



PlanaFlor

# A Strategic Plan for Implementing the Brazilian Forest Code

## Overview

AUGUST 2023

**P**lanaFlor is a set of strategic guidelines, organised in the form of a nationwide sustainable development plan, which promotes environmental, economic and social assets based on the effective implementation of the Native Vegetation Protection Law (Federal Law 12.651/2012), known as the Brazilian Forest Code (FC). It starts from the view that the effective implementation of the Forest Code has the potential to foster rural production integrated with the protection and recovery of vegetation cover, generating new jobs, income and positive impacts on the environment, the climate, the economy and society.

There are two dimensions to PlanaFlor. One is what we call the 'PlanaFlor Project', with a duration of five years (2021-2025), which includes compiling information, carrying out strategic analyses, formulating a set of guidelines, publishing the studies on which the strategic plan is grounded, drawing up the planning matrix – based on a multi-sector consultation process – and engaging government bodies at federal and state level, companies and organisations in the private sector and the civil society.

A consortium of institutions is developing the PlanaFlor Project, made up of the Brazilian Foundation for Sustainable Development (FBDS), BVRio, the Getulio Vargas Foundation (FGV) and the Conservation Strategy Fund (CSF-Brasil). The other dimension is the design of a blueprint or a Strategic Plan; which consists of eight strategic objectives, 21 strategies and 104 actions considering Brazil's international commitments in the areas of forests, land use and climate with which the actions indicated in PlanaFlor have a high potential to contribute. The proposed timetable foresees implementation of the plan over eight years (2023-2030).

This document summarises the proposals and guidelines of PlanaFlor, including the expected social, economic and environmental impacts. All the studies and mappings carried out, including the complete Plan, an Executive Summary, and the Strategic Matrix, are available on the project website (in Portuguese) [www.planaflor.org](http://www.planaflor.org). For enquiries in English, contact us at [contato@planaflor.org](mailto:contato@planaflor.org).

## Purpose

To offer Brazilian decision-makers and society a development strategy that considers the sustainability of agricultural production, land use and the protection and recovery of forests and other ecosystems as the main vectors for generating opportunities for work, income, entrepreneurship and prosperity in rural areas.

To place Brazil's native vegetation at the centre of its development strategies, with the Forest Code as the primary regulatory framework, and its provisions as drivers of a sustainable, inclusive and lasting development model.

## Premises

### WORLD LEADER IN SUSTAINABLE PRODUCTION

To consolidate Brazil's leading role as a world player in the agricultural sector and biodiversity conservation. The country has the potential to gain economic, social, environmental and geopolitical advantages if it invests in climate targets, food security, social inclusion and biodiversity conservation, essential pillars of PlanaFlor and central themes in today's international agenda.

### FOUNDATIONS FOR A GREEN ECONOMY

The country's economic growth must be guided by a development model with sustainable rural production practices and nature-based solutions as its essential pillars.

### OPPORTUNITIES FOR INTERNATIONAL COOPERATION

Brazil has the necessary regulations, technology and know-how to establish a green economy on a sustainable footing. A nationwide plan based on territorial and strategic intelligence, such as PlanaFlor, is essential to leverage the financial resources needed for this transformation.

### TRANSITION TO A SUSTAINABLE RURAL PRODUCTION BASED ON THE PROTECTION AND RECOVERY OF NATIVE VEGETATION

The Forest Code is a robust legal framework for promoting sustainable agricultural production that is, above all, free from deforestation. It presents appropriate and cost-effective tools to facilitate the sustainable transition of our agriculture.

### POSITIVE IMPACT ON GDP IN THE MEDIUM TERM

Economic models drawn up by PlanaFlor indicate a positive impact on GDP over the transition period (2023-2030). There is also strong potential for significant long-term gains, including productivity gains and positive economic externalities.

### SUSTAINABLE DEVELOPMENT AS THE NORM

The development of agriculture, livestock and forestry on a sustainable basis and in compliance with legal regulations is fundamental to revitalising the rural economy, generating jobs, foreign exchange, ensuring a positive reputation for agribusiness and the country, protecting and restoring native vegetation and the ecosystem services on which rural production ultimately depends, including climate regulation.

