NATIVE SPECIES SILVICULTURE IN BRAZIL:

ADVANCING KNOWLEDGE AND CUTTING-EDGE TECHNOLOGIES FOR SUSTAINABLE PRODUCTION SYSTEMS AND CLIMATE RESILIENCE

SILVICULTURE OF NATIVE SPECIES

PP&D-SEN

Daniel Piotto; Fátima C. M. Piña-Rodrigues; Lucas J. M. Freitas; Luciano M. Verdade; Marcelo F. Arco-Verde; Miguel Calmon; Miguel L. M. Freitas; Renata E. de Oliveira; Ricardo A. G. Viani; Samir G. Rolim; Silvio Brienza Junior; Carlos E. S. da Silva; Tatiana M. do Amaral.

Establish a new forest economy in Brazil based on silviculture of native species at the scale of the main agro-industrial sectors

SILVICULTURE OF NATIVE SPECIES

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WHY

- Potential for Brazil to become a global tropical timber producer
- Sustainability of natural forests
- Mitigation and adaptation to climate change
- Generation of scientific knowledge
- Acceleration and scaling up of reforestation and restoration
- Generation of employment and income in rural areas
- Conservation of biodiversity
- Improvement of other ecosystem services

History

SILVICULTURE OF NATIVE SPECIES
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Verena Project

Economic viability of reforestation with native species and Pre-competitive R&D

2016

Workshop

Research Gaps and Priorities in Silviculture of Native Species in Brazil

2018

Working Paper

2019

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Mobilize public and private resources to support a network of researchers and institutions

2021

Brazilian Coalition

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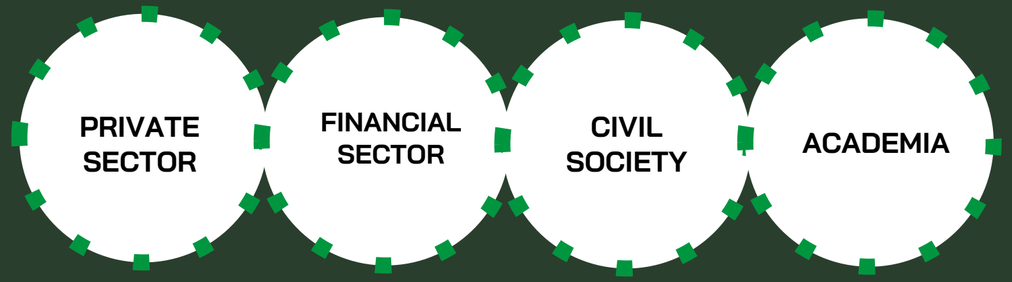

400+ MEMBERS

OBJECTIVE:

Articulate and facilitate actions to promote the harmonious, inclusive and a sustainable land use in Brazil.

HOW?

- Dialogue between different sectors;
- Development of proposals by consensus
- Advocacy for these proposals; and
- Communication with society.

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Task Force Silviculture of Native Species

- **Research and development (PP&D-SEN):** develop and implement an R&D program for native species in Brazil;

- **Improve the regulatory framework at national and subnational levels**: increase legal security and reduce producer costs when planting and sustainably exploiting native species;

- **Increase markets for timber and non-timber products**: identify and develop markets for native species products;

- **Attract financing and investment**: increase the volume of public and private investment for projects and enterprises with native species.

BRAZILIAN COALITION
ON CLIMATE, FORESTS AND AGRICULTURE

WHERE WE ARE

SILVICULTURE OF NATIVE SPECIES

PP&D-SEN

- Proposal under analysis by BNDES to implement PP&D-SEN
- Approved US$2.5 million contribution from the Bezos Earth Fund (JUL 2023)
- Two SELD-Network sites under implementation
- Began studies in three reference Hubs
- Developed topoclimatic zoning for 15 species
- Disseminating knowledge and capacity building
- Strengthening seed collectors´ network with indigenous people, afro decedent and traditional communities
- Supporting mapping priority of areas in Conservation Units in partnership with ICMBio
- Defining priority clusters and business models to mobilize private and public funding
- Advocacy to influence policy, create incentives, and remove regulatory barriers
- National and international outreach

