

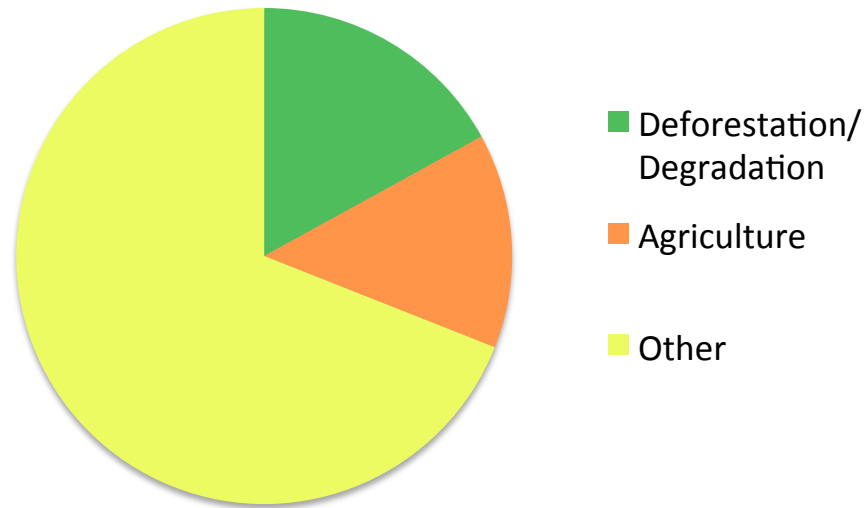
Brazil' s Evolving REDD Architecture

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Global Anthropogenic Greenhouse Gas Emissions



Can agricultural emissions be reduced along with REDD?

REDD = New Paradigm in Rural Development

- **Policy reform, policy alignment**
- **Enforcement**
- **Positive incentives for forest-maintaining activities***
- **Negative incentives for forest-replacing activities**

(*Can be achieved through pilot projects)

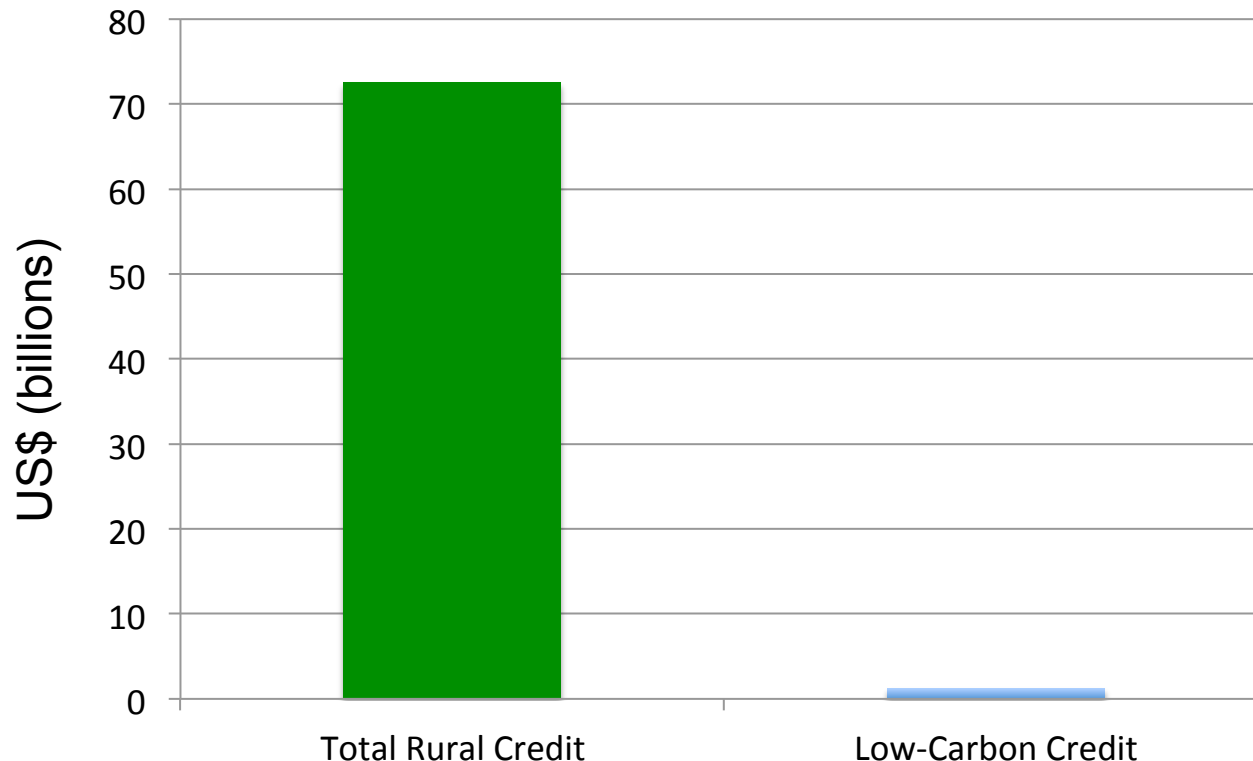
REDD projects are the source of important lessons for sector-wide programs . . .but they are less effective in addressing policy reform, policy alignment, enforcement.

Total and “Low Carbon” Agricultural Credit in Brazil

2010/11 Harvest

(Ministério da Fazenda)

The need for policy alignment



REDD Programs Require Strong Sector-Specific Sub-Programs

- Smallholders
- Large-scale farming/ranching
- Indigenous people/lands
- Protected areas
- Timber/plantation industries

Under design in Acre

What will sectoral REDD programs look like?

