FOLUR
Food · Land Use · Restoration

GOOD GROWTH PARTNERSHIP
Led by UNDP

GEF Brown Bag Lunch (BBL) Series, The World Bank, September 24, 2025

Applying Economic Analysis to Drive Sustainable Policy Reform: The case for Targeted Scenario Analysis (TSA)

A look at the GEF-supported TSA

Marlon Flores
Global Technical Advisor on Economic Analysis (TSA) and Policy Reform
UNDP-Food Systems

Supported by gef FOLUR Food · Land Use · Restoration | Led by UNDP | In partnership with Conservation International, iseal, UN environment programme

This presentation provides leads on the following topics:

1. Recent Targeted Scenario Analysis Impact
2. Why policy reform matters
3. What is TSA
4. Policy reform cycle
5. Decision makers and influencers
6. Coherent policy design
7. TSA 5-step approach
8. Sample TSA calculations and policy recommendations
9. TSA’s Global Footprint (Map)

Recent TSA impact on policy and investment

Dominican Republic (TSA on the Coffee and Cocoa Sector/Small Producers) -UNDP

- Ongoing design of the Restoration Fund for Coffee and Cocoa Mountain Landscapes
- Initial Government negotiations for an agriculture loan to support the renovation and transition to sustainable coffee and cocoa production (not UNDP activity).

Peru (Four TSA studies in the Peruvian Amazon region: Cocoa, Livestock, Palm Oil, and Coffee sectors) – UNDP FOLUR. Led by the ministries of Environment and Agriculture, the results of the first two TSAs are yielding results:

- **TSA on Cacao** (completed in April 2021) facilitated the completion and approval of the National Deforestation-Free Cacao Development Plan on November 25, 2022. UNDP-Peru.
- **TSA on Livestock** (completed in September 2023) is being used to support the updating of the National Livestock Development Plan. Intending to modernize livestock farming and strengthen territorial governance, in February 2025, the Ministry of Agrarian Development and Irrigation (MIDAGRI) announced the updating of the 2017-2027 National Livestock Development Plan, with a view to extending it to 2030. MIDAGRI, 2025.

Recent TSA impact on policy and investment

Uganda (TSA on banana and corn sector, Bwindi Impenetrable Forest National Park) – UNEP, 2024:

- Revision of the Gorilla Tourism Revenue Sharing mechanism (USD 23 million/year) to improve investment to support small holders near Bwindi and expand their access to markets.

Mongolia (Multiple Sectors: Protected Areas, Agriculture, Tourism, Water Supply, Mining)- The Nature Conservancy (TNC), 2025:

- Ongoing support to implement the Government of Mongolia, The Nature Conservancy (TNC), and the Mongolian Nature's Legacy Foundation agreement (signed in April 2024) to jointly implement the Eternal Mongolia Project Finance for Performance, mobilizing $198 million over 15 years.
- Key policy target: eliminate mining concessions in PAs, promote sustainable agriculture and tourism, and expand the Mongolian Network of PAs.

Why policy reform matters (e.g., food policy)