BEZOS EARTH FUND

Implementation

SELD sites

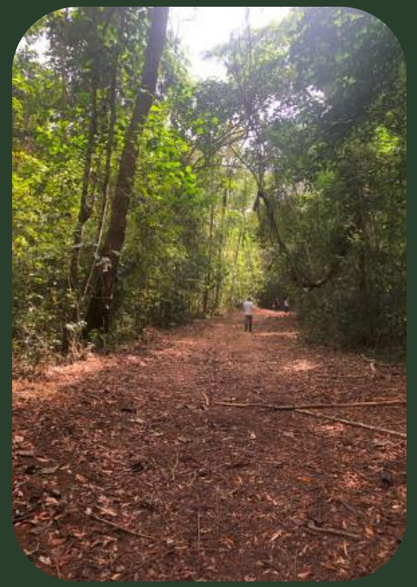
Centro de Estudos Rioterra (RO)

Symbiosis Investimentos (BA)

Implementation

Reference Hubs

Embrapa-Belterra (PA), CEPLAC-Porto Seguro (BA), RNV-Linhares (ES)



Implementation

Reference Hubs

RNV-Linhares (ES)

SILVICULTURE OF NATIVE SPECIES

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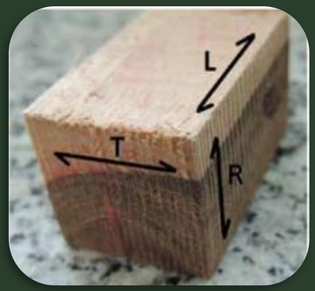

