



Empowering family farmers to produce and protect

Four productive forests cases in Brazil



The
Food and Land Use
Coalition

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Introduction

Brazil is a country known for its vast biodiversity, extensive forest cover, and remarkable food production capabilities. However, despite these assets, approximately 20 million Brazilians continue to face food insecurity, while emissions from food production contribute to around 70% of the country's annual carbon footprint, largely due to deforestation and conversion driven by agricultural expansion.

A key piece of the puzzle in addressing these challenges is the role of family farmers. They are vital to both regional and national food security and nutrition, and their sustained socioeconomic development, along with their technical and digital inclusion, is critical to Brazil's future. Rural areas in Brazil systematically face poverty, and the impacts of climate change and biodiversity loss increasingly threaten their livelihoods.

Many practices essential for transforming food systems on a large scale, such as regenerative agriculture, agroforestry, and crop diversification, are already being implemented by family farmers across the country. Since they account for 77% of rural properties in Brazil, identifying solutions, barriers, and enabling conditions to scale up practices that balance food security, economic development, and environmental impact is crucial for Brazil to meet its social, climate, and biodiversity commitments.

One challenge concerning family farmers is that, although they are legally defined, the category encompasses a wide range of practices and scales of production.

As a result, while family farmers are key players in advancing a just food system transition, there is a significant gap in the systematization and identification of the practices adopted on these farms, their positive or negative impacts, and their broader implications. This gap hinders efforts to scale successful solutions and limits the representation of family farmers' voices and interests in national and international decision-making spaces.

One promising solution is the concept of "productive forests," and the four diverse cases presented by FOLU Brazil in this booklet serve as examples of why Brazilian family farmers should be central to public debates on climate, biodiversity, and sustainable development.

A key lever for scaling and replicating such solutions is ensuring that policies and programs are designed and implemented with these specific goals in mind. These efforts must be clearly aligned with Brazil's broader sustainable development plans, targets, and commitments, such as its Nationally Determined Contributions (NDCs) and National Biodiversity Strategies and Action Plans (NBSAPs). In the context of productive forests, two essential policies are the National Plan for Native Vegetation Recovery (PLANAVEG) and the Productive Forests Program. Both have been supported and influenced by FOLU Brazil and its partner institutions since their inception. By continuing to advance their implementation, we aim to facilitate the expansion and development of new, relevant, and systemic initiatives, such as those highlighted here.

Understanding the concepts

Family farming: Formally defined by federal law¹, family farming is a production system that occurs in small farms and concentrates the property management and the majority of the labor within the family members. It is diverse and encompasses different biomes, production techniques, and products, as they account for 77% of all rural properties in Brazil.

Productive forests: Productive forests, as per the Decree Nº 12.087/2024 that formalized the Productive Forests Program, is an approach for restoring degraded areas, mainly in family farming establishments and territories of traditional peoples and communities that utilize integrated production systems. These systems, such as agroforestry and the integration of crop-livestock-forest, allow for food production while simultaneously recovering native vegetation.

¹ Law No. 11.326, of June 24, 2006



Photo: André Cheri
WRI Brasil



Photo: Igor Lopes
WRI Brasil

Case 1

Regenerating the Forest and Producing Healthy Food in the Amazon

Family farmers in agrarian reform settlements in Belém use assisted natural regeneration models combined with agroforestry systems to reverse degradation while producing healthy and biodiverse food.



Organizations involved: WRI Brasil, Imazon, Landless Workers' Movement (Movimento dos Trabalhadores Rurais Sem Terra, MST)

Location: Metropolitan Region of Belém, Pará, Amazon, Brazil

Period: 2020 – ongoing

Total initiative area: 11,000 hectares

Productive forest area: 1,350 hectares

Number of people benefited: 725 families

In the Amazon, initiatives that promote forest restoration and healthy food production have transformed rural settlements by integrating environmental preservation with income generation for family farmers. Two successful examples are the Abril Vermelho and João Batista settlements, located in the metropolitan region of Belém, Pará, which have demonstrated that it is possible to reconcile the recovery of degraded areas with food security and nutrition and socioeconomic development.

The Abril Vermelho and João Batista settlements, in Santa Bárbara do Pará and Castanhal respectively, are reversing environmental degradation through more biodiverse practices. In Abril Vermelho, previously marked by palm monoculture and labor conflicts, Assisted Natural Regeneration (ANR) and Agroforestry Systems (AFS) are restoring degraded areas while enabling the

production of healthy food. In the João Batista settlement, former unproductive pastures are being regenerated through the introduction of native species and diverse and resilient agricultural practices. In both settlements, these initiatives are improving local biodiversity, increasing ecological resilience, and generating income and food sovereignty for the settled families, while also introducing more diverse products into the diets of other people living around the settlements.

Both projects are part of the *Plano Nacional Plantar Árvores, Produzir Alimentos Saudáveis* (National Plan to Plant Trees and Produce Healthy Food), led by the Landless Workers' Movement (MST). This initiative aims to expand the use of forest regeneration techniques, such as ANR, and promote sustainable development in rural settlements in the Amazon.