POLICY

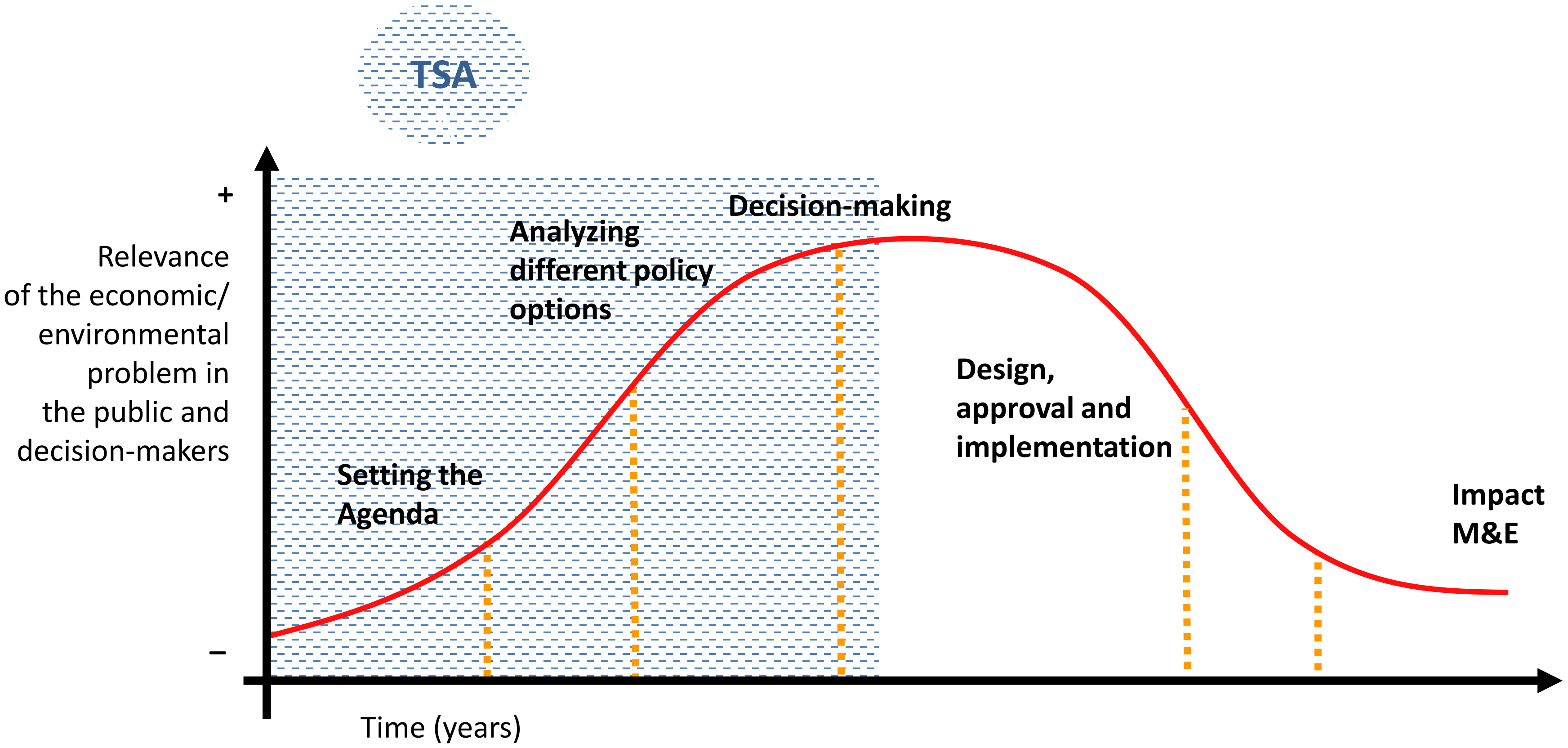
- Food accessibility, affordability, and nutritional quality
- How and where food is produced, processed, marketed, and distributed
- Investment, taxation, regulations, and incentives

IMPACT

- Population's health, environmental sustainability, and farmers' livelihoods.
- It improves what people eat and how food is sourced.
- Corporations' operations within the food system: production practices, pricing strategies, and product development.

Various sources: FAO, US National Institute of Health, IPES-Food, UNDP

Policy Reform Cycle



Source: Adapted from Environmental Fiscal Reform, The World Bank, May 2005

What is Targeted Scenario Analysis (TSA)?

- TSA is an innovative policy-centred economic analysis that compares Business as Usual with Sustainable options to provide evidence-based data to support policy decision-making and advance sustainable policy and investment reform.

- The final product of the TSA is a set of coherent policy recommendations, supported by economic data from both monetary and non-monetary indicators, along with an action plan. More than 30 TSAs have been completed in 30 countries, including 20+ for GEF projects.

TSA presents in a balanced way the pros and cons of:

- Continuing with unsustainable policies: Business-as-Usual (BAU)

- Shifting to more effective and sustainable policies: Sustainable Ecosystem Management (SEM).

NOT ALL BAU IS BAD - most countries show elements of transitioning from BAU to SEM

Who are the Policy Decision-makers and policy influencers?

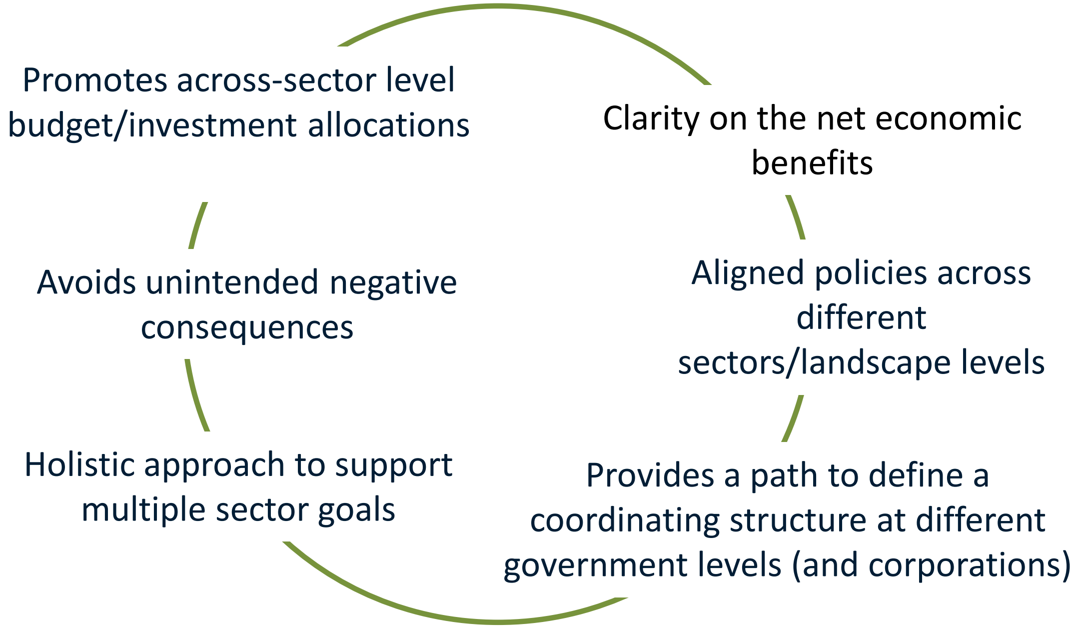
Decision makers (Direct TSA clients)