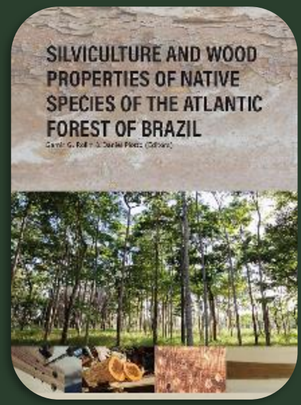

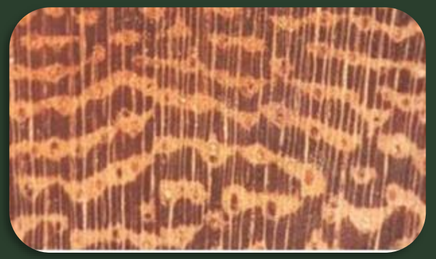

Implementation

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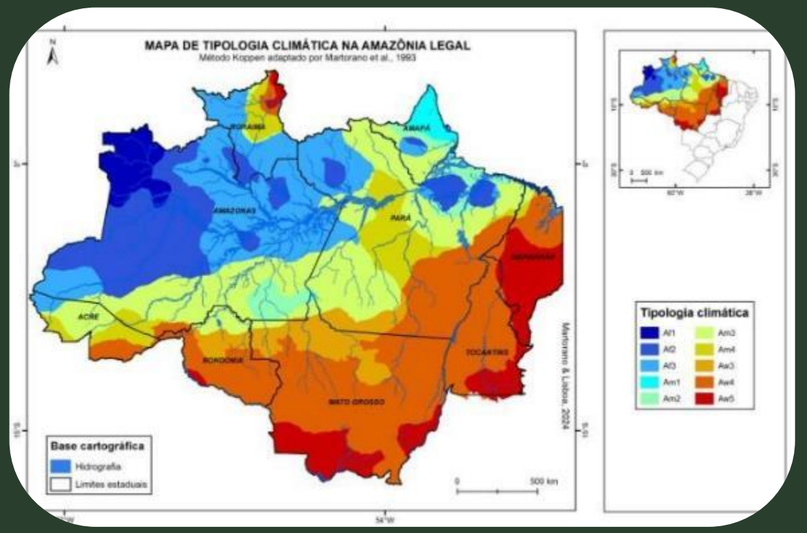
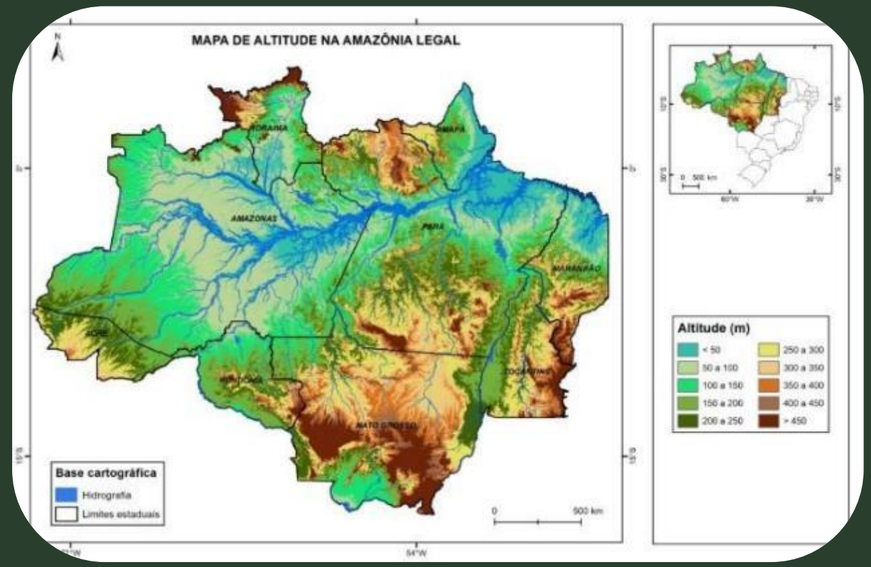
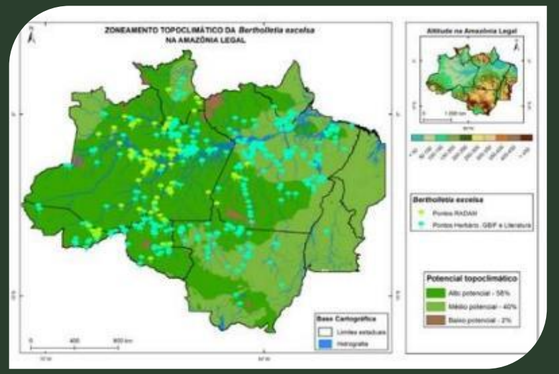
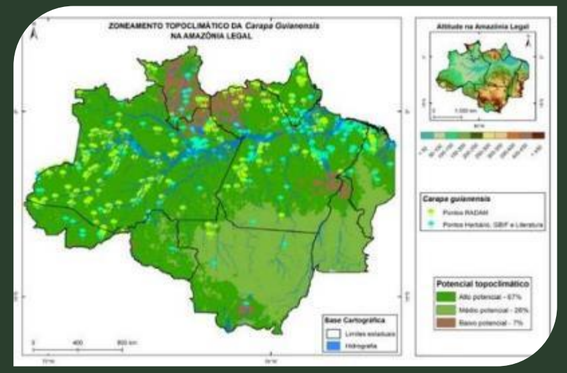
Topoclimatic zoning

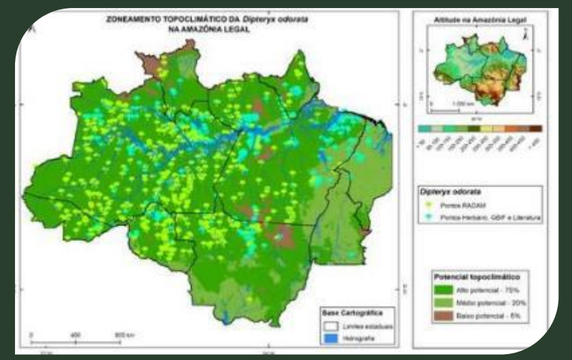
Andiroba, Cumaru, Castanha-da-amazônia , ...