### EXPANDING RURAL PRODUCTION WITHOUT DEFORESTATION

In Brazil, there are plenty of degraded pastures to broaden the area destined for rural activities, in addition to recovering legal reserves and areas of permanent preservation (APPs), under the terms of the law in all of Brazil's biomes, without the need to deforest. The dichotomy between economic growth and environmental conservation is false.

### INSTRUMENTS FOR INCLUSIVE AND LOW-CARBON PRODUCTION CHAINS

Public and private financial instruments should encourage low-carbon, deforestation-free and socially inclusive production chains and impact businesses that favour environmental conservation and people's well-being.

### INCENTIVES FOR NATURAL CAPITAL CONSERVATION

Conserving vegetation is an important economic asset because it maintains essential agricultural services (water regulation and quality, soil protection, pollinators, etc.). It is set to gain even more financial value in the coming decades through the development of environmental asset markets.

# Infographic: Forest Code Implementation

Graphic representation of the PlanaFlor strategic matrix: objectives, strategies, actions and targets.



## TYPES OF ACTIONS

-  Strategic planning and institutional articulation, regulatory and operational changes
-  Fostering and strengthening production chains
-  Payment for environmental services (PSA), Forest Reserve Credits (CRA) and carbon markets schemes
-  Technical Assistance and Rural Extension (ATER)
-  Tax incentives
-  Credit and insurance
-  Budget allocation
-  Technological improvements



### 1 STRENGTHENING INSTITUTIONAL CAPACITY

Targets: Register **140 Mha** in the Rural Environmental Registry and speed up the analysis of registrations.

Strengthen the **monitoring system** with technology and cross-referencing of databases.



### 2 SCALING DEFORESTATION-FREE AGRICULTURE

Targets: Expand agriculture in **11.3 Mha** of priority areas: degraded pastures, high agricultural aptitude and low regeneration potential.

**110 Mha** of surplus Legal Reserves conserved.



### 3 SCALING LOW-CARBON AGRICULTURAL PRODUCTION

Target: **20.4 Mha** of priority areas for low-carbon agriculture by 2030 (areas of degraded pasture and low soil carbon stock).



### 4 PROMOTING SUSTAINABLE SMALLHOLDER FARMING

Target: Strengthen **557 municipalities** with a high degree of fragility in small-scale agricultural activity.



### 5 STRENGTHENING SUSTAINABLE SILVICULTURE

Targets: **4 million** additional hectares of woodland in degraded pasture areas.

Encourage multi-purpose **forestry** with native species.

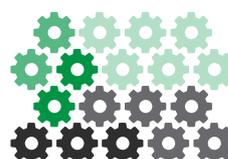


### 6 EXPANDING THE PROTECTION OF NATIVE VEGETATION IN PRIVATE, PROTECTED AND UNPROTECTED AREAS

Targets: Zero illegal deforestation by **2030**.

**110 Mha** of surplus Legal Reserves conserved.

**154 Mha** of areas potentially available for Forest Reserve Credits conserved



### 7 RESTORE PERMANENT PRESERVATION AREAS AND LEGAL RESERVES

Targets: Restore and reforest **12.1 Mha** of native vegetation by **2030**.

**8.1 Mha** of Permanent Preservation Area and **4 Mha** of Legal Reserve, meeting the Planaveg targets and the Paris commitments.



### 8 IMPROVING CREDIT, FINANCIAL AND TAX INCENTIVE SYSTEMS

Target: To provide **economic and financial incentives** for forest conservation, restoration, and sustainable, low-carbon farming.