- High-level public officials and/or business managers
- People with the power to influence policies and practices at different levels.
- The owner of access to natural resources.
- The owner of a policy-related problem.
- The person responsible for approving a sector budget.
- Groups of individuals with a mandate to make laws (the legislature).

Policy influencers (Indirect TSA clients)

- Actors that can shape and impact the development, implementation, financing, and outcomes of public or corporate policies.
- Individuals, interest groups, advocacy organizations, think tanks, and even social media personalities.
- Their influence stems from their ability to educate, lobby, mobilize support, or shape public opinion on policy issues.

TSA: Coherent approach to sector policy reform

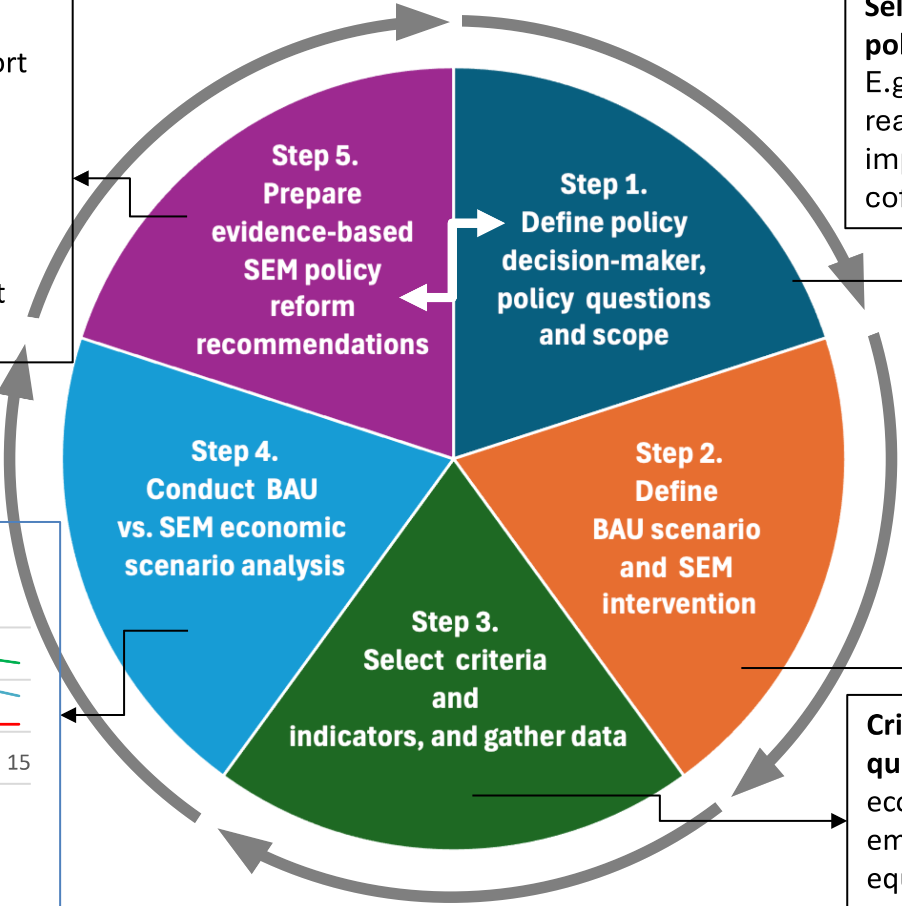


Example: Promoting sustainable/profitable agricultural practices to produce quality, healthy, nutritious foods while supporting nutrition labeling and school meal programs.

UNDP's Policy-centred TSA (5-Step Approach)

Sample recommendations:

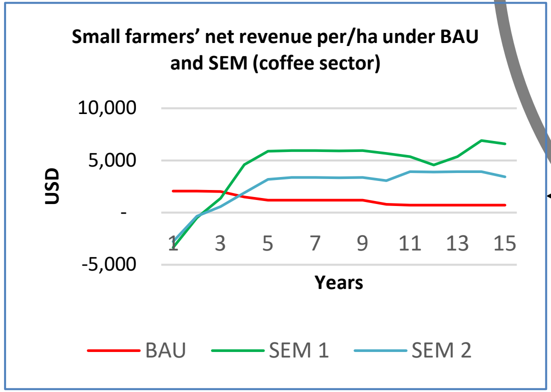
- Create a sinking fund to support food security and the small farmers' system renovation.
- Update the agriculture bank's credit policy (interest/grace periods).
- Negotiate a sector adjustment loan.