Implementation

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Training activities in the Tapajós National Forest

Training community members and multipliers in the collection and management of Amazon forest seeds, with an emphasis on structuring a seed network.

Dissemination of Knowledge

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PP&D-SEN

Communication

https://coalizaobr.com.br/en/nativespecies/

- 44 posts (in 2024): Instagram, Facebook and LinkedIn
- 1.618.292 accounts reached
- 1.652 posts shares
- 14 videos and reels

Dissemination of Knowledge and outreach

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Advocacy

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What next

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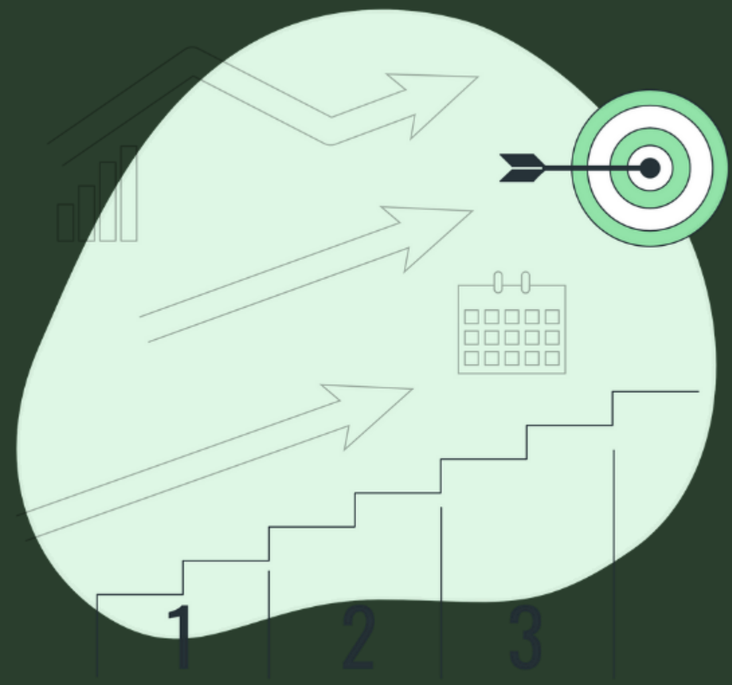

- **Funding:** secure funding from BNDES to consolidate the PP&D-SEN and extension of the BEF project;

- **Implementation:** new sites research sites and hubs, collect data, capacity building and training, demonstration units;

- **Dissemination of knowledge and outreach:** mainstream the concept of silviculture of native species at national and international events and increase communication (videos, publications and posts);

What next

SILVICULTURE OF NATIVE SPECIES
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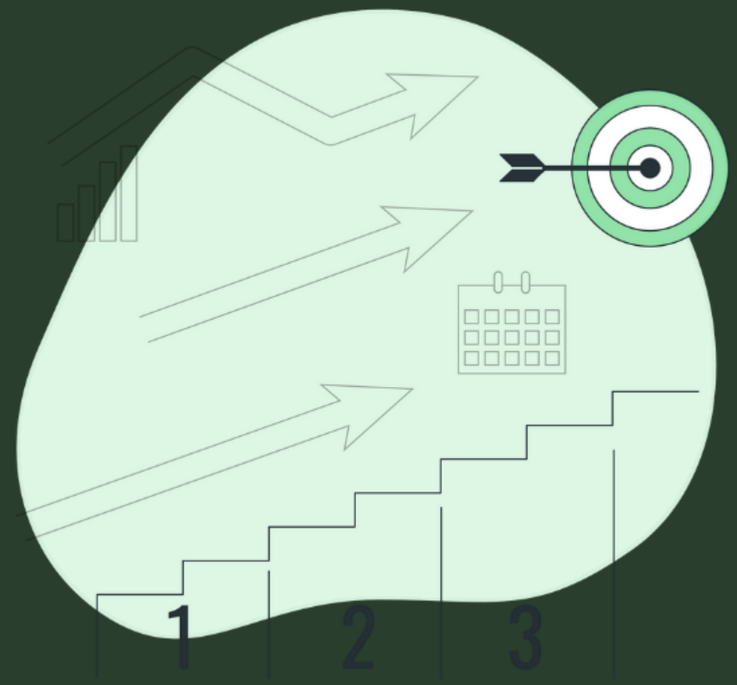