# Infographic: Potential

**401**  
billion

Brazilian Reais raised  
in eight years

**0,07**  
%

GDP growth  
(R\$ 6.2bn/year)

## ECONOMY

**32,5**  
bi/year

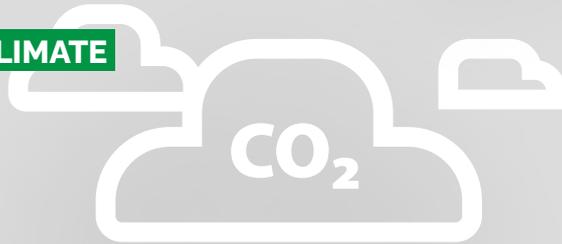
of BRL in additional revenue



**+25** GtCO<sub>2</sub>e

of reduced emissions

## CLIMATE



## WORK AND INCOME



**+2,5**  
mi

New jobs

**+2,6**  
mi

smallholder farmers benefited

**+31,7**  
Mha

Low Carbon  
Agriculture

**11,4**  
Mha

subsidised for  
smallholder farming

## AGRICULTURE



## ENVIRONMENT



**110**  
Mha

of surplus Legal  
Reserves protected

**12**  
Mha

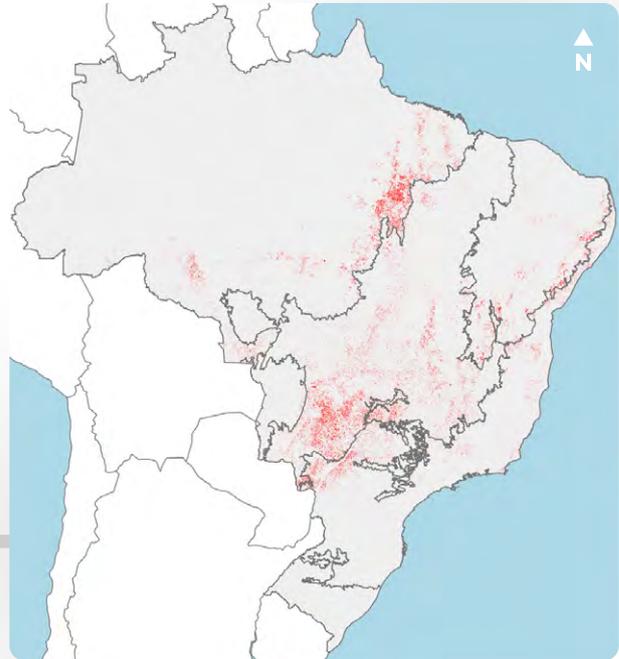
Native vegetation  
restored

## Expected outcomes

### EXPANDING AGRICULTURE WITHOUT DEFORESTATION

PlanaFlor identified and mapped 15.7 million hectares of areas suitable for the expansion of agriculture in the national territory (areas of pastures with medium and high degrees of degradation, with increased agricultural aptitude and low potential for natural regeneration). This area is greater than the 11.3 million hectares of growth the Ministry of Agriculture, Livestock and Supply (MAPA) projected by 2030, indicating that achieving the growth targets for agricultural production without new deforestation is possible.

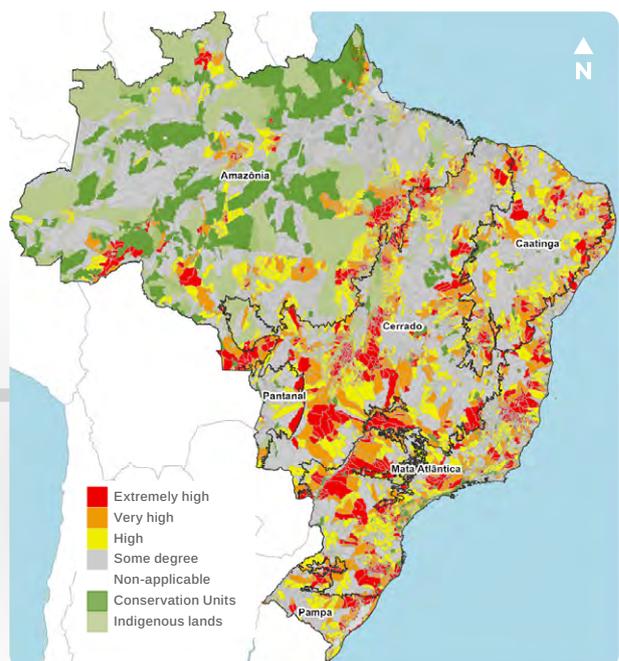
Recommended areas for agricultural expansion in Brazil.