Select decision-maker and their policy objectives (questions):
E.g., Is there a compelling economic reason to increase investment to implement the national sustainable coffee action plan?

BAU / SEM:
Current policies (gaps), state of ES, technical capacity, business models, finance, economic impact, and institutional functionality.

Criteria & indicators to address policy questions: Financial (net revenue), economic (net economic benefit), employment (# jobs, living income), equity and fairness (salaries by gender).



Selecting criteria and indicators to respond to policy questions

Criteria	Indicators
Financial	• Changes in productivity • Costs, investment costs • Debt-to-capital ratio • Net profits • Cost of shifting from BAU to SEM
Economic	• Net benefits (regional) • Tax revenue to local governments • Foreign exchange earnings
Employment	• Number of newly employed people • Income levels / Living Income • Ratio of formal versus informal employment • Number of part-time jobs • Ratio of high-paying versus low-paying jobs
Equity and fairness	• Ratio of income by gender • Impact of gender equity on financial and economic returns • Ratio of benefits by different community groups • Employment by demographic category

TSA Cacao, Dominican Republic 2023. Connecting indicators , policy questions, and data sources.

Grant Thornton

TSA Cacao, Dominican Republic 2023. Examples: Net economic benefits and Foreign exchange inflow

Fig 1. Aggregated net revenue under BAU and SEM – Cacao (Millon USD)

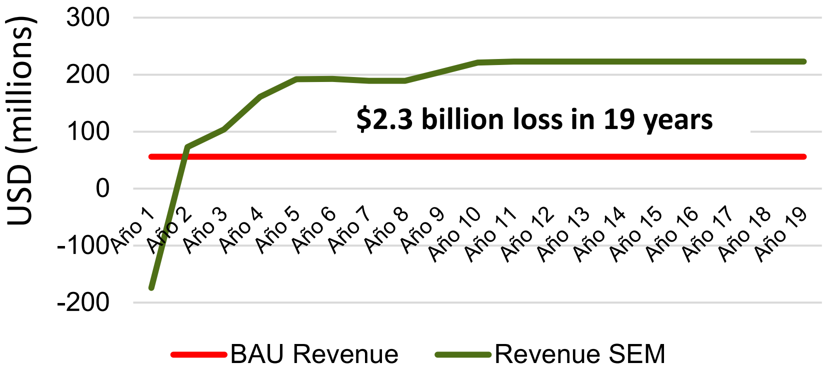
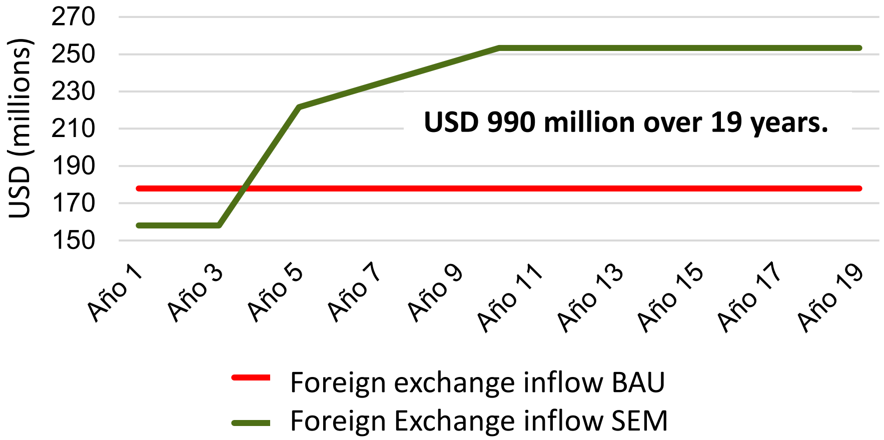