- **Advocacy and strategic partnerships**: Federal Government (MMA, MAPA, SFB, ICMBio), Coalition, Regional Networks, State and Local governments, Universities, Private sectors etc.);

- **Capacity building and training:** EAD Platforms Saberes, Train the trainer, Technical Assistance and Rural Extension, Communities, Farmers, companies etc;

- **Roadshow:** mobilize investors, funders, and private companies and sectors.

PUBLICATIONS

WRI BRASIL

TECHNICAL NOTE

VERENA INVESTMENT TOOL: VALUING REFORESTATION WITH NATIVE TREE SPECIES AND AGROFORESTRY SYSTEMS

AUTHORS: ALAN BATISTA; ALEXANDRE PRADO; CLAUDIO PONTES; MARCELO MATSUMOTO

EXECUTIVE SUMMARY

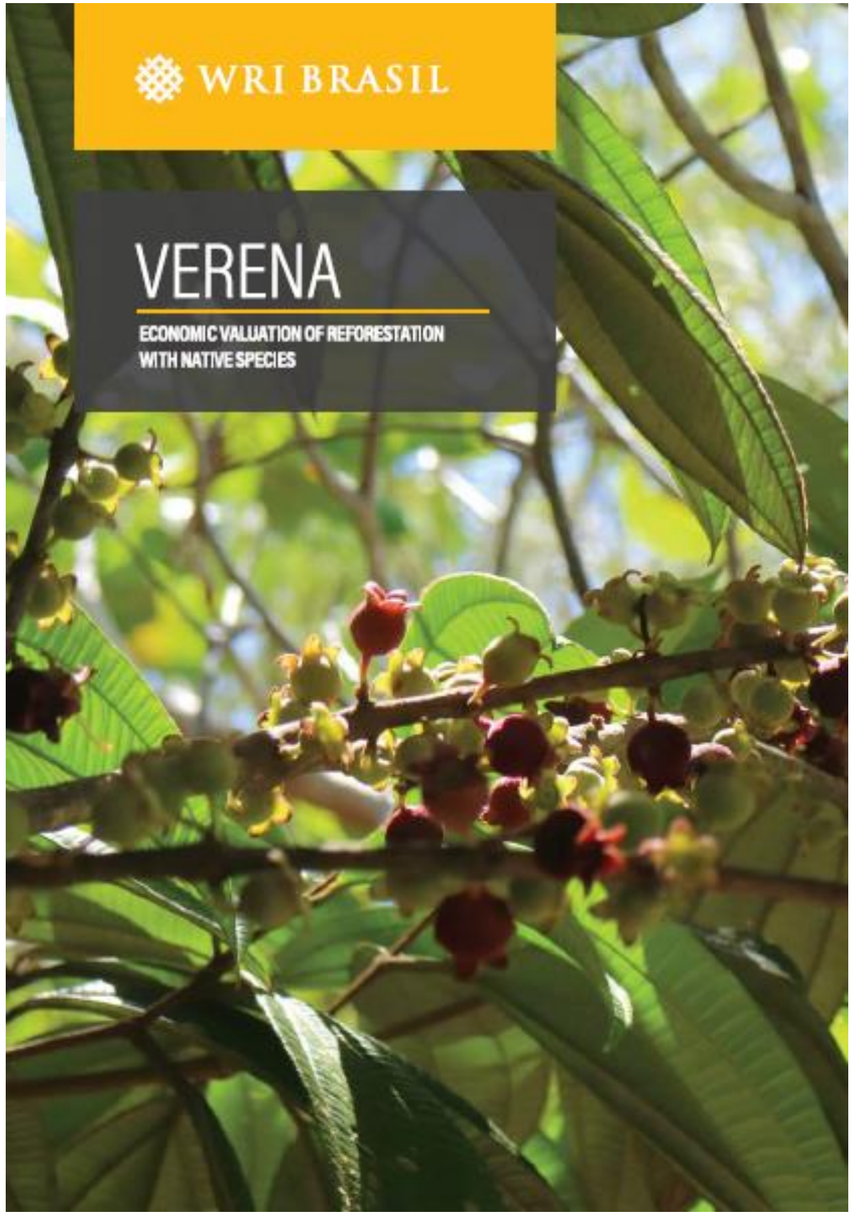
Is reforestation with native tree species and Agroforestry Systems a viable business? The great challenge faced by reforestation with native Brazilian tree species, agroforestry systems and restoration lies in moving from the pilot project phase to a larger scale, and then to mainstreaming. To answer this question, we turn to the global capital market. There is a risk and return track record of more than 100 years for several asset classes and publicly traded companies. Moreover, it is possible to find and produce information on how these various asset classes correlate with each other, with economy and inflation, that is, the level of information is large enough for investment decision making given its profile risk and return. Although native Brazilian tree species have existed for thousands of years, and despite some good commercial experience with them, we have no history of this asset class from the capital market standpoint. In this way, building the ongoing business cases in Brazil with native trees and agroforestry systems is fundamental to create this track record and make it possible for reforestation with native species and agroforestry systems to gain scale and reduce risk perception.

