focused funds **offering flexible mezzanine debt to ventures operating in the "missing middle".** These are enterprises that are too mature for early-stage equity yet not sufficiently de-risked for conventional debt. While many nature funds focus on either high-risk, early-stage equity with potential for outsized returns, or low-risk, late-stage debt targeting near-term security, few address the growth-stage segment. This leaves a critical financing gap for ventures positioned to scale proven models. TREF directly addresses this gap by providing affordable mezzanine capital tailored to the needs of early- and growth-stage nature ventures. The underutilization of mezzanine instruments in this market segment is largely due to high transaction and monitoring costs, TREF addresses some of these constraints by working with local implementation partners who reduce risk, enhance pipeline identification, and effectively monitor impact.
- Second, TREF **integrates climate adaptation and resilience (A&R) as a core part of its investment strategy**. While many nature-focused funds either overlook A&R entirely or include it nominally in strategy documents without it informing capital allocation, TREF embeds adaptation into capital allocation decisions, enabling more resilient and thus less risky investments. It incorporates A&R metrics into investment screening and collaborates with portfolio companies to co-develop action plans that strengthen ecological and business resilience. TREF also applies a resilient landscape approach, investing across the entire value chain, from nature projects to productive systems and market catalysts. This enables the fund to embed resilience holistically and drive systemic improvements across nature-based economic systems.
- Third, TREF **operates across multiple tropical ecosystems using a localized implementation model**. Many comparable funds either limit their scope to a single biome or operate globally without meaningful local leadership. TREF applies a global investment strategy that is executed through regional teams and partnerships. Building on the success of the Amazon Biodiversity Fund in Brazil, TREF is now expanding into other undercapitalized tropical biomes, such as Southeast Asia, where demand for nature-positive capital significantly exceeds supply. This regional, local presence enables more effective pipeline development, due diligence, and post-investment support.

Out of the 81 funds analyzed, 12 were identified as direct comparators to TREF. The table below summarizes the three most similar funds and highlights how TREF's structure, strategy, and regional model provide additionality relative to each.

Similar Instruments	Overview	Differentiation
EcoEnterprises Partners IV	A nature fund that provides mezzanine and equity financing to nature-based companies in the Amazon, Andes, and Meso-America.	• No explicit adaptation & resilience focus. • Targets slightly later-stage companies (ticket size of USD 5m to 12m). • Only invests in Latin America and not in other tropical ecosystems.
The Livelihoods Carbon Fund III	A carbon fund that provides results-based financing to restoration, agroforestry, and rural energy projects in developing countries with an A&R focus.	• Investment thesis is primarily focused on rural development and not adaptation or climate more broadly. • Carbon credits are the sole revenue stream. • Longer investment periods than TREF (10 to 20 yrs).
Mirova Sustainable Land Fund II	A nature fund that provides mezzanine and equity financing to land management projects in LATAM, SE Asia, and Africa.	• Targets later-stage ventures and projects (ticket size of USD 11m to 22m). • Carbon credits are not an explicit revenue source.

IMPLEMENTATION AND OPERATIONALIZATION

3. IMPLEMENTATION PATHWAY AND REPLICATION

TREF will launch with a first close of USD 30 million, initially investing in Latin America before expanding to Southeast Asia and other selected regions. The Fund is targeting a final close of USD 100 million.

