



# Advancing the Integrated Approach to Tackle Commodity-driven Deforestation

Learning from the GEF Program on *Taking Deforestation out of Commodity Supply Chains*





# PROGRAM HIGHLIGHTS

**Communities of Practice:**  
Building trust, aligning values, and sharing knowledge

**Food Systems: Sustainable**  
Developing nature-positive supply chains with more resilience and less pollution

**Holistic Approaches:**  
Understanding the emerging impact of commodities on deforestation by acting across the main three dimensions of the supply chain—production, demand, and transaction

**Circular Supply Chains (CSC):**  
Creating a closed-loop system that reduces the need for external inputs, minimizes environmental impact, and maximizes value creation within the supply chain

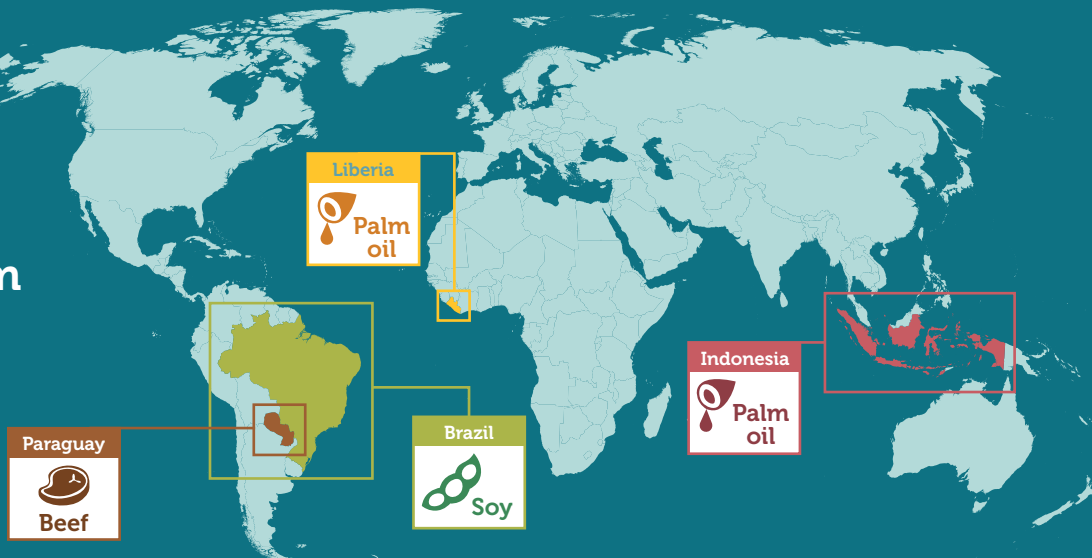
**Stronger Connections:**  
Making links between policy, farmers, and value chain drivers

**Solutions at Scale:**  
Harnessing local and national actors in target areas

**Partnership:**  
Striking a balance between public and private investments

**A Shared Vision:**  
Combining market incentives, conservation, land-use planning, and innovation

## Map of GGP Program



**Figure 1:** Map showing the four critical tropical forest countries and three commodities covered by the GGP Program: soy in Brazil, beef in Paraguay, and palm oil in Indonesia and Liberia.



*“To make a dent in the climate crisis, we need to work together to address the significant environmental strains from today’s global food systems and land use patterns. Through our integrated programs we have an opportunity to make needed changes across landscapes, sectors, and value chains, using an integrated approach to tackle the drivers of unsustainable land use and degradation and build better food systems.”*