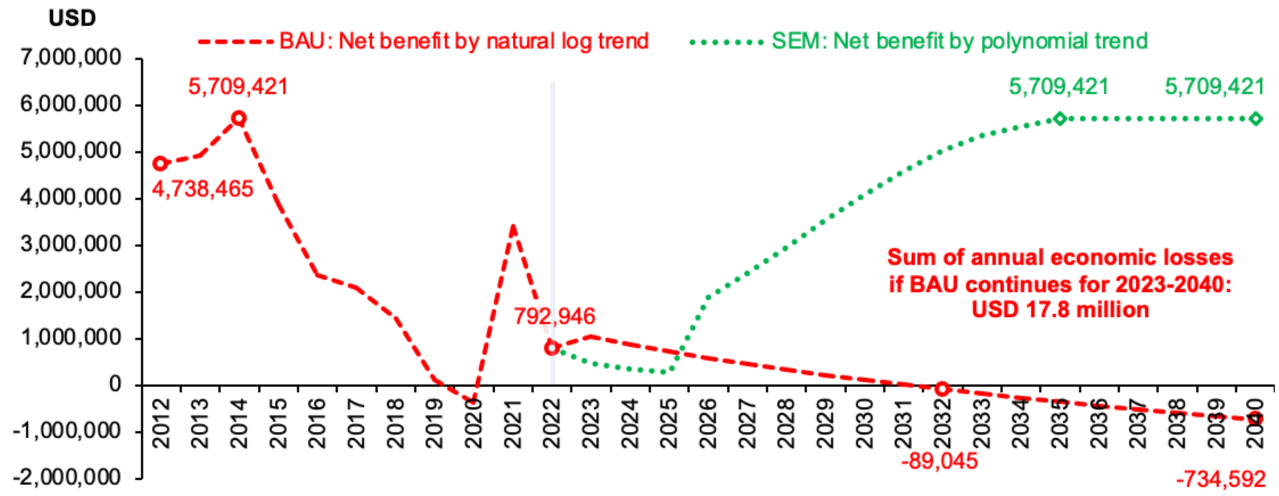
Fig 2. Annual foreign exchange income (Millon USD)



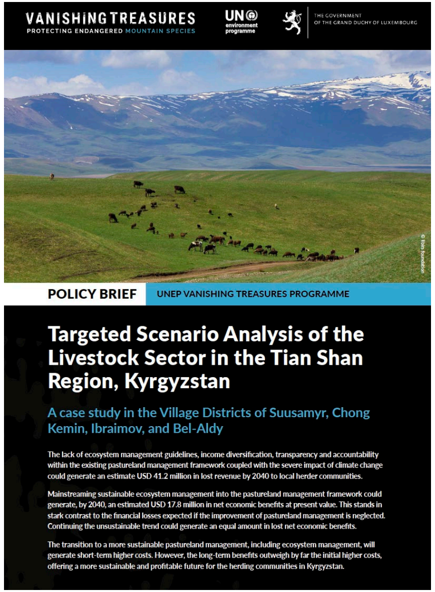
Grant Thornton

Net economic benefit from livestock production in 4 VD Livestock sector TSA, Kyrgyzstan, 2024.

Figure 22. BAU vs SEM scenario: Net economic benefit of the livestock production in 4 VDs



Source: Authors' estimation


VANISHING TREASURES
PROTECTING ENDANGERED MOUNTAIN SPECIES
UN environment programme
THE GOVERNMENT OF THE GRAND DUCHY OF LUXEMBOURG

POLICY BRIEF
UNEP VANISHING TREASURES PROGRAMME

Targeted Scenario Analysis of the Livestock Sector in the Tian Shan Region, Kyrgyzstan

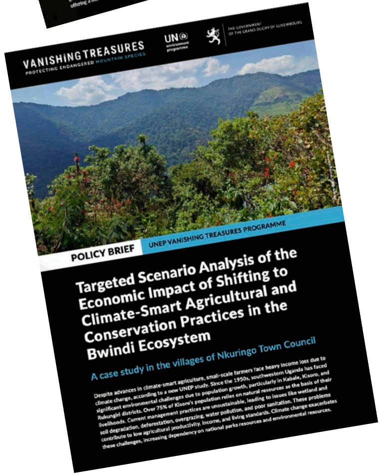
A case study in the Village Districts of Suusamyr, Chong Kemin, Ibraimov, and Bel-Aldy

The lack of ecosystem management guidelines, income diversification, transparency and accountability within the existing pastureland management framework coupled with the severe impact of climate change could generate an estimate USD 41.2 million in lost revenue by 2040 to local herder communities.

Mainstreaming sustainable ecosystem management into the pastureland management framework could generate, by 2040, an estimated USD 17.8 million in net economic benefits at present value. This stands in stark contrast to the financial losses expected if the improvement of pastureland management is neglected. Continuing the unsustainable trend could generate an equal amount in lost net economic benefits.

The transition to a more sustainable pastureland management, including ecosystem management, will generate short-term higher costs. However, the long-term benefits outweigh by far the initial higher costs, offering a more sustainable and profitable future for the herding communities in Kyrgyzstan.