This technical note presents the Economic Valuation of Reforestation with Native Species (VERENA) tool, a model framework based on 12 investment cases developed by WRI Brasil in partnership with UICN Brazil and contribution of several organizations and collegues. The goal of the VERENA Project is to fill the gap of knowledge on reforestation and agroforestry systems and assess returns on investments and other relevant information, in order to better inform investors, policy makers and analysts interested in using

CONTENTS

WRI Technical Notes document methodology underpinning research publications, interactive applications, and other tools.

Suggested Citation: Batista, A., Prado, A., Pontes, C., Matsumoto, M., 2017. "VERENA Investment Tool: Valuing Reforestation with Native Tree Species and Agroforestry Systems". Technical Note. São Paulo, Brazil: WRI Brasil. Available online at: www.wri.org/publication/verena-investment-tool.



VERENA

RELATÓRIO DE ATIVIDADES
DA REDE DE PARCEIROS

PROJETO VERENA

WRI BRASIL

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WORKING PAPER

ROLE OF ABC PLAN AND PLANAVEG IN THE ADAPTATION OF BRAZILIAN AGRICULTURE TO CLIMATE CHANGE

EDUARDO DELGADO ASSAD, LUIZ CLAUDIO COSTA, SUSIAN MARTINS, MIGUEL CALMON, RAFAEL FELTRAN-BARBIERI, MAURA CAMPANILI, CARLOS A. NOBRE