### PROTECTING LEGAL RESERVE SURPLUS

Brazil has around 18.8 million hectares of native vegetation deficit on rural properties (8.1 million in APPs and 10.7 million in Legal Reserves). On the other hand, the country has more than 110 million hectares of vegetation on rural properties that exceed the minimum required by law. PlanaFlor identified and spatialised the priority areas for restoring the deficit of native vegetation, taking into account cost-effectiveness, prioritising areas of degraded pasture with low agricultural aptitude and high potential for natural regeneration located in hydrographic basins that are important for water supply and hydroelectricity generation. Recovering all the vegetation deficit in Permanent Preservation Areas and part of the deficit in Legal Reserves will lead Brazil to fulfil the targets set in the National Plan for the Recovery of Native Vegetation (Planaveg) and the Nationally Determined Contributions (NDC) of the Paris Agreement.

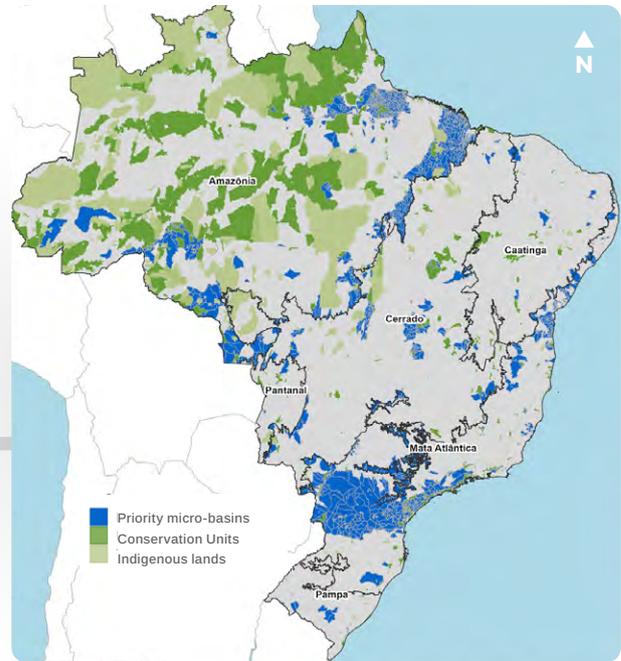
Priority micro-watersheds for the restoration of permanent preservation areas and legal reserves in Brazil.



**✓ PROTECTING VEGETATION  
SUSCEPTIBLE TO DEFORESTATION**

PlanaFlor has identified opportunities to increase the value of surplus vegetation on rural properties through tax incentives (credit and subsidies, for example) and through the environmental services markets, primarily carbon, with the potential to generate more than \$30 billion Brazilian Reais a year. This resource will induce the conservation of these areas as, in addition to creating the incentive for their preservation, it provides the necessary resources to recover degraded pasture areas and expand sustainable, low-carbon agriculture.

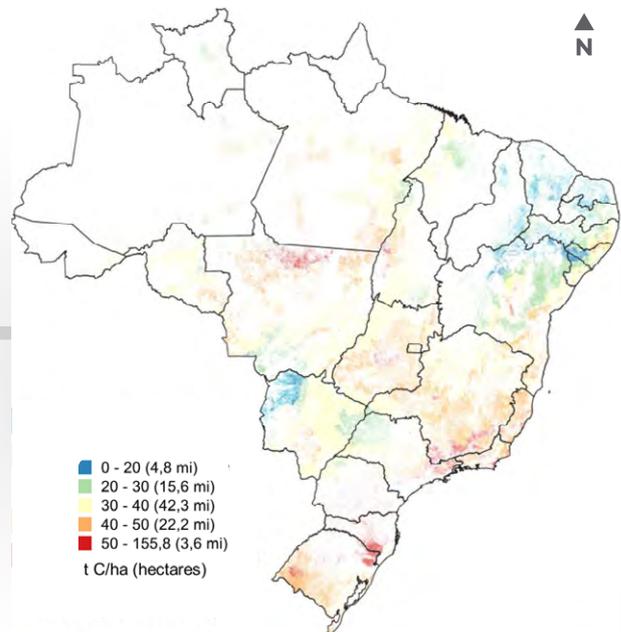
**Priority micro-watersheds for offsetting  
Legal Reserve areas in Brazil.**