**Carlos Manuel Rodríguez**

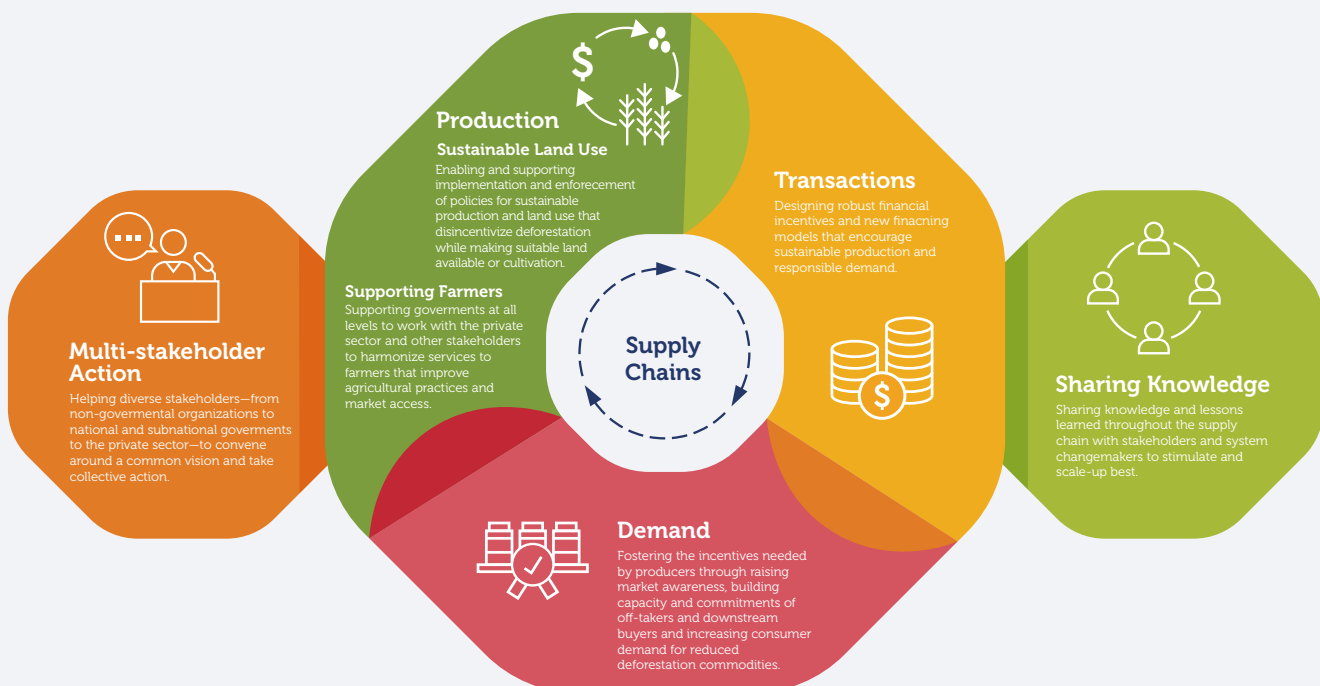
CEO and Chairperson  
Global Environment Facility

## INTRODUCTION

In 2014, the GEF launched an ambitious effort to influence a shift in supply chains for beef, soy, and palm oil towards reduced-deforestation production, while delivering continued social and economic development to farmers and their communities. The GEF-6 program, Taking Deforestation out of Commodity Supply Chains, evolved into the Good Growth Partnership (GGP) program, which draws on a range of skills and experience from a consortium of GEF Agencies and a diverse set of partners to catalyze and integrate wider action along the entire supply chain for these three commodities (Fig 1).

With ten years of experience, now is the time to reflect on the integrated supply chain approach used—what worked, what can be improved, and what lessons can be derived from implementation of the GGP program. The GEF, in collaboration with UNDP and CIFOR-ICRAF, convened all relevant stakeholders in the program as well as independent academic institutions and other experts from the private sector, non-governmental organizations, and inter-governmental organizations to discuss the outcomes of the GGP. This report provides a summary of their findings.

## Sustainable Commodity Supply Chains



**Figure 2:** GGP program’s six main ways to enable change toward sustainability in commodity supply chain, targeting three dimensions of the supply chain - Production, Demand, and Transactions, which are interconnected through multi-stakeholder action and knowledge sharing.

## BOX 1: EVOLUTION OF GEF INTEGRATED PROGRAMMING ON FOOD SYSTEMS

The GEF has been at the forefront of addressing the environmental impacts of food systems, which contribute significantly to greenhouse gas emissions, freshwater usage, and deforestation. The GEF's agri-food system agenda aims to mitigate environmental degradation and negative externalities through an integrated approach across entire value chains. This approach is critical for systems transformation, as it helps to avoid trade-offs and maximize synergies while promoting circularity.