Photo: Igor Lopes
WRI Brasil

Why it is an example of a Productive Forest:

- Utilizes interventions to guide natural forest regeneration;
- Enriches secondary forest areas with native species;
- Features active participation and leadership of family farmers;
- Encourages the adoption of biodiverse food production through agroforestry.

What these systems produce:

- Cupuaçu, açai, banana, papaya, andiroba, copaiba, Brazil nut, cassava, among others.



Photo: MV Gestão Integrada

Case 2

Connecting family farming in the Atlantic Forest with public policy

A company develops management methods and technology resources for Payments for Environmental Services (PES), supporting the recovery of degraded areas and food production.

Organizations involved: MV Gestão Integrada

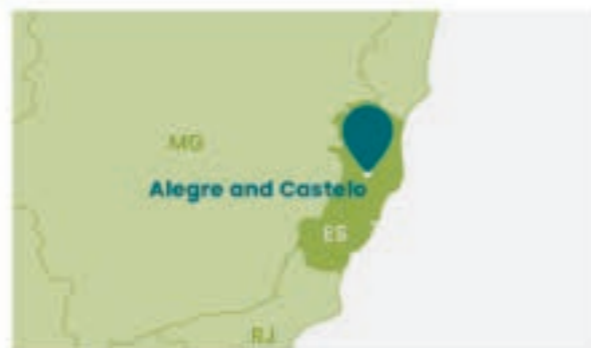
Location: Alegre and Castelo, Espírito Santo, Atlantic Rainforest, Brazil

Period: 2018 - ongoing

Total initiative area: 21,871 hectares

Productive forest area: 3,190 hectares

Number of people benefited: 1,003 families



In Espírito Santo, a state covered by the Atlantic Forest in southeast Brazil, family farmers are getting support to access the Reflorestar Program – an important subnational public policy that promotes restoration through Payment for Environmental Services (PES) – and receiving technical assistance to preserve native forests, implement sustainable agriculture and recover degraded areas. This connection between public policy and farmers is being made by the company MV Gestão Integrada. The integration of environmental preservation and income generation has transformed the lives of several farming families.

The project engages farmers from the Feliz Lembrança Community, located in Alegre, in the southern region of the state

of Espírito Santo. This community has stood out for implementing sustainable practices that have promoted the ecological and economic balance of rural properties. The technical assistance offered, together with facilitated access to public policies, has been crucial in ensuring that the properties become more resilient and productive, adding value to the products generated, such as agroforestry coffee and native fruit.

At Sítio São Felipe, this work is driving the implementation of agroforestry systems with diversified crops such as arabica coffee and banana varieties, and species native to the Atlantic Forest, such as pupunha palm. The result is an increase in family income, both through the sale of products and access to the PES, as well as the conservation and regeneration of the forest.



Photo: MV Gestão Integrada

Why it is an example of a Productive Forest:

- Applies strategic interventions that promote the natural regeneration of the forest;
- Agroforestry-based coffee adds value to farmers;
- Access to public policies increases the resilience of farms;
- Encourages the adoption of biodiverse production and reconciles agricultural production with ecological balance.

What these systems produce:

- Coffee, avocado, honey, pupunha palm, fruit trees native to the Atlantic Forest and citrus fruits.



Photo: Geysa Marques
WRI Brasil

Case 3

Native seeds for more equitable and resilient agriculture in the Caatinga

Farmers in the semi-arid Brazilian region of Caatinga are promoting agroecology and seed banks for food production, biodiversity conservation and adaptation to climate extremes.

Organizations involved: Articulação Semiárido Brasileiro (ASA), ASA Paraíba Seed Network, Polo da Borborema Seed Commission, AS-PTA Family Farming and Agroecology

Location: Borborema Territory, Paraíba, Caatinga, Brazil

Period: 1993 - ongoing

Total initiative area: ~209,000 hectares

Productive forest area: N/A

Number of people benefited: +5,000 families



Sementes da Paixão is an initiative that rescues and preserves Creole seeds in the semi-arid region of Paraíba, promoting agroecology and food security and nutrition. Developed by family farmers (the “Seed Guardian Families”), this action is based on the creation of community seed banks (CSB), which store and distribute seeds adapted to local climatic conditions.

Since its inception in 1993, the initiative has consolidated more than 240 seed banks in the state of Paraíba, benefiting more than 8,000 families in 63 municipalities. Creole seeds, selected by generations for their resistance and productivity, are essential for family farming, guaranteeing harvests even during long periods of drought. These seeds are affectionately called *Sementes da Paixão* (“The Seeds of Passion”), a name coined by farmer Cassimiro Caetano Soares (also known as “Seu Dodô”) in 1995 during the 1st State Meeting of the *Sementes da Paixão*.