3.1 NEAR-TERM IMPLEMENTATION PLAN

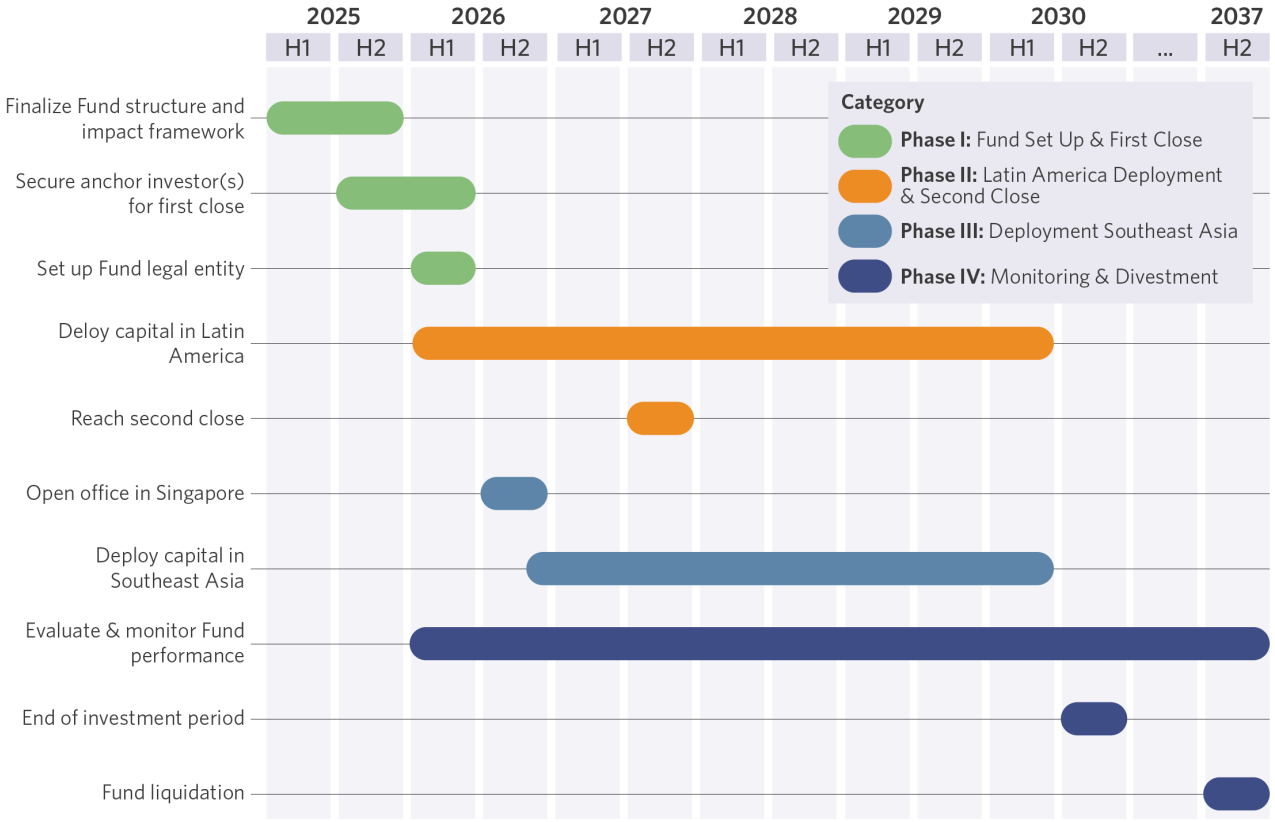
Impact Earth will launch TREF in Latin America, with plans to expand operations to Southeast Asia. In Latin America, the Fund can move quickly by leveraging an existing pipeline of projects and ventures sourced through the Amazon Biodiversity Fund. In parallel, Impact Earth will begin building new pipelines and partnerships in Southeast Asia to support TREF´s expansion.

The Fund is targeting a first close of USD 30 million, with set-up expected during the first half of 2026. Finalizing the fund structure, refining the impact framework including the resilience score and gender assessment, and establishing the Fund legal entity will be central to these efforts. Capital deployment in Latin America is then planned to begin by the end of 2026, contingent on the presence of sufficient de-risking mechanisms such as a committed junior tranche investor or an appropriate guarantee. Expansion to Southeast Asia is anticipated thereafter, with pipeline due diligence beginning in 2027, followed by capital deployment. While Latin America and Southeast Asia are the initial focus regions, the Fund may also consider investments in other tropical geographies, depending on funder interest and alignment with strategic opportunities.

Initial fundraising efforts will focus on securing an anchor investor for the first-loss junior tranche. Subsequent fundraising will engage with prior investors in the Amazon Biodiversity Fund, along with new DFIs, and other impact and institutional investors. Impact Earth will pursue both global and regionally focused investors and may consider having a local currency denominated window depending on investor interest, aligning outreach strategies with specific geographic and investor priorities.

The Fund is well-positioned for the regional expansion to Southeast Asia, drawing on the long-standing experience of Impact Earth's leadership team in the region and its active partnerships across Southeast Asian economies. Regional partners will play a central role in TREF's operations. In Latin America, TREF already benefits from a strong network of established partners and project implementers. In Southeast Asia, Impact Earth is strengthening ties with existing partners while addressing gaps with donors, government agencies, and service providers through its networks in countries such as Indonesia and Cambodia.