**▶▶ PROMOTING LOW-CARBON AGRICULTURE**

To guide policies aimed at strengthening integrated crop-livestock-forestry (ILPF) systems, PlanaFlor identified 34.6 million hectares of areas recommended for establishing and expanding these production systems (degraded pasture areas with a low concentration of carbon in the soil). Adopting these practices can reduce greenhouse gas emissions from Brazilian agriculture and increase productivity in degraded pasture areas, bringing greater economic returns for the country while conserving environmental assets and biodiversity.

**Priority areas for  
low-carbon agriculture.**

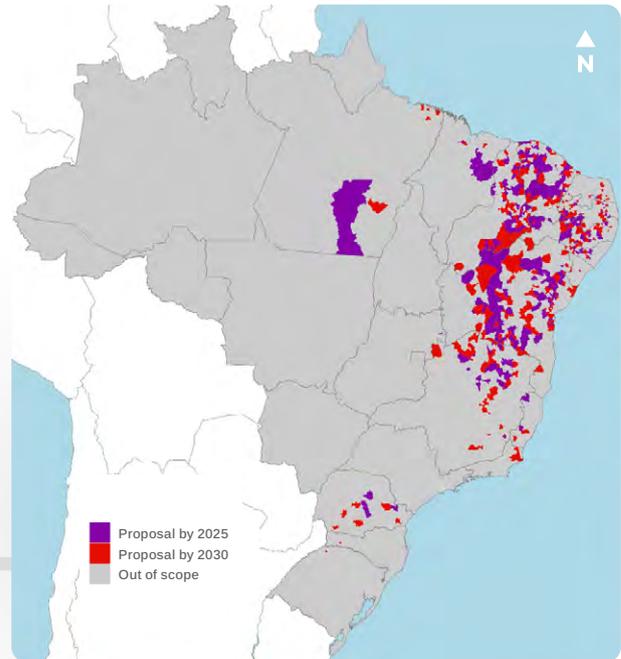




## STRENGTHENING SMALLHOLDER FARMING

Small-scale farming is vital for producing food for the basic grocery basket and social inclusion in the countryside. Considering the importance of the sector and the need to target public policies that encourage smallholder farming to reach its potential throughout the country, PlanaFlor has developed a fragility index for Brazilian municipalities concerning smallholder farming. Based on four criteria (productivity of the main crops used in small-scale farming, density of farms, social inequality and vegetation deficit in APPs), 557 municipalities were identified as priorities for targeting public policies related to small-scale farming. This will strengthen smallholder farming where it is most needed, impacting food production on 11.4 million hectares and benefiting 2.6 million smallholder farmers.

Priority municipalities for strengthening family farming.



