



SECTOR PAPER
BRAZIL

FEBRUARY 2022

**Supporting the mobilisation of funds
from commercial banks to finance
forest conservation and sustainable
agriculture in Brazil.**

Introduction

Brazil is one of the world's largest agricultural producers and exporters, producing a range of commodities for the global market. The country also plays host to some of the most important global ecosystems, including in Amazonia and the Cerrado.

Farmers and agribusinesses are often best placed to implement the solutions required to bring about a shift in the sector. However, transitioning to more sustainable, deforestation-free, agricultural production in key sectors, such as soy and beef, requires significant amounts of finance for business models and production practices that can be deployed at scale. Public and private financial resources are available - yet there still exists a significant funding gap, in order to reach its broader sustainability targets. For example, according to Markestraat consultancy, it is estimated that USD 78.9 billion is still needed to implement the Forest Code and the Low Carbon Agriculture Program (ABC+), the two central policies for sustainable agriculture in Brazil.



Rabobank

In partnership with IDH and Rabobank, AGRI3 is working in Brazil to support the mobilisation of commercial finance towards sustainable production in key agri-commodity sectors – soy and beef. Together, the partners have analysed the critical interventions and financing needs in the soy and beef sector, the current practices and initiatives already applied in an attempt to overcome them, and the levers available to scale up and to help more producers to move faster to practices that conserve forest areas, implement sustainable agriculture and support rural livelihoods. This document summarises these findings, providing details of intervention areas and examples of potential financing models to mobilise finance in each.





THE BRAZILIAN AGRIBUSINESS SECTOR IS **CRUCIAL** TO THE COUNTRY'S ECONOMY.

Soybean and cattle production play a prominent role in the Brazilian agribusiness sector, which is crucial to the country's economy.

During the 2019-20 harvest, soybean was planted on over 37 million hectares, reaching a production of 124.8 million metric tons. The area planted corresponds to 54.4% of the Brazilian cropland area, and to less than 4.5% of the Brazilian territory. Given the climate conditions in tropical countries, such as Brazil, it is possible to produce 3 crops per year in each hectare of cropland area. Producers therefore typically grow soybeans as their primary summer crop, and alternate it with corn, cotton, or wheat as winter crops.

In the next decade, soybean production in Brazil is expected to grow 33%, while planted area is expected to grow less than 27% due to increases in productivity.



At the same time, in 2019 meat production reached 10.5 million tons of carcass-weight equivalent, with 24% of this destined for export markets. With a herd of around 215 million animals, pastureland in Brazil represented 163 million hectares.

Beef production in Brazil is expected to grow 20% in the next decade, while pasture area is expected to be reduced in 7%, according to an analysis by Markestrat consultancy. This is mainly due to production intensification, but many cattle ranchers will still need support to achieve system transformation.

Global population growth in the next decade will demand additional animal protein and other protein production. As such, it is expected that both cattle and soybean production in Brazil will grow by over 20% and 33% respectively.

As any other global commodity, both the cattle and soybean sectors experience significant sustainability challenges, including deforestation, land and soil degradation (pasture lands) and biodiversity loss, also contributing to climate change.

Cattle Sector

Cattle ranching is often associated as a driver of deforestation, leading to the clearing of forest areas to convert to grazing pasture. Lack of capacities at farm level to implement adequate practices and access to better technology lead to poor pasture management in cattle. New fields can degrade in five to ten years due to overgrazing and nutrient loss, which leads to a renewed need for land and potential further deforestation. Conversely, cattle ranching productivity in Brazil is still poor, at 30% of its expected potential.

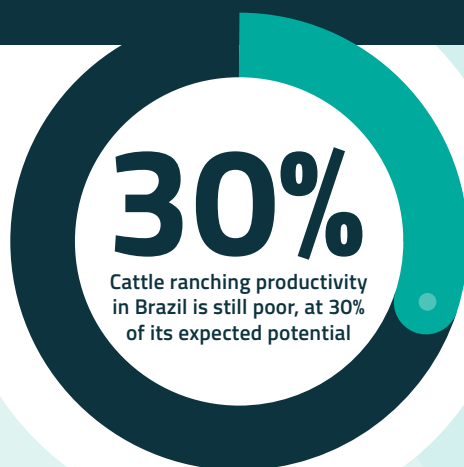
Through higher yields – obtained by improving soils and animal feed, with better cattle quality and pasture management – production can keep up with demand while making considerable land redundant, thereby reducing the pressure to convert land. However, this requires producers to have the technology, expertise, and finance to do so, which they often lack.

Soybean Sector

Increases in production will require an increase in the area planted with soybeans of around 27%, which raises concerns about additional legal clearing of forests. Implementing innovative agricultural practices in the soy sector can also enhance soil fertility, further reducing the arable land needed and disincentivising area expansion over original vegetation.