Figure 3



3.2 POTENTIAL RISKS AND CHALLENGES TO VEHICLE SUCCESS

TREF faces a variety of risks ranging from macroeconomic to market level, to internal implementation risks. The macro and market-level risks are closely linked to the geographies and sectors that TREF targets, specifically nature projects in Emerging Markets and Developing Economies (EMDEs). Key mitigants include a diversified portfolio and blended finance structures, such as first-loss guarantees, to absorb risk. The other key risk for Impact Earth relates to internal execution, particularly around TREF's expansion into Southeast Asia. To mitigate the risk of expansion into a new region, the team will need to continue developing strong partnerships to source pipelines and run their investment process. See below for a more detailed table of risks to success and potential mitigation.

Table 1: Risks

Risk	Likelihood	Level of Impact	Mitigants
Macro risks			
FX risk: Volatility of local currencies could lead to currency depreciation and challenges for investments to service debt	High	High	• Local currency basket/diversification of currencies • Exposure to hard currency when relevant (carbon, other export-based commodities) • Deal specific hedging strategies
Interest rate risk: Increases in local interest rates could increase the cost of lending and limit access to funding for TREF's investments	Medium	Medium	• Investment strategy: Invest in companies and projects not overly reliant on short-term debt for working capital • Geographical diversification
Regulatory/Political risk: A shift in regulatory/political environment could create barriers to investments, divestments, or revenue creation	Medium	High	• Core target countries have clarified their NbS/Environmental policies • Investment strategy has diversified revenue streams • Geographical diversification • Possibility for political risk insurance as needed
Opportunity set risks			
Volatility of key commodity prices (coffee, cacao, etc.): Fluctuations in commodity prices could negatively impact cash flows of investments, leading to non-performing loans	High	High	• Diversified revenue streams and commodities • Preference for premium assets (certified, etc.) and/or products with pricing power • Possibility for offtake agreements/partnerships with floor pricing for certain investments
Land tenure and indigenous rights: Challenges with land tenure could lead to projects not materializing or being halted	Medium	High	• No land acquisition strategy for investments (exceptions to be discussed at the IC level) • TREF will implement controls and methodology aligned with highest standards for payment for ecosystem services projects • Free, Prior, and Informed Consent (FPIC) process completed pre-investment • Governance structures to incorporate = local stakeholders pre-investments • Possibility for third party audit of FPIC

Exit: Risk that fund will not have clear or easy exits from investments given nascency of asset class and capital markets	High	Low	• Investment strategy is focused on mezzanine debt and has strong preference for self-liquidating structures • Equity conversion will only occur if pathway to third party fundraising is clarified • Team has extensive experience in transferring payment-for-ecosystem-services (PES) tail rights to market participants
Pipeline development: Project pipeline could be insufficient/challenging to build which could delay fund deployment	Medium	Low	• Fund strategy designed to target existing funding gaps, with potential pipeline already identified • Team is considering creation of a TA sidecar to support on acceleration/pipeline development • Strong team track record and network in building pipeline
Carbon Markets: Volatility of the voluntary carbon market (VCM) could lead to fluctuation in prices, alongside risk of scandals impacting perception of the integrity of the VCM and carbon projects	High	Medium	• Within carbon projects, TREF will look for a diversified exposure to methodologies/standards • Team will seek to secure offtake agreements/partnerships for carbon projects • Flexible structuring with ability to re-adjust carbon/PES rights over time • Possibility to purchase insurance as needed
Internal execution risks			
Expansion into SE Asia: Could take longer than anticipated for the Impact Earth team to be officially established in SE Asia, leading to delays in pipeline development and deployment in the region	Medium	Medium	• TREF will take a phased approach with modest deployment targets in new geographies • TREF will leverage on existing local partnerships • TREF will hire in-country staff to set up regional operations
Complicated structuring with compartments to attract regional investors → may raise costs, management fee, etc.	Low	Low	• TREF will establish minimum size for sub-compartments • TREF will establish pass-through structures with centralized governance, investment process, and reporting
Challenges in fundraising for a first-loss tranche and a guarantee	High	High	• Team will leverage existing partnerships and networks

4. FINANCIAL MODELING OUTCOMES

The commercial viability of TREF and the effectiveness of its de-risking mechanisms were evaluated through comprehensive financial modeling. The proponents developed a financial model designed to test a range of key assumptions which were informed by empirical data from Impact Earth's Amazon Biodiversity Fund, providing a real-world benchmark for risk and performance expectations. Based on the risks outlined in Section 3.2, the Lab team considered the default rate assumption captured the primary way in which identified risks could be expected to manifest.