EXECUTIVE SUMMARY

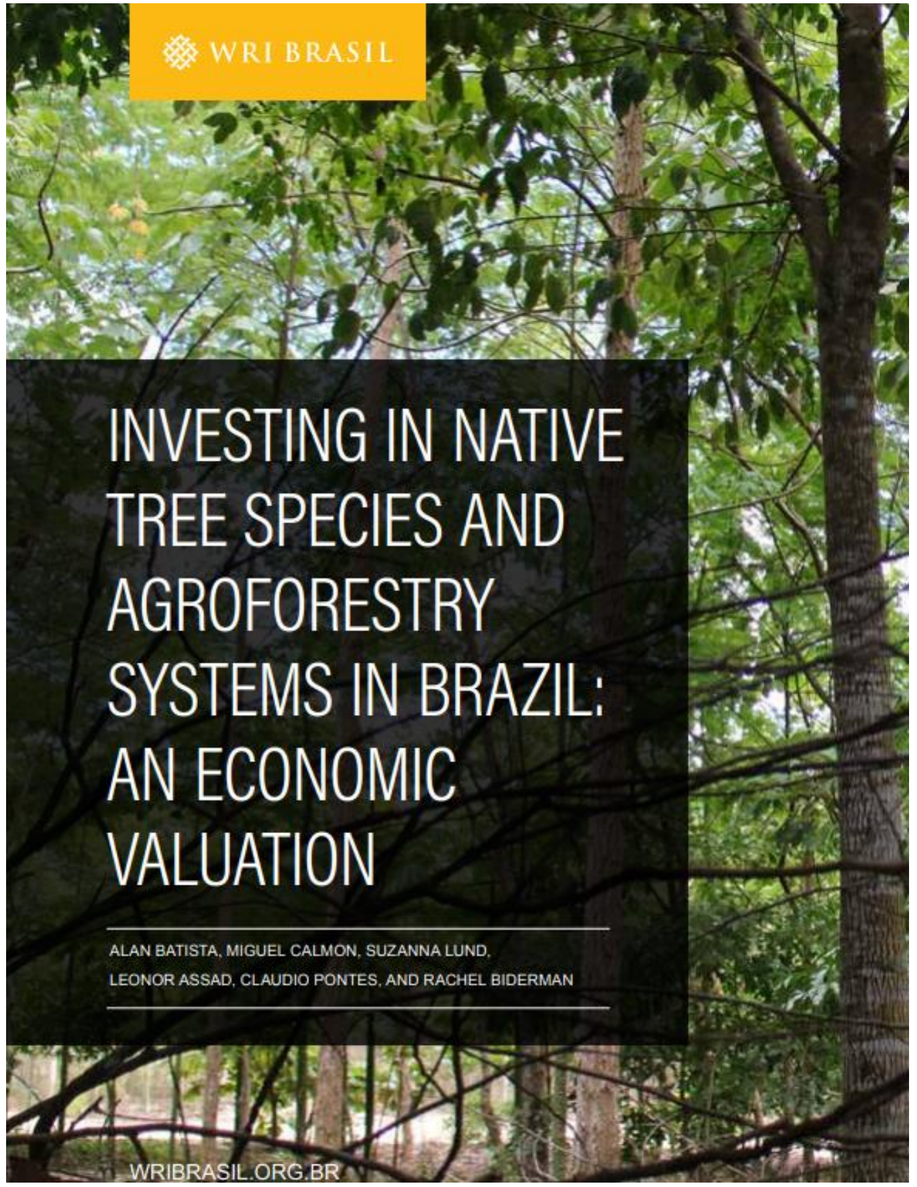
Highlights

- **This working paper presents a set of sustainable practices for the Brazilian agriculture in the short and long-terms,** that contribute to the provision and maintenance of ecosystem services, conservation and restoration of biomes, and more resilient low-carbon productive systems that are more adapted to current and future impacts from climate change.
- **It proposes a matrix that highlights opportunities to increase resilience and adaptation to climate change** of the main technical approach recommended by the ABC Plan and Planaveg, which can be used by investors and financial institutions to assess risks.
- **Climate change adaptation strategies in the agriculture sector can provide environmental and financial benefits** for farmers, and economic, social and environmental benefits for society at large, in addition to reducing risk to investors, financial institutions and insurance companies.
- **Increased investment and adoption of the systems recommended by the ABC Plan and the restoration strategies proposed by Planaveg are needed,** in order for their importance to land use and legal compliance, and vulnerability reduction of farmers to climate variability and extreme climate events to be realized.

CONTENTS

Working Papers contain preliminary research, analysis, conclusions and recommendations. They are distributed to stimulate discussions and critical commentary and to influence the debate underway about emerging issues. Most Working Papers are eventually published in another form and their contents may be revised.