### **GEF-6 (2014-2018): The Pilot Phase with the Good Growth Partnership (GGP)**

The GEF's journey began in 2014 during its sixth replenishment cycle (GEF-6), with the launch of the pilot of the GGP. This initiative focused on removing deforestation from global commodity supply chains, specifically targeting palm oil, soy, and beef in four major producer countries. The GGP provided valuable insights into the supply chain challenges associated with these key commodities.

### **GEF-7 (2018-2022): Expansion to the Food System, Land Use, and Restoration (FOLUR) Impact Program**

Building on the lessons learned from the GGP, the GEF expanded its efforts with the FOLUR Impact Program during GEF-7. The FOLUR program embodies an integrated approach, mobilizing diverse actors across multiple scales—from local to global—to deliver concrete actions on both the production

and demand sides of food supply chains. The program targets major food crops and commodities such as rice, wheat, maize, coffee, cocoa, soy, oil palm, and beef.

### **GEF-8 (2022-2026): The Food Systems Integrated Program (FS IP)**

The current phase, GEF-8, marks the development of the FS IP, which builds upon the foundations laid by GGP and FOLUR. The FS IP extends its focus to include livestock and aquaculture, with the goal of catalyzing the transformation to sustainable food systems that are nature-positive, resilient, and pollution-reduced. The FS IP aims to catalyze significant changes in global food systems by extending its influence beyond individual country projects. It engages with global policy forums, financial frameworks, and networks of actors to support the application of integrated and sustainable landscape and farm management practices on the ground.

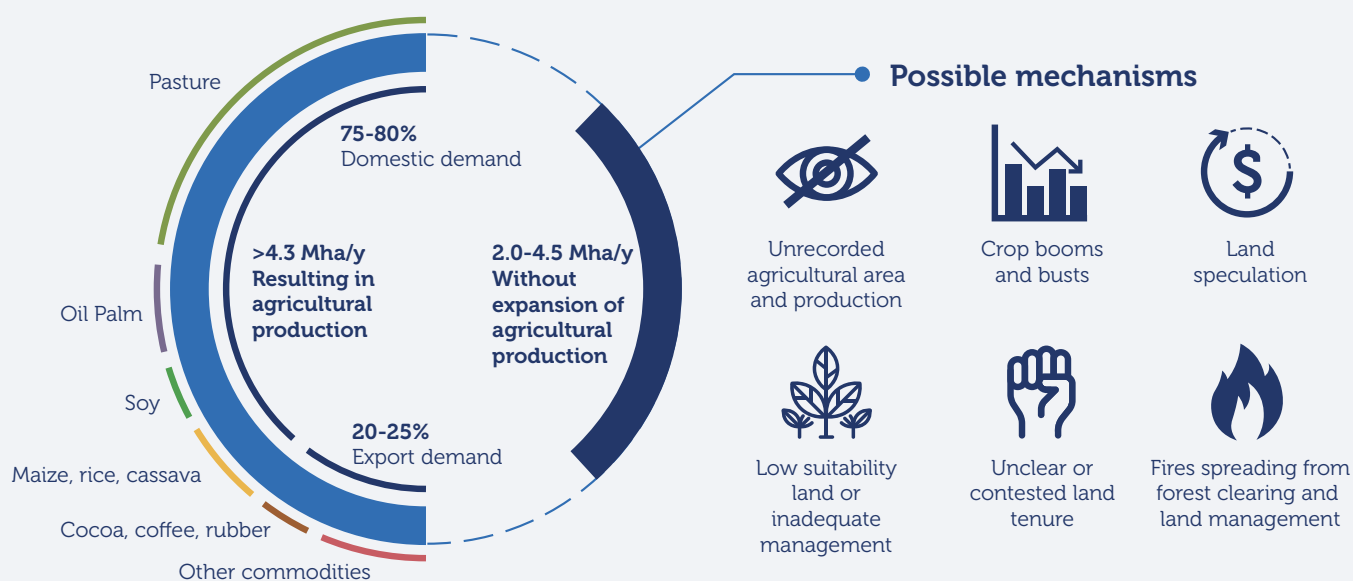
Through these strategic investments, the GEF is fostering multi-stakeholder engagement and communities of practice around major food crops and commodities. The ultimate goal is to create a critical mass of evidence and knowledge that will transform global thinking, policy options, and actions related to food systems, aligning with international discussions and initiatives on the need for food system transformation.