The model is built using a pre-determined 30% junior catalytic tranche allocation in the capital structure, consistent with what the proponents expect to secure based on their experience with Impact Earth's first fund, the Amazon Biodiversity Fund, as well as senior tranche investors' perception of risk. Impact Earth expects TREF to rely on a smaller proportion of first-loss capital, reflecting a more commercially oriented approach to nature investing. The model, however, is fully adjustable and allows users to modify this allocation to assess how varying levels of catalytic capital affect returns and risk outcomes. An exercise that explores different scenarios as for this allocation is possible but was not in the scope of the analysis performed by the Lab as proponents have set themselves to 30% catalytic junior tranche fundraising goal.

The predetermined default rate used in the base case scenario illustrated in the table below is more conservative than the default rate that has been achieved by the ABF, despite this, the model shows that the returns achieved are slightly higher than the proposed target return Impact Earth expects to deliver (10%). Of course, in a favorable scenario, where average default rates were tested at a conservative 14%, the senior tranche's IRR could rise to approximately 17% significantly overpassing TREF's net IRR target.

Table 2

Scenario	Default Rate	Investment Return	Net Global IRR	Junior IRR	Senior IRR
Worst	23%	1.88 MOIC	3.46%	0.00%	5.09%
Base	18%	2.50 MOIC	10.9%	10.6%	10.7%
Best	14%	3.13 MOIC	17.5%	15.6%	16.6%

The results also show that TREF's structure remains commercially viable and effective at de-risking investments through blended capital approach; under a more adverse scenario with a 23% default rate, the senior achieves a 5% annual IRR, while junior investors absorbed projected losses but preserved its principal. Overall, the findings indicate that TREF's design can de-risk investments while providing attractive returns, increasing confidence in the Fund's ability to crowd in both commercial and impact-oriented investors.

The model highlights the effectiveness of TREF's risk mitigation strategies, including a first-loss tranche and a potential guarantee. Importantly, the blended finance approach enables TREF to mobilize commercial capital into nature-focused projects in underserved geographies that traditionally struggle to attract mainstream investment. The Lab team determined that the financial model serves as a dynamic tool to assess the Fund's financial sustainability under a range of different assumptions and scenarios.

5. CLIMATE AND SOCIAL IMPACT STRATEGY AND PROJECTIONS

TREF builds resilient value chains by supporting projects and ventures that protect and conserve nature while advancing local economic development and long-term ecological sustainability.

5.1 IMPACT MEASUREMENT AND MANAGEMENT STRATEGY

The primary objective of TREF is to protect and conserve nature while building resilient value chains and supporting local economic development. To measure progress toward this goal, the Fund will track five core, fund-level metrics that reflect its climate, nature, and socioeconomic impact. These metrics are intentionally broad to ensure consistency and comparability across different sectors, geographies, and investment sizes. At the individual investment level, additional key performance indicators (KPIs) will be applied, and the fund-level metrics will be adapted to reflect the specific impact profile and potential of each investment. Impact Earth will define objectives, measurement methodologies, and reporting requirements for each KPI prior to investment, as part of a tailored Impact Management Plan for each investee.

Key Performance Indicators		
Impact Metric	**Unit**	**Verification**
Land Sustainably Managed	Hectares	Verification methods will be determined on a case-by-case basis and formalized within each investee's Impact Management Plans.
Number of Beneficiaries	People	
Local Economic Output	USD	
Improvement in Resilience	Resilience Score (1-100)	Impact assessment by CIAT's Impact SF.
Avoided & Sequestered GHG Emissions	Tons of CO2e	If carbon project, assessed by independent 3rd party for credit verification. Otherwise, ad-hoc methods in alignment with international standards.

To help ensure robust monitoring and evaluation, Impact Earth will collaborate with leading scientific institutions, including the International Center for Tropical Agriculture (CIAT) and the Consultative Group on International Agricultural Research (CGIAR) network, as well as local research institutions. These partnerships will support impact assessments at both fund and investment levels and will provide independent verification of the results. Depending on the Fund´s structure at first close, and available resources, impact monitoring may be integrated into the Fund´s management fees or delivered through a dedicated technical assistance facility.

As part of its broader impact framework, TREF plans to pilot a scientifically grounded resilience score as one of its fund-level KPIs. This score will be co-developed and measured in partnership with CIAT and will serve as a tool to assess improvements in ecological and socioeconomic resilience across portfolio investments.