Suggested citation: ASSAD, E. D. *et al.* Role of the ABC Plan and Planaveg in the adaptation of crop and cattle farming to climate change. Working Paper. São Paulo, Brazil: WRI Brasil. Available online at: https://wribrasil.org.br/pt/publicacoes



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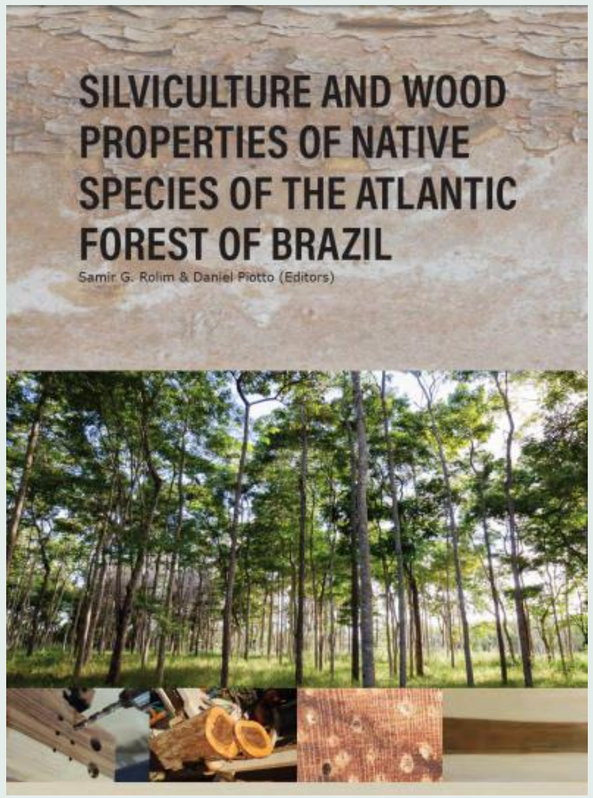
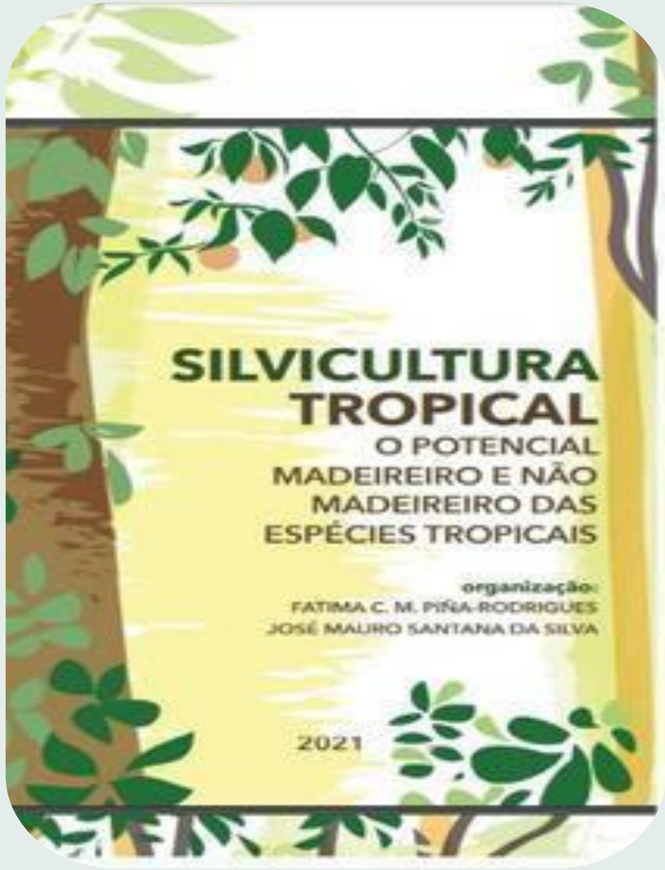
PUBLICATIONS





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Thank you!

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Get in touch to learn more and discuss partnership opportunities.

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