Step 5: Key Policy Recommendations for Decision Makers

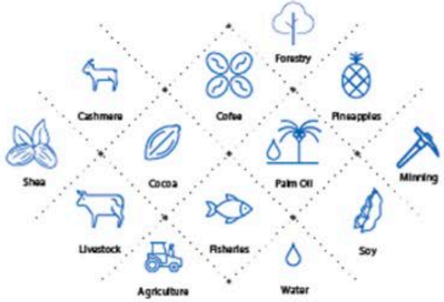


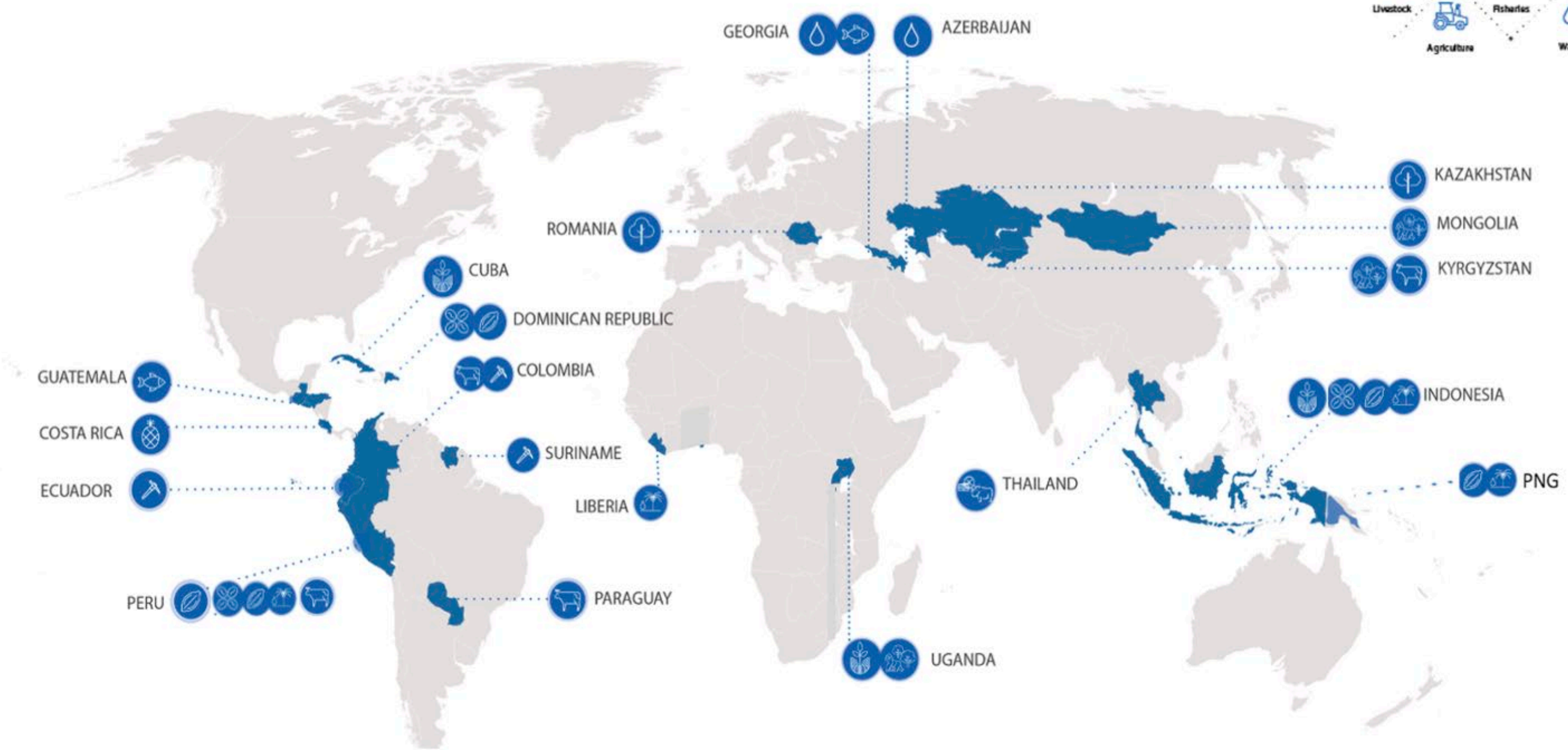
Using blended finance, create an agricultural fund for the period of renovation and promotion of sustainable coffee and cocoa farms (first 4 years of the period of analysis):

- Improve access to credit, guarantees, and establish agricultural insurance for small producers.
- Co-finance a food security incentive during the transition from BAU to SEM.