5.2 PRE-INVESTMENT IMPACT MODELING PROJECTIONS

TREF drives impact by investing in nature projects, productive systems, and market catalysts that conserve and protect natural ecosystems while strengthening value chain resilience. Each investment vertical drives impact through a unique mechanism:

- **Nature Projects**: Primary impact through ecosystem conservation and restoration with secondary effects for local economic output through shared revenues from carbon credit sales and improvement in ecosystem services.
  Key KPIs: Land Sustainably Managed and Avoided & Sequestered GHG Emissions.
- **Productive Systems**: Primary impact through the support and improvement of productive activities, mainly commodity production, with strong local economic and resilience effects.
  Key KPIs: Land Sustainably Managed, Local Economic Output, Improvement in Resilience.
- **Market Catalysts**: Primary impact through enabling ventures that support sustainable productive systems (indirect) and providing livelihood opportunities for local communities (direct).
  Key KPIs: Number of Beneficiaries and Local Economic Output.

Impact Modeling Findings

Impact is measured at the investment vertical level and then aggregated to assess overall fund-level impact. The vertical-level impact estimates and underlying financials are informed by Impact Earth's experience with the Amazon Biodiversity Fund portfolio and validated through relevant literature.

Key assumptions include:

- Impact attribution per vertical based on data from the Amazon Biodiversity Fund.
- A weighted-average investment default rate of 18% applied in modeling. These investments generated no impact.
- A weighted-average investment underperformance rate of 30% applied in modeling. These investments generated half of the expected impact.
- Impact recovery rate of 50% for underperforming investments and 0% for default investments.

Impact Modeling Findings		
Metric	**Result**	**Unit**
Land Sustainably Managed	862,400	Hectares
Number of Beneficiaries	22,454	People
Local Economic Output	USD 46,403,000	USD
Improvement in Resilience	30	Average Improvement in Resilience Score (1-100)
Avoided & Sequestered GHG Emissions	4,236,295	Tons of CO2e

5.3 PRELIMINARY GENDER STRATEGY

Gender dynamics are a primary consideration in the design and implementation of climate change solutions and are particularly important in the context of nature projects and ventures. Women play a central role in natural ecosystems as primary producers, service providers, traditional knowledge holders, community leaders, caregivers, and custodians of biodiversity (WRI, 2023). For example, women comprise over 50% of the agricultural labor force in many developing economies (FAO, 2023). Their leadership in managing natural resources positions them as central actors in any nature-related initiative.

However, women and other marginalized genders often face systemic barriers that hinder their ability to access and benefit from nature-based solutions. These challenges include insecure land tenure, limited legal ownership of natural assets, unequal access to markets and financial capital, and restricted opportunities for education and healthcare— all of which constrain their ability to benefit from nature projects (GGEO, 2016).

TREF is committed to addressing these inequities by mainstreaming gender across its operations. As a first step, TREF has initiated an assessment of gender-related risks and opportunities across its four target geographies:

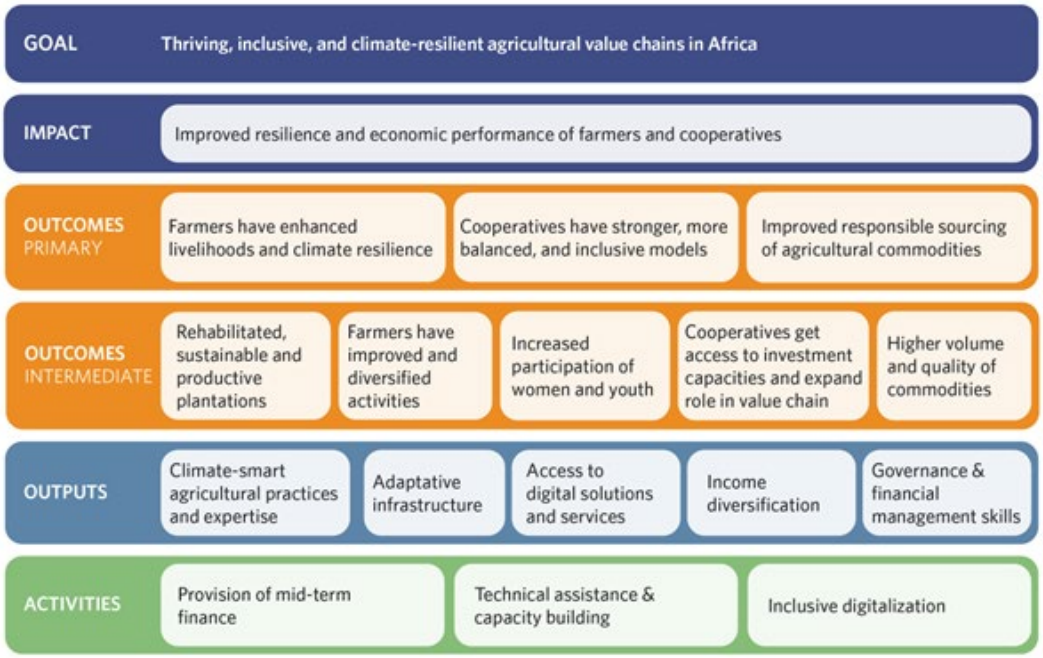
Table 3: UNDP Gender Inequality Index Value and Ranking as of 2023