The technical workshop explored how the GGP integrated supply chain approach (Fig. 2) operates within the broader global context of combating commodity-driven deforestation. The GEF recognizes the need to understand the evolving context of commodities driving deforestation globally, to assess the implementation of the GEF approach in taking deforestation out of commodity supply chains, and to derive lessons for the GEF's broader engagement in the food systems space.

The GEF is committed to sustained engagement with countries for tackling commodity-driven deforestation, considering historic trends, actions for change, and influencing policy options toward avoided deforestation. The GEF approach through different food system-related programs offers an opportunity for influencing policies, practices, and institutions toward long-term sustainability (Box 1).



# Agriculture-driven deforestation



**Figure 3:** The impact of agriculture on deforestation varies by region and involves both direct (production) and indirect mechanisms. Improved data monitoring can help attribute deforestation to specific agricultural practices and commodities, influenced by both export and domestic market demands. Adapted from Pendrill et al. (2019).

## EMERGING ISSUES AND TRENDS

The workshop considered the evolving context and trends in commodity-driven deforestation linked to beef, palm oil, and soy, as well as efforts to reduce deforestation from supply chains. Progress and achievements globally suggest that such efforts are extending beyond commodity-specific approaches, and the need to consider spillover effects, land use change, food security risks, and social exclusion (Fig.3). Furthermore, there is a recognition of the importance of regional idiosyncrasies in advancing solutions, and for considering other less obvious commodities linked to deforestation. For example, cocoa and coffee production is gaining ground in many countries, while demand for biomass energy such as charcoal is also emerging as an important driver of deforestation in others. This calls for a holistic approach that promotes alignment and integration of actions for tackling all drivers of tropical deforestation.

In framing and scoping solutions for sustainability, there is growing evidence of the need to consider values of different actors across the commodity supply chains, and important issues such as the definition of “forest” that have country-specific

implications for assessment of deforestation. This is critical for securing buy-in and commitment of both local and national stakeholders in delivering solutions at scale and in target geographies. Understanding and aligning values helps to build consensus on priorities for intervention.

Implementation and scaling-up of supply chain solutions to tackle commodity-driven deforestation and catalyze transformative change also have implications for long-term durability. This calls for recognition of the importance of behavior change, institutional structures, incentive mechanisms, and understanding of “winners” and “losers” from achieving major changes. Stakeholder collaboration and engagement is therefore essential and can be greatly enhanced by stakeholder mapping to ensure inclusion of key groups and foster collective action.

Finally, the critical role of the private sector in achieving supply chain sustainability has continued to increase with growing demands for the agricultural commodities globally. The importance of balancing public and private investments in tackling commodity-driven deforestation is gaining momentum, recognizing the complementarity of companies for influencing and sustaining impacts.



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## EXPERIENCES AND LESSONS FROM THE GGP PROGRAM

The GGP program mobilized and engaged actors from production, demand, and finance sectors to coordinate efforts and promote sustainable practices. Significant accomplishments include the creation of commodity-specific platforms and forums, policy changes, global environmental benefits (GEBs) generated, active collaboration with involved parties, and the development of gender-focused action plans (Fig. 4).

Through implementation of the GGP program, important lessons have emerged on several dimensions of the integrated supply chain approach to tackling commodity-driven deforestation. Building from learning missions jointly organized with GGP implementing partners, and synthesis and evaluation documents, the following were considered as noteworthy during discussions at the workshop:

1. The roles and *modus operandi* of the GEF and agencies are critical in influencing the design and delivery of integrated solutions with supply chain

## Key Achievements-Programmatic level

### Commodity Platforms and Action Plans



23 commodity platforms and forums

established, strengthened and/or supported to facilitate multi-stakeholder dialogue and collective action



9 national and subnational action plans

for sustainable commodities supported, adopted, and under implementation

### Policy Reform



29 policies

supported to enable reduced deforestation supply chains and foster forest connectivity and biodiversity conservation, including 26 adopted or submitted for legalization