Both sectors also continue to be affected by other sustainability challenges. These include limited weed and insect resistance, limited adaptation to climate change effects, high water footprint, poor animal welfare and lack of traceability in livestock supply chain.

For producers to address these challenges it requires investment in scalable business models, production practices and supply chain measures that encourage resource management and protection.



Supporting sustainability

AGRI3 and partners identified four key intervention areas to focus on mobilising finance.



1

Forest recovery and sustainable forest management



Examples of projects include:

- Recovery of permanent preservation areas on farms
- Recovery of legal forest reserve areas on farms
- Alternative income-generating activities from forest recovery on farms, such as sustainable forestry and carbon finance

2

Production intensification and best-practice implementation



Examples of projects include:

- Crop-livestock and crop-livestock-forest systems
- Restoration and recovery of degraded pastureland, incl. to other crops (e.g. soybean)
- Alternative and improved cultivation techniques, such as regenerative agriculture, sub-soiling, soil correction and fertilisation, erosion management (e.g. terrace and contour)
- Efficient irrigation methods

3

Certification and traceability



Examples of projects include:

- Animal monitoring systems (incl. indirect producers)
- Traceability in deforestation-risk areas and certifications (e.g. beef and low-carbon certifications)

4

Digital farming and sustainability innovation



Examples of projects include:

- High precision agriculture technology and machinery, and farm management improvements (e.g. smart irrigation) that make better use of resources, improve productivity and reduce pressure on area expansion
- Hardware and software related to agronomic management systems
- Research and development



THERE IS A LARGE **FUNDING GAP** IN THE SOY AND BEEF AGRICULTURE SECTORS IN BRAZIL.

The funding gap

Delivering on these interventions and ensuring a transition to sustainable agriculture and forest conservation and restoration in Brazil requires efforts from both the public and private sector. A sustained policy environment, fiscal and regulatory incentives, business innovation and long term finance can all support this transition.

- Furthermore, Brazil has a number of policy commitments and targets aimed at promoting forest conservation and sustainable agriculture. For example, the country's National Strategy for Climate Neutrality, aligned to its Nationally Determined Contribution (NDC) includes strengthening the commitment of the producers to the Forest Code and the additional restoration of 15 million hectares of degraded pastures by 2030.
- While there are some public financial resources available, such as Programa ABC, to address the challenges mentioned, these are not sufficient to meet Brazil's sustainability goals in agriculture and require complementary commercial finance. However, the commercial finance that's currently available is often fragmented, short-term and only addresses parts of the sustainability interventions farmers want to implement. Or they are not available to producers at all due to the high risks associated with financing the sector.

Brazilian Forest Code compliance and reducing legal deforestation

When addressing deforestation in Brazil, it's important to distinguish between legal and illegal deforestation. According to the Brazilian Forest Code, a certain percentage of farmland should be preserved, ranging from 20% to 80% depending on the biome where the farm is located.

Complying with the Forest Code, however, presents several challenges to Brazilian farmers:

1. The law mandates farmers to comply with the Forest Code by 2032. This long deadline limits farmers' incentives to invest in the recovery of degraded land and setting aside areas for preservation in the short term, so as to maintain biodiversity and mitigate climate change.
2. Lack of (financial) resources to enable implementation and subsequently compliance with the Forest Code, including recovering degraded pastureland, and actively restoring and preserving conservation units.

In addition to regular compliance with the Forest Code, for the soybean and cattle sectors to comply with zero-deforestation targets, farmers also need to be incentivised to maintain and potentially expand forest area on farmland beyond Forest Code compliance (i.e. to reduce legal deforestation). Often, converting surplus forest area into agricultural land is economically more attractive, especially when commodity prices have increased considerably, amplifying the opportunity cost of not producing.

Converting surplus forest area into agricultural land is economically more attractive.



Barriers to finance

Commercial financiers, such as banks, may perceive a number of risks and other barriers to providing loans to support innovative, sustainable business and production models in the sector.

This includes the perception that the risks attached to these investments are too high and the required loan tenors are too large a step to comply with prudent and increasingly stringent banking regulations.

Some of the key barriers associated with providing commercial finance for sustainability purposes to Brazilian soy and beef producers include:

- **Non-cash generating interventions**

Many on-farm sustainability interventions, such as forest restoration to comply with the Forest Code, do not generate cash and require integration with a strong business model by the farm itself to be commercially viable.

- **Long repayment periods**

The implementation of sustainability interventions often requires longer repayment periods and thus loan tenors.

- **Inefficiency and high transaction costs**

Loan administration and disbursement to smaller and medium-sized rural farmers in particular can be inefficient and costly.

- **Poor credit history**

Some producers are in debt or lack the collateral required, such as land titles.

- **Low capacity of producers**

Producers may be unable to implement the sustainability interventions.