Country	Brazil	Peru	Indonesia	Cambodia
Ranking	96	83	108	136
Example Risk	Only approximately 50% of women participate in the formal workforce which inhibits TREF's ability to improve the economic output of women as employees of its investees (UNDP GII, 2024).	Women own less than 25% of land despite accounting for a significant percentage of agricultural labor which could inhibit TREF's ability to reach women as direct beneficiaries (Schling, 2024).	Only ~50% of women have at least some secondary education which could limit TREF's ability to reach women in its tech-focused investments (UNDP GII, 2024).	Less than 15% of parliamentary seats are held by women which is indicative of a broader difficulty TREF might face in investing in women-led companies and projects (UNDP GII, 2024)

In preparation for its launch, TREF will undertake a comprehensive gender assessment to inform the development of a gender strategy and corresponding action plan. The Fund also commits to the systematic collection of gender-disaggregated data and the integration of gender-based violence (GBV) screening within its environmental and social risk management framework.

ANNEX

Theory of Change



REFERENCES

Benton, et al. “Food System Impacts on Biodiversity Loss”. 2021. 2021-02-03-food-system-biodiversity-loss-benton-et-al.pdf

Elias, et al. “Carbon finance for forest resilience in California). 2025. Frontiers | Carbon finance for forest resilience in California

European Commission. “Deforestation and Forest Degradation in the Amazon”. 2021. https://publications.jrc.ec.europa.eu/repository/handle/JRC130081

FAO. “The Status of Women in Agrifood Systems”. 2023. https://openknowledge.fao.org/server/api/core/bitstreams/e34863d6-a08a-465e-8d65-2b38f611946d/content/status-women-agrifood-systems-2023/chapter1.html

Gee, et al. “A guide to better tomorrow’s brew through regenerative coffee farming”. 2023 A guide to a better tomorrow: regenerative coffee farming

Gusli et al. “Soil Organic Matter, MItigation of and Adaptation to Climate Change in Cocoa-based Agroforestry Systems”. 2020. Soil Organic Matter, Mitigation of and Adaptation to Climate Change in Cocoa–Based Agroforestry Systems

Hasegawa et al. “Extreme climate events increase risk of global food insecurity and adaptation needs” 2021. Extreme climate events increase risk of global food insecurity and adaptation needs | Nature Food

IDB Invest. “IDB Group Natural Capital and Biodiversity Mainstreaming Action Plan 2024-2025”. 2024. https://publications.iadb.org/en/idb-group-natural-capital-and-biodiversity-mainstreaming-action-plan-2024-2025

IPCC. “Climate Change 2022: Impacts, Adaptation and Vulnerability”. 2022. IPCC_AR6_WGII_FullReport.pdf

Schling, et al. “Effective land ownership, female empowerment, and food security”. 2024. https://www.sciencedirect.com/science/article/pii/S0305750X24001505#b0305

Tubiello et al. “Greenhouse Gas Emissions from food systems: building the evidence base” 2021. Greenhouse gas emissions from food systems: building the evidence base - IOPscience

UN Environment Programme. “Global Gender and Environment Outlook”. 2018. https://www.unep.org/resources/report/global-gender-and-environment-outlook-ggeo\

UN Development Programme. “Gender Inequality Index”. 2024. https://hdr.undp.org/data-center/thematic-composite-indices/gender-inequality-index#/indicies/GII

US Department of Agriculture. “Rice Outlook April 2025”. 2025. Rice Outlook April 2025 | Economic Research Service

Viña, et al. “Enabling Rural Women as Key Actors in Nature-Based Solutions”. 2023. enabling-rural-women-key-actors-nature-based-solutions.pdf