### Landscape Management



28+million hectares of land

benefiting from improved natural resources management and practices, improving biodiversity conservation and climate mitigation



29+million tones of CO<sub>2</sub> emissions

avoided due to land use and protection strategies

### Stakeholder Engagement



17+thousand farmers, producers and community members

directly benefiting from agriculture training and community conservation agreements, introducing climate smart practices and increasing resilience to climate change



\$16+million in new investments

supporting sustainable production fostered by Partnership interventions



88 companies

engaged in project activities making new or stronger commitments to source reduced deforestation palm oil, soy, and/or beef



207 financial institutions and insurance companies

with increased capacities on Environmental, Social, and Governance (ESG), including forest risks, and better equipped to make sustainable investment decisions

### Gender



4 gender action plans

developed and implemented to foster gender equality and female participation

**Figure 4:** GGP Program's key achievements include the establishment of commodity platforms and forums, policy reforms, GEBs generated, stakeholder collaboration and engagement, and the development of gender action plans.





Photo by Mohamed Bakarr/GEF

In all regions and across supply chains, it is crucial to involve and align various stakeholders—such as government bodies, industries, farmers, and conservation groups—to implement sustainable practices.

**Pictured here:** Dialogue with smallholders supported by GGP in Pekanbaru, Sumatra, Indonesia in 2022.

actors. This is key to addressing policy coherence and securing longer-term commitments in GEF and agency strategies, as well as aligning efforts and being aware of possible tipping points and windows for influencing policy change toward transformational shifts.

2. The process for stakeholder engagement and collaboration calls for building trust and creating a shared vision among the diverse actors. In all regions and across supply chains, it is crucial to involve and align various stakeholders—such as government bodies, industries, farmers, and conservation groups—to implement sustainable practices.
3. Effective policies and regulations are fundamental in driving and sustaining change towards deforestation-free and sustainable practices. This includes legislative support, enforcement mechanisms, and incentives to encourage compliance and innovation. Direct engagement with institutions and actors at the national level is fundamental for addressing this aspect of the integrated supply chain approach.
4. Understanding and shaping market forces and demands, both national and international, significantly influences the adoption of sustainable practices. Creating incentives, product differentiation, and market-driven pressures are seen as catalysts for change.
5. While complex challenges such as coordination, financial constraints, mindset shifts, and aligning policies at different levels persist, opportunities also exist. These include leveraging multistakeholder platforms, using decision support tools, and exploring innovative financing mechanisms.
6. Effective strategies involve multi-pronged and integrated approaches—combining market incentives, conservation efforts, land-use planning, and technological innovation. Such holistic approaches are key to addressing sustainability issues across diverse supply chains.





Group photo with smallholder farmer representatives in palm production landscapes in Bomi County, Liberia

## KEY TAKEAWAYS

The workshop reaffirmed the importance of the GEF's integrated supply chain approach to tackling commodity-driven deforestation, but also emphasized the need for the GEF to strengthen its engagement with countries and stakeholders on food systems transformation. In this regard, recommendations for the GEF and partners were proposed on fostering innovations in the GEF integrated approach (Box 1) to programming for transformation in food systems, leveraging convening power to scale-up solutions for transformative change, and prioritizing knowledge and learning. These are presented and discussed in the following sections.

### ***Integrated Approach on Food Systems Agenda***

The GEF emphasizes the importance of an integrated approach in all its activities, an approach anchored in key landscapes and geographies where transformative change is needed. This applies broadly to the development of the GEF's Food Systems Agenda and particularly to place-based efforts to reduce deforestation in food production

and to transform global supply chains. An integrated approach ensures a direct link between global environmental benefits and the aspirations of stakeholders dependent on commodities. It also considers processes for land-use planning and fosters sustainability and resilience through multi-stakeholder platforms.

The GEF recognizes that establishing a strong connection between policy, farmer capacity building, and value chain drivers, while also acknowledging the reality of integrated agricultural systems, will be essential to food systems transformation. Strong local institutions are central to this process, as they play the key roles of both working with farmers to improve their practices and collaborating with governments on sustainable resourcing.

The Food System Integrated Program to be launched in 2024 has adopted a systematic approach to influencing changing societal values and institutions. By balancing food security, social welfare, and sustainability through practical small steps using incentives, the program is preparing to leverage unpredictable policy windows for impactful change.



Policy options, incentive mechanisms, market dynamics, and growing commitments by local governments underpin food systems transformation. Food System Programs should ensure integration of mainstream concepts like policy coherence into their initial design.

### **Public and Private Sector Engagement**

Engaging with countries and stakeholders on food systems transformation will be critical as the GEF builds on the work of the GGP program. That engagement will help the GEF foster innovations in its integrated approach to programming for transformation in food systems, as well as leverage its convening power to scale-up solutions for transformative change and prioritize knowledge and learning among the broader GEF community and beyond.

Experience with the GGP program highlighted the importance of leveraging successful integrated private sector approaches linking sustainable supply, market demand, and financing. The GEF can foster considerable progress by rallying all actors under a shared vision and strategic roadmap and emphasizing consistent strategies for sustainable production, transparent market signals, and supportive investment.



GEF programming should also leverage private sector insights to create adaptive solutions resilient to market and policy changes. This requires engaging private actors in co-development of approaches to share knowledge on commodity contexts, from production capacity to transparent value chain integration.

### **Programming to Achieve Scale**

The GEF and its partners across implementing agencies, governments, and communities will need to think and act strategically to achieve impacts on food systems and supply chains at scale. One key step will be investing in networks of producers and along supply chains and capitalizing on the Food

Meeting with Soy farmers in the Matopiba, Brazil



Photo by Mohamed Bakarr/GEF





and Agriculture Commodity Systems community of practice. It will also be important to leverage the global agenda, such as the COP 28 Declaration on Food Systems transformation, for robust design and implementation of National Food System Pathways, align with NDCs, NBSAPs, NAPs, and shift values around food systems.

Effective systems transformation depends on a thorough understanding of how those systems function and the political economies of which they are a part. A system mapping approach can help deepen that understanding and is one element of the GEF's approach. This includes systematic stakeholder mapping, understanding power dynamics, and analysis of leverage points.

Transformational outcomes also require changes in behavior and incentives. A lesson from the GGP program is the need to pay increased attention to behavior change and address incentives and vested interests in interventions targeting.

The GEF Core Indicators have proven enormously effective in measuring the impact of GEF projects. The GGP program has shown, however, that there is also a need to capture impacts beyond the Core Indicators to reflect cross-cutting benefits and on-the-ground changes. This may require coordination across scales for systemic transformation and strengthening of science-policy interfaces.

Finally, scaling the lessons of GGP program demands adopting digital technologies to enable harmonized approaches to traceability, transactions, agronomic practices, renewables, and monitoring across commodity value chains. New programs should leverage technological solutions for global environmental benefits while balancing production and profitability.

### ***Knowledge Management and Learning***

Strengthening knowledge and learning across all food systems programs is key to expanding the impact of the GGP program. This means incorporating principles such as systems thinking, transformation levers, and inclusion, and leveraging knowledge beyond GEF programs through strategic partnerships with research institutions.



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There is also a need to expand learning missions and workshops for other Impact Programs and GEF projects to uncover trends and patterns in experiences, lessons learned, and challenges across GEF programming. Strengthening the flow of knowledge and learning between GEF cycles should be fundamental to these efforts as well.

Communities of Practice are effective channels for engaging stakeholders, including the private sector, to shape collaborative solutions. Regional and commodity-focused Communities of Practice can bridge GEF programs across cycles and funding streams, contributing to program design and enhancing continuity.

Lead Agencies of programs should facilitate platforms for multi-stakeholder dialogue, nurturing transparency, and policy coherence. A commitment by Lead Agencies should capitalize on experiences

gained from previous and existing programs, and knowledge resources developed in previous GEF cycles.

There are challenges in adopting lessons learned due to delays in integrating insights from one project cycle to the next. Learning missions can help speed up this exchange. Passing on tacit knowledge for continuity in GEF programming and knowledge management can also be important. Broad representation among participants is essential for diverse inputs.

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