## INCREASING GDP AND GENERATING JOBS AND INCOME

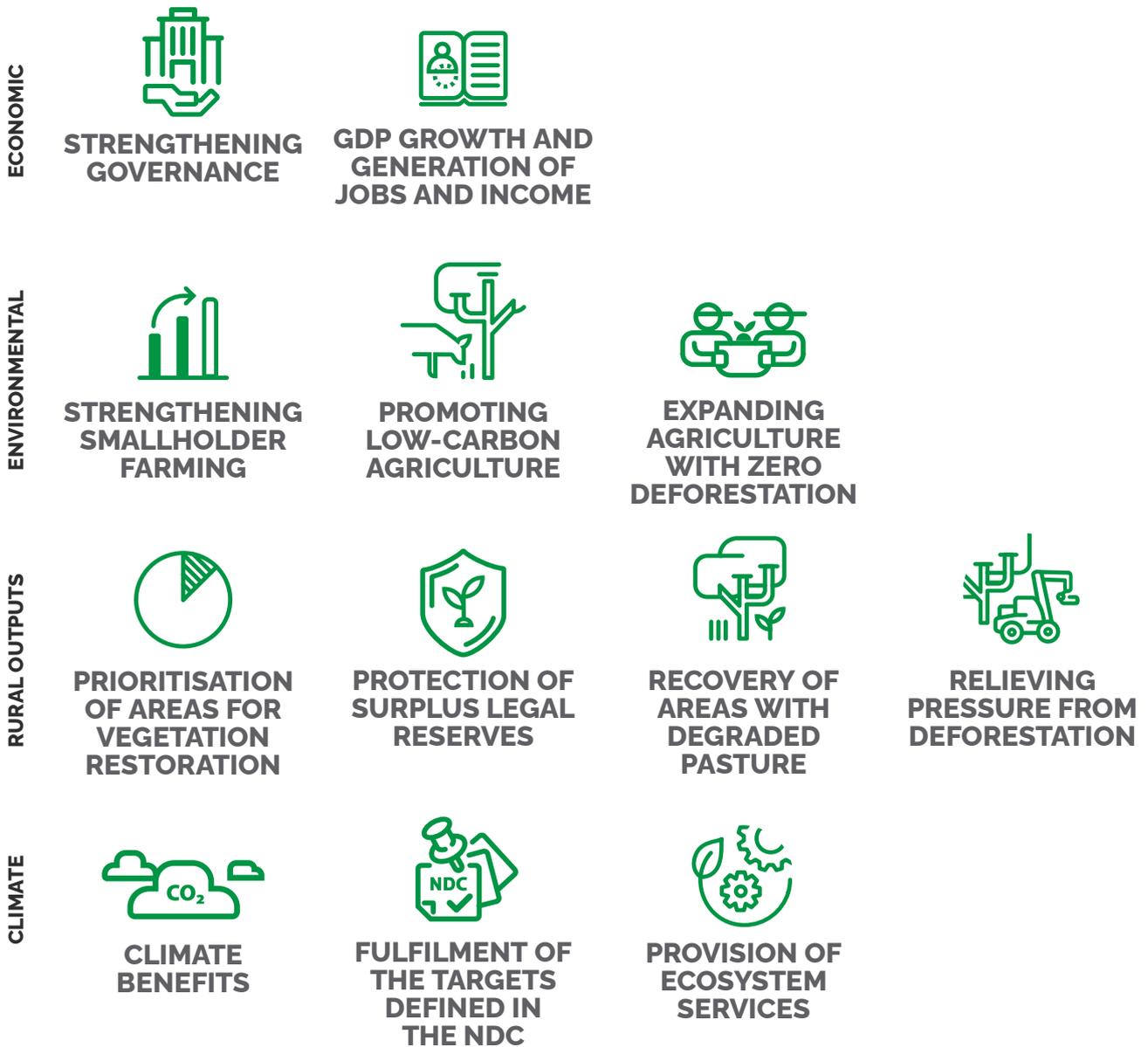
The economic models produced by PlanaFlor refute the theory that implementing the Forest Code will harm the country's growth. The positive or neutral impacts on economic activities in general are predominant, while the environmental benefits are favourable, especially for the rural economy. Projections show that by 2030, implementing the Forest Code could generate an increase in GDP of R\$6.2 billion per year, mobilising resources of around R\$400 billion by 2030 and generating about 2.5 million jobs.



## CLIMATE BENEFITS

The effective implementation of the Forest Code, considering only the restoration of Permanent Preservation Areas (APPs) and Legal Reserve areas and the conservation of surplus native vegetation, will generate a positive balance of around 25 Gt of CO<sub>2</sub>e (removals and evaded emissions), leading Brazil to fulfil its internationally agreed targets.

# Impact



## To learn more

All the studies and mappings carried out by the project, including the full Plan, the Executive Summary and the Strategic Matrix can be consulted on the project website [www.planaflor.org](http://www.planaflor.org).

PlanaFlor developed by:



Funded by:

