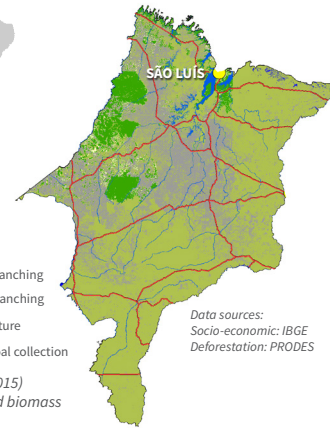




LOW-EMISSION RURAL DEVELOPMENT (LED-R) AT A GLANCE

- Comprised of 3 ecosystems: Cerrado (64%), Amazon (35%) & Caatinga (1%); 80% of the state is within the Legal Amazon (~240,000 km²)
- Differing biome-specific environmental policies pose challenges for implementing statewide LED-R initiatives
- 70% of remaining forests located in indigenous peoples' (IP) territories & protected reserves; secondary vegetation (27% of deforested area) is unprotected, despite significant restoration potential
- Part of MATOPIBA region: agricultural frontier of the Cerrado spanning Maranhão, Tocantins, Piauí & Bahia states
- 20% of state's soybean crop area certified by Round Table for Responsible Soy (RTRS); ~65% of soy expansion on lands converted from native vegetation
- Land concentration & monoculture in late 20th century contributed to socio-economic disparity & underdevelopment
- Free Babaçu Law gives rights to babaçu harvesters (mostly women) for free access & community use of babaçu, even on private land, & prohibits cutting & burning palm trees to protect babaçu harvesting & promote sustainable agricultural development



- FOREST
- NATURAL SAVANNAH (CERRADO)
- DEFORESTATION (2001-2017)
- NO FOREST

DRIVERS OF DEFORESTATION

- Illegal logging
- Large-scale cattle ranching
- Small-scale cattle ranching
- Large-scale agriculture
- Subsistence charcoal collection

Data sources:
Socio-economic: IBGE
Deforestation: PRODES

AVERAGE ANNUAL EMISSIONS FROM DEFORESTATION

5.76 Mt CO₂ (2010-2015)
Includes above-ground biomass & peat decomposition

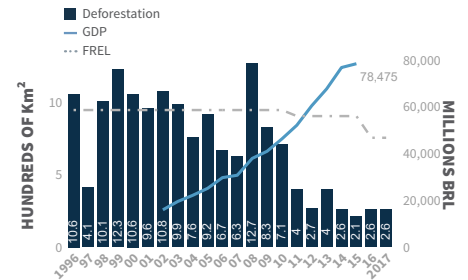
- AREA: 331,937 km²
- POPULATION: 7,059,776 (2018)
- HDI: 63.90 (2010)
- GDP: USD 21.54 billion (2015, Base year 2010)
- GINI: 0.506 (2015)

MAIN ECONOMIC ACTIVITIES

- Public Services
- Trade
- Services

RURAL/URBAN POPULATION

40%/ 60% (2015)

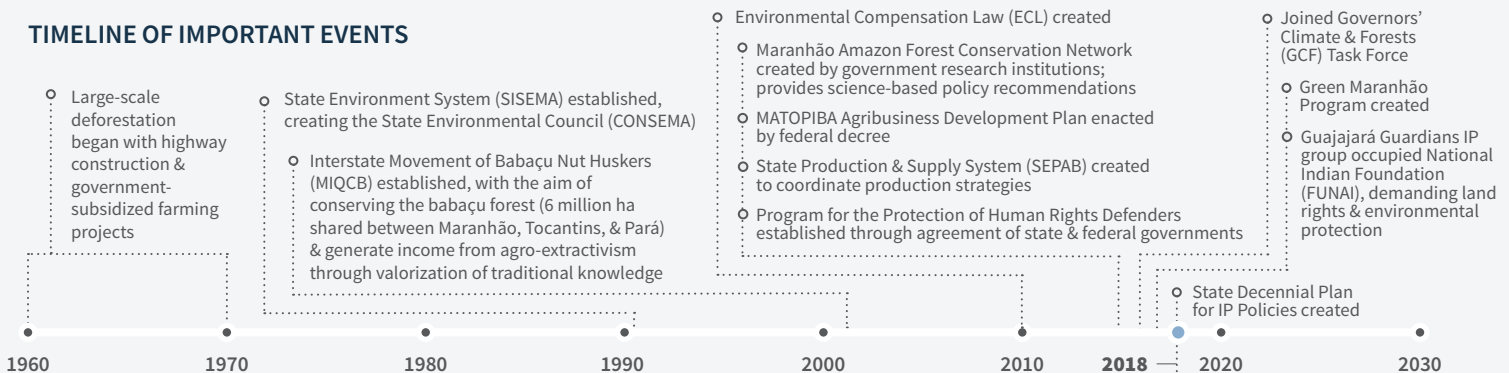


SPOTLIGHT ON INNOVATION

The Maranhão Verde (Green Maranhão) Program (Law 10.595/2017) provides environmental education & technical training for families living in Conservation Units (UCs). Under the program, beneficiaries receive cash compensation through the Bolsa Maranhão Verde for their conservation and restoration activities. The program's Management Committee includes representatives of the State Secretariats of Environment (SEMA), Government (SEGOV), Family Agriculture (SAF), Human Rights and Popular Participation (SEDIHPOP), and the State University of Maranhão (UEMA) and Maranhão Institute of Socioeconomic and Cartographic Studies (IMESC). The Committee is responsible for approving the action plan, monitoring and evaluation,

and identification of priority areas for program implementation. Individual projects under the program target specific geographies, such as watersheds and state parks. In the activity areas - in the Bacanga and Mirador State Parks - the beneficiaries are mainly women. Beneficiaries must enroll in the State and/or Federal Government Registry for Access to Social Programs (CadÚnico), and sign an agreement specifying the conservation and restoration activities. Activities include planting seedlings and isolating areas for natural regeneration, among others. The program is Maranhão's first active Payment for Environmental Services (PES) initiative, and could provide lessons for development of other PES initiatives in the state.

TIMELINE OF IMPORTANT EVENTS



PLEDGES & COMMITMENTS

◆ Part of international agreement or forum

- Reduce deforestation in the Amazon by 80% below baseline; Reduce deforestation in the Cerrado by 50% below baseline; Zero illegal deforestation in the Cerrado.
- Reduce deforestation 80% below baseline.
- Reduce GHG emissions 37% below 2005 level.
- Restore 12 million ha deforested land.

JURISDICTIONAL

State Plan for Prevention & Control of Deforestation (PPCD-MA)¹

Rio Branco Declaration² ◆

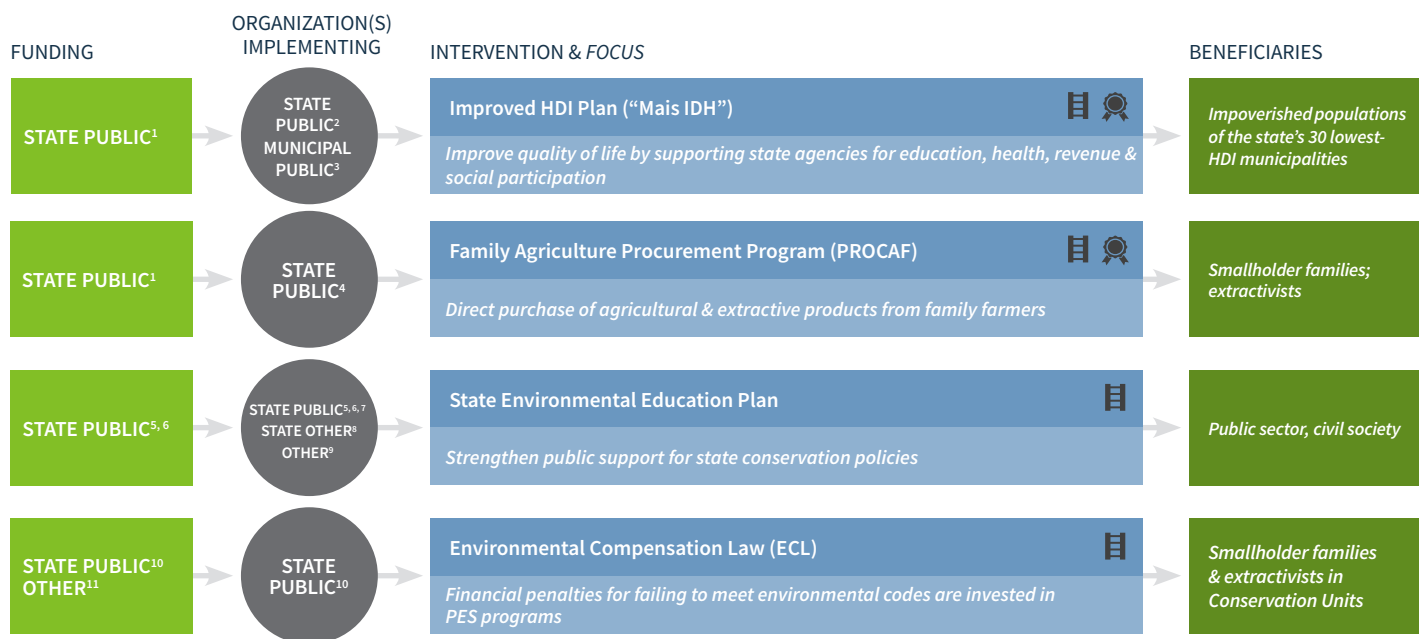
NATIONAL

Nationally Determined Contribution (NDC) to UNFCCC³ ◆

Bonn Challenge⁴ ◆

KEY INTERVENTIONS

✘ DISINCENTIVES 📊 ENABLING MEASURES 🎯 INCENTIVES



1 State treasury. 2 Management Committee made up of: State Secretary of Human Rights & Popular Participation (SEDIHPOP – the executive secretariat), State Secretary of Social Development (SEDES), State Secretary of Social Communication & Political Affairs (SECAP), State Secretary of Health (SES), State Secretary of Education (SEDUC), State Secretary of Family Agriculture (SAF), State Secretary of Labor and Solidarity Economy (SETRES), Secretary of Farming (SEFAZ), Secretary of State for Cities & Urban Development (SECID), Extraordinary Secretary of State for Racial Equality (SEIR), Environmental Sanitation Company of Maranhão (CAEMA/SECID), Maranhense Institute of Socioeconomic & Cartographic Studies (IMESC/SEPLAN). 3 Committee of the Participant Municipalities. 4 SAF. 5 State Secretary of Environment. 6 SEDUC. 7 State Education Council. 8 CONSEMA. 9 Other civil society & research institutions. 10 State Fund for Conservation Unites (FEUC) – linked to SEMA budget. 11 Companies involved in the licensing process.

PROGRESS TO JURISDICTIONAL SUSTAINABILITY

○ EARLY ◐ INTERMEDIATE ● ADVANCED

Integrated LED-R Strategy	○	<ul style="list-style-type: none"> PPCD-MA requires updating to better guide policy-making & enforce action toward meeting targets SEMA has begun the process of developing a jurisdictional REDD+ system, supported by UNDP funding & implemented by the Amazon Environmental Research Institute (IPAM)
Spatial plan	○	<ul style="list-style-type: none"> Development of State Macro Ecological-Economic Zoning (MacroZEE) included multi-sector consultations in 4 municipalities; low involvement of IP & traditional communities (TC) Finer-scale ZEE in 108 Amazon counties focused on territorial planning, & Agrarian Zoning (ZAMA) for policy development for agricultural sector in 10 regions of the state, are under development
Performance targets	○	<ul style="list-style-type: none"> PPCD-MA targets align with national Amazon & Cerrado plans, but are not enforced State regulations to reduce forest protection contradict national conservation & restoration targets (e.g., NDC)
Monitoring, reporting & verification (MRV)	◐	<ul style="list-style-type: none"> National large-scale deforestation data publicly available for Amazon (PRODES & DETER) & Cerrado (PRODES CERRADO) biomes Regular state-level monitoring hindered by lack of capacity, personnel, technology & infrastructure, despite available information from national level
Policies & incentives	○	<ul style="list-style-type: none"> State policy framework for advancing LED-R does not adequately reconcile environmental & economic development agenda, & state policy priorities do not align with national environmental policies Maranhão Verde Program & establishment of SEMA's Green Economy Administration are initial efforts to transition to a low-carbon economy
Multi-stakeholder governance	○	<ul style="list-style-type: none"> CONSEMA, led by SEMA & including state government, private, & civil society sector representatives (including smallholders & quilombolas), manages environmental policy & licensing processes & meets every 2 months
Sustainable agriculture	○	<ul style="list-style-type: none"> Extensive use of fire in agriculture & ranching sectors, threatens IP/TC territories & ability to meet PPCD-MA targets More Production Program, implemented by Secretariat of Agriculture, Livestock, & Fisheries (SAGRIMA), promotes intensification of 10 priority supply chains & offers technical training (~5300 properties benefitting)
Indigenous peoples & local communities	○	<ul style="list-style-type: none"> Majority of IP territories are under severe threat, including from fires; violent conflict with illegal loggers on-going Coordination of Maranhão IP Organizations (COAPIMA) is active in public policy discussions, especially regarding IP land tenure rights Women's social movement MIQCB defends their territories & access to babaçu palm areas, which is limited by farmers
LED-R finance	○	<ul style="list-style-type: none"> Credit available from national Low-Carbon Agriculture (ABC) Plan to support advancing LED-R; however, high interest rates, poor technical assistance, & rigid bank requirements hinder producer access

CITATION | M. de los Rios, O. David, A.C. Crisostomo, C. Stickler. 2018. “Maranhão, Brazil” in C. Stickler *et al.* (Eds.), *The State of Jurisdictional Sustainability*. San Francisco, CA: EII; Bogor, Indonesia: CIFOR; Boulder, CO: GCF-TF.

COMPLETE REFERENCES & DATA SOURCES PROVIDED AT www.earthinnovation.org/state-of-jurisdictional-sustainability
2020/04/10

TECHNICAL TEAM



SUPPORTED BY



based on a decision of the German Bundestag



CHALLENGES & OPPORTUNITIES

CHALLENGES

- Transition to LED-R faces resistance from traditional agrarian sectors - historical development model based on monoculture agriculture & royalties from mining activities
- With delayed implementation of the Forest Code, the state lacks regulations to implement the regularization of liabilities in Permanent Preservation Areas (APP) & legal reserves → increased risk of deforestation
- Expansion of agribusiness in MATOPIBA region without spatial strategy & associated with illegal land grabbing

OPPORTUNITIES

- Current government supports strengthening environmental protection & livelihood improvement policies & programs (e.g., via Green Maranhão Program & start of jurisdictional REDD+ system development)
- Prospect of RTRS certification is a stimulus to producers that can support design & implementation of a state-wide soy expansion strategy
- Collaboration with other MATOPIBA states could maximize impact of LED-R interventions & facilitate achieving shared goals