- **Limited capacity for applying appropriate deal conditions for financing key sustainability interventions**

These include identifying ESG risks and opportunities, and monitoring impact.

- **Limited understanding of key sustainability intervention areas**

These include the associated business case and the financial risk appetite required.



Loan disbursement to farmers can be inefficient and costly.

AGRI3 enabling tools



Across the four intervention areas identified, AGRI3 and partners formulated a number of enabling tools that can support mobilisation of finance from commercial banks to address these risks, and subsequently to allow producers to access capital for sustainability.

1 Reduce risk and raise attractiveness of financing producer sustainability interventions



- Provide (partial) pari-passu guarantees in case of a bank's inability to provide the required amount of financing on its own
- Guarantee part of the loan with a longer tenor in order to allow a bank to provide longer term funding
- Take on higher risk tranches for some of the funding, encouraging the mobilisation of commercial finance

Provide other risk-sharing arrangements, such as a subordinated position to support commercial investors in certain funding structures (e.g., in collective fund instruments such as the Brazilian FIDC structure).

2 Enhance deal conditions



Support partner banks in structuring transactions with improved deal conditions to support clients, manage risks, and monitor and steer towards creating positive impact. For example, by developing an Environmental and Social Action Plan (ESAP), key risks and areas for positive impact generation can be identified and systematically addressed by the client with support from AGRI3 and technical assistance where needed.

3 Partner with others on innovative models



Support innovative credit analysis tools with better measurement of systemic risk, or structure higher-risk financial products that allow for increased flexibility in the use of collateral (e.g., number of calves traced or future soybean bag production as collateral).

4 Provide technical assistance



Provide technical assistance by the AGRI3 Technical Assistance Facility (TAF) to support producers in meeting pre-investment eligibility criteria, and in implementing post-investment interventions (e.g. by supporting capacity building and delivery of technical expertise), as well as supporting farmers in identifying opportunities for increased environmental and social impact, monitoring those impacts, and thereby reducing the overall project risk for the investor.

AGRI3 support

Two examples illustrate how these instruments could support the sustainability intervention areas identified in the cattle and soy sectors in Brazil.



1

Forest recovery and cattle intensification financing



The Challenge

For cattle producers who are willing to invest in Forest Code compliance, pastureland renovation, and implementation of cattle intensification best practices, it is difficult to obtain the necessary financing from commercial banks.



AGRI3 Solution

AGRI3 proposes providing commercial banks with a so-called maturity subordination guarantee that has a longer tenor and amortises later than the banks' own exposure, making it possible for the bank to provide these producers with ten-year financing. This allows producers to make the investments in recovery of forest reserves and on-farm improvements, with the goal of reducing negative environmental impact and increasing efficiency.

The long tenor also gives producers ample time to generate the cash-flows that are required to repay the loan.

An ESAP, agreed as part of the financing and combined with technical assistance, will further help producers to implement any improvements needed to safeguard the sustainability of the investments and maximise positive impact.

2

Portfolio farmer financing to support sustainable production methods



The Challenge

Value chain players like cooperatives, off-takers and input suppliers want to support the provision of loans to farmers who are willing to adopt sustainable production methods and commit to maintaining certain standards, traceability requirements and/or certifications, but are unable to do bring on board commercial financial players, such as banks, because of the (financial) risks involved.



AGRI3 Solution

By taking a mezzanine position in a portfolio structure with value chain partners, AGRI3 can de-risk and mobilise funding from commercial banks in a senior position.

The portfolio approach with other value chain players, in combination with innovative credit analysis tools and inclusion of compensation mechanisms like carbon credits, makes it possible to provide attractive financing options to farmers while still realising a structure that's commercially viable overall.

Technical assistance can support producers (directly or through the development of tools) in the pre-investment stage to meet eligibility criteria for portfolio financing, as well as in the post-investment stage to help monitor progress and further maximise positive impacts.

What's next?

AGRI3 and its partners, including Rabobank, are already working to implement a number of these possible solutions. For example, AGRI3 and Rabobank provided financing in the form of a ten-year US\$5 million loan for pastureland renovation and accelerated compliance with the Forest Code to a Brazilian cattle producer. We are currently discussing similar transactions with several other large producers in the cattle and soy sectors in Brazil – for example, to restore degraded pasture for soybean planting.

AGRI3 and Rabobank are also launching a blended finance solution in early 2022 to finance the sustainable intensification of cattle projects. This includes pastureland renovation and Forest Code compliance, targeting medium- to large-sized farms that are at the lower end of the Rabobank Brazil rural portfolio in terms of average loan size.

AGRI3 and partners welcome others to connect and explore how to mobilise and accelerate additional commercial finance for these types of projects, to support the sustainability transition in the soy and cattle sectors in Brazil

Interested?

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AGRI3 and partners welcome others to connect.



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