TSA – Global Footprint

Supported by · Led by · In partnership with





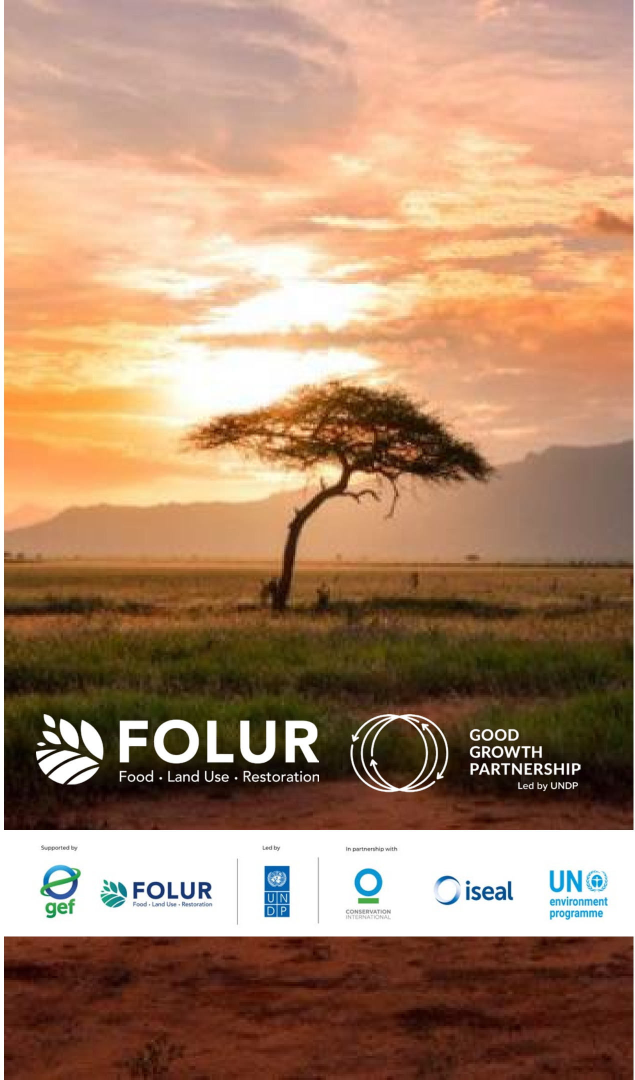
Contact information:

Marlon Flores
Global Technical Advisor on Economic Analysis (TSA) and Policy Reform
Nature Hub
Food Systems Team
Bureau for Policy and Programme Support/Global Policy Network
United Nations Development Programme (UNDP)

marlon.flores@undp.org

https://www.undp.org/foodsystems/targeted-scenario-analysis

New updated TSA Methodology available in January 2026



Annexes

Cost-Benefit Analysis (CBA) and Targeted Scenario Analysis (TSA)