The CSBs are managed by local commissions, such as the Polo da Borborema Regional Seed Commission, which coordinates more than 60 BSCs, thousands of family-based banks and the main bank (the “Mother Seed Bank”), involving around 1,900 families. The practice of exchanging seeds, in which 15 kg are returned for every 10 kg taken, guarantees the maintenance of stocks and promotes farmers’ autonomy. The project also strengthens the conservation of genetic biodiversity, makes agricultural systems more resilient to climate change, and reduces dependence on commercial seeds and external inputs.

In Borborema Territory, the campaign “I Don’t Plant GMOs to Preserve My History” was launched to protect native corn from transgenic contamination. It also ensures the multiplication of native corn and supplies a GMO-free corn derivatives unit, producing food for farming families and agroecological markets.

Why it is an example of a Productive Forest:

- In the semi-arid region of Paraíba, it uses specific measures to preserve and multiply Creole seeds;
- Traditional varieties adapted to local conditions enrich the genetic diversity of the plantations;
- Ensures the active participation of family farmers in the process of seed conservation and cultivation;
- Encourages the production of biodiverse and sustainable food, promoting agroecology and food security and nutrition.

What these systems produce:

- Corn, beans, fava beans, cassava, squash, watermelon, among other agroecological products;
- Native seeds of different varieties adapted to the climatic conditions of the semi-arid region;
- Products that guarantee food security and nutrition and autonomy for family farmers, reducing their dependence on external inputs.



Photo: WWF-Brazil

Case 4

Agroforestry model for food security and nutrition in the Cerrado

By combining ecological regeneration and food security, the Cerrado Agroforestry Systems (SACIs) offer a replicable model for restoring the Cerrado and improving the quality of life for its communities.



Organizations involved: Federal Institute of Brasilia (IFB), Candombá Agroecology Nucleus, Landless Workers' Movement (Movimento dos Trabalhadores Rurais Sem Terra, MST), WWF-Brazil

Location: Planaltina, Federal District, Cerrado, Brazil

Period: 2022 – ongoing

Total initiative area: 3,5 hectares

Productive forest area: 3,5 hectares

Number of people benefited: 5 families

How do you develop an agroforest in a biome that combines savanna and grassland characteristics, such as the Cerrado? Inspired by the *saci*, a character from Brazilian folklore who lives in the forest, producers from the settlements of Oziel Alves III and Roseli Nunes, located in Planaltina, Distrito Federal, show that it is possible to reconcile the recovery of degraded areas with food and nutrition security and socio-economic development.

The SACIs – Cerrado Agroforestry Systems – arose from the need to adapt agroforestry systems (SAFs) to the specific characteristics of the Cerrado. In the settlement of Oziel Alves III, where cereal and eucalyptus monocultures once dominated, SACIs are regenerating degraded areas and enabling the production of healthy food. Similarly, the

Roseli Nunes settlement uses native species and agroecological practices to restore the soil and promote biodiversity. In both cases, the adoption of SACIs increases ecological resilience, generates diversified income sources for the families living there, and improves local food and nutrition security.

These projects are part of a broader strategy to combine ecological restoration techniques with food production in the Cerrado. With the support of various organizations and the leading role of family farmers, the SACIs are creating a model of sustainable agriculture that values native species and promotes the efficient use of natural resources, and since 2023 this approach has been extended to other agrarian reform areas in the states of Minas Gerais, Goiás, Mato Grosso and Mato Grosso do Sul.



Photo: WWF-Brazil

Why it is an example of a Productive Forest:

- Restores degraded areas in the Cerrado through specific interventions;
- Enriches degraded areas with native species, including grasses and shrubs;
- Ensures the active participation of family farmers in the restoration process;
- Promotes the production of biodiverse and sustainable food.

What these systems produce:

- Cashew, baru, pequi, araticum, corn, beans, cassava, among other agroecological products.

Conclusion

In 2024, Brazil's Ministry of Agrarian Development and Family Agriculture launched the decree of the National Productive Forests Program in partnership with the Ministry of Environment and Climate Change. The program has the goal of supporting 100,000 families on more than 1 million hectares by 2030.

FOLU Brazil is working to strengthen the policy by providing the Ministry of Agrarian Development with an in-depth study of potential areas and criteria for expansion, to guarantee its effective planning and subsequent implementation.

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About FOLU

Established in 2017, the Food and Land Use Coalition (FOLU) is a global community of changemakers, innovators and experts working to advance sustainability, equity and resilience in food and land use systems. United by a shared vision of rapid and transformative change, this network of now seven country platforms nine international partners, and over 50 Ambassadors, strives for a world in which food and land use systems enable people and nature to prosper.

Guided by evidence and science-based solutions, FOLU works with farmers, policymakers, businesses, investors, and civil society to unlock collective action at scale. To deliver positive outcomes for the environment, improve health, prompt inclusive development and tackle food insecurity, the Coalition advocates for a reformed global agenda, centered around ten critical transitions. Together, these transitions enable these systems to provide food security and nutrition and healthy diets for a growing global population, while also tackling climate, biodiversity, health, and poverty challenges – and could unlock \$4.5 trillion a year in new business opportunities.



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