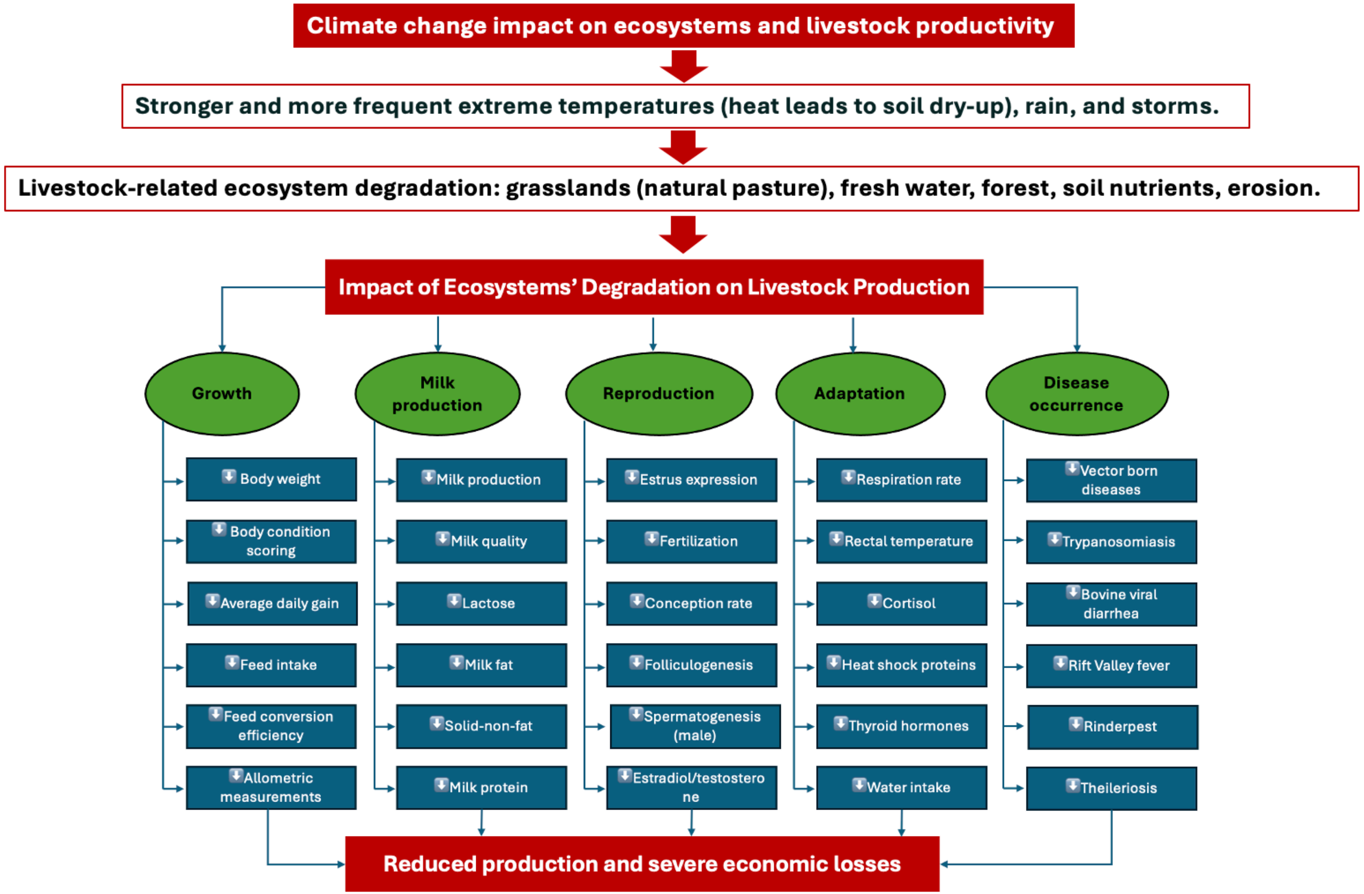
CBA

- Evaluating a project, policy, or investment.
- Compares the monetary value of its total costs to its total benefits to determine if the benefits outweigh the costs.
- Compares C/B using metrics such as the benefit-cost ratio or net present value (NPV) to see if the project is worthwhile
- **End result**: single static number, the NPV, the internal rate of return, or the benefit-cost ratio.
- A positive result suggests that it will lead to improved human well-being.
- When assessing several projects, the one with the highest NPV should be chosen.

TSA

- Evaluates two different policy paths (BAU and SEM), considering management and investment policy.
- Sector-centered approach, not an ecosystem-centered approach
- Conducted for a specific sector decision-maker
- Responds to multiple policy questions
- Assess the contribution of ES to sectoral productivity
- Provides time-bound information
- Considers multiple indicators of the relative benefits of BAU and SEM
- **End result**: A set of coherent policy reform recommendations.

Establishing the causal relationship between ecosystem degradation and production (BAU)



Source: Flores, M, 2024. Based on "Impact of Climate Change in Livestock Productivity," Veerasamy, Sejiam, et al., 2016. Broadening Horizons

TSA's Value Added

Country-level client (government/private sector):

- ✓ Improve sector policy design and fiscal reform.
- ✓ Increase quantity and quality of investment in SDGs, CC mitigation, and reduction of CO2 emissions.
- ✓ Increase sustainable sector productivity and long-term profitability.
- ✓ Increase GDP at the sector and national levels.
- ✓ Increase direct net benefits for sector producers and value-chain stakeholders.
- ✓ Increase other financial, economic, social, and environmental benefits.

Institutional

Technical capacity

Funding donor

Key barriers to policy reform success and disconnect with the project design

Barriers:

- Political instability / partisan divisions
- Limited or no policy decision-makers' leadership
- Unawareness of poor regulatory quality and the cost of no action (and action)
- Opposition from influential stakeholders lobbying against change
- Complex bureaucratic structures
- Corruption
- Lack of policy coherence
- Concerns about unintended consequences
- Sound policy can be reversed
- Market-based uncertainty: Changes in existing markets / Emerging markets.

Project design:

- Absence of policy-dedicated projects.
- Short-term approach and limited scale.
- Absence of policy-related economic analysis.
- Decision-makers are not engaged in implementation.
- Poor participation of stakeholders.
- Instability within the implementing gov. agency
- Lack of policy accountability within the implementing gov. agency.
- Project implementation modality

FOLUR Capacity Building Assessment (UNDP)

Countries expressing interest in TSA support (GEF 7)

1	Burundi
2	Côte d'Ivoire
3	Ethiopia
4	Ghana
5	Guinea
6	India
7	Indonesia** (Palm oil and other crops)
8	Kenya
9	Liberia*
10	Malaysia
11	Mexico
12	Papua New Guinea**
13	Peru** (Coffee)
14	Tanzania
15	Thailand
16	Ukraine

**Ongoing TSAs
*Previous TSA (2020) on palm oil concessions in partnership with CI-Liberia

Uncertainty: external independent factors affecting calculations

Exogenous economic uncertainty

Migration

Pandemics/Armed conflict

Climate Change/ Preparedness

Trade regulations

Market-based uncertainty

Labour markets

Transport

Economic policy uncertainty

Demand and Supply

Price volatility

Policy reform acceptability

Source: S. Makridakis et al. / International Journal of Forecasting 25 (2009) 794–812