Example: REDD sub-program for smallholders

1. Reform Agrarian Reform?
 - *Re-direct land settlement towards existing agricultural lands, peri-urban zones (not trivial!)*
 - *Increase job opportunities in towns and cities*

Example: REDD sub-program for smallholders (continued)

2. Higher agricultural yields/income; higher value of forest products

- Technical assistance
- Development and commercialization systems and strategies for smallholder production systems
- Rural credit

Example: REDD sub-program for smallholders (continued)

3. Supporting smallholders for new markets

- Roundtable certification
- Zero deforestation supply chains

Example: REDD sub-program for smallholders (continued)

4. Resolve land tenure disputes

Sectoral programs will require integration across governmental hierarchy: the case of Brazil

National Government:

- All lands within 200 km of federal highways
- Most agrarian reform/land settlements (INCRA)
- Rural extension (EMATER)
- Most rural credit
- Shared land enforcement (IBAMA)

State Government:

- Lands beyond 200 km
- State rural extension
- All land registry and environmental licensing
- Land use zoning
- Shared land enforcement (state environment agency)

Integrity of Nesting Frameworks

Sum project-level emissions reductions \leq state-level emissions reductions

and. . .

Sum of state-level emissions reductions \leq national emissions reductions

***Crediting baselines at project, state, and national levels
must be compatible!***

Nesting Frameworks: The Case of Brazil

National Climate Change Plan (approved 2009):

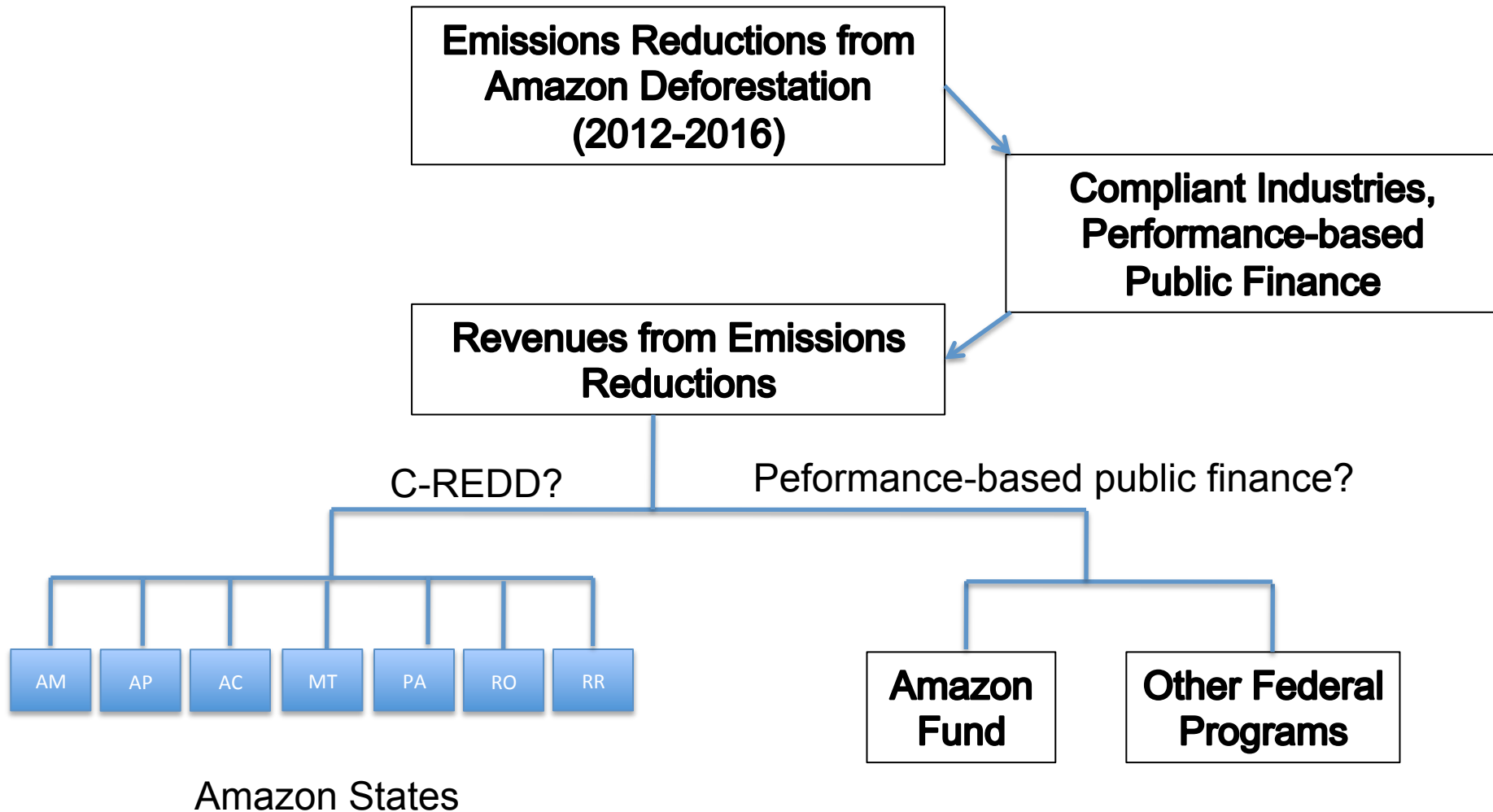
- Reduce national emissions 36-39% by 2020
 - Reduce deforestation in the Amazon region by 80%
 - Reduce deforestation in the Cerrado region by 40%
 - Increased forest restoration and plantations

Brazil's Amazon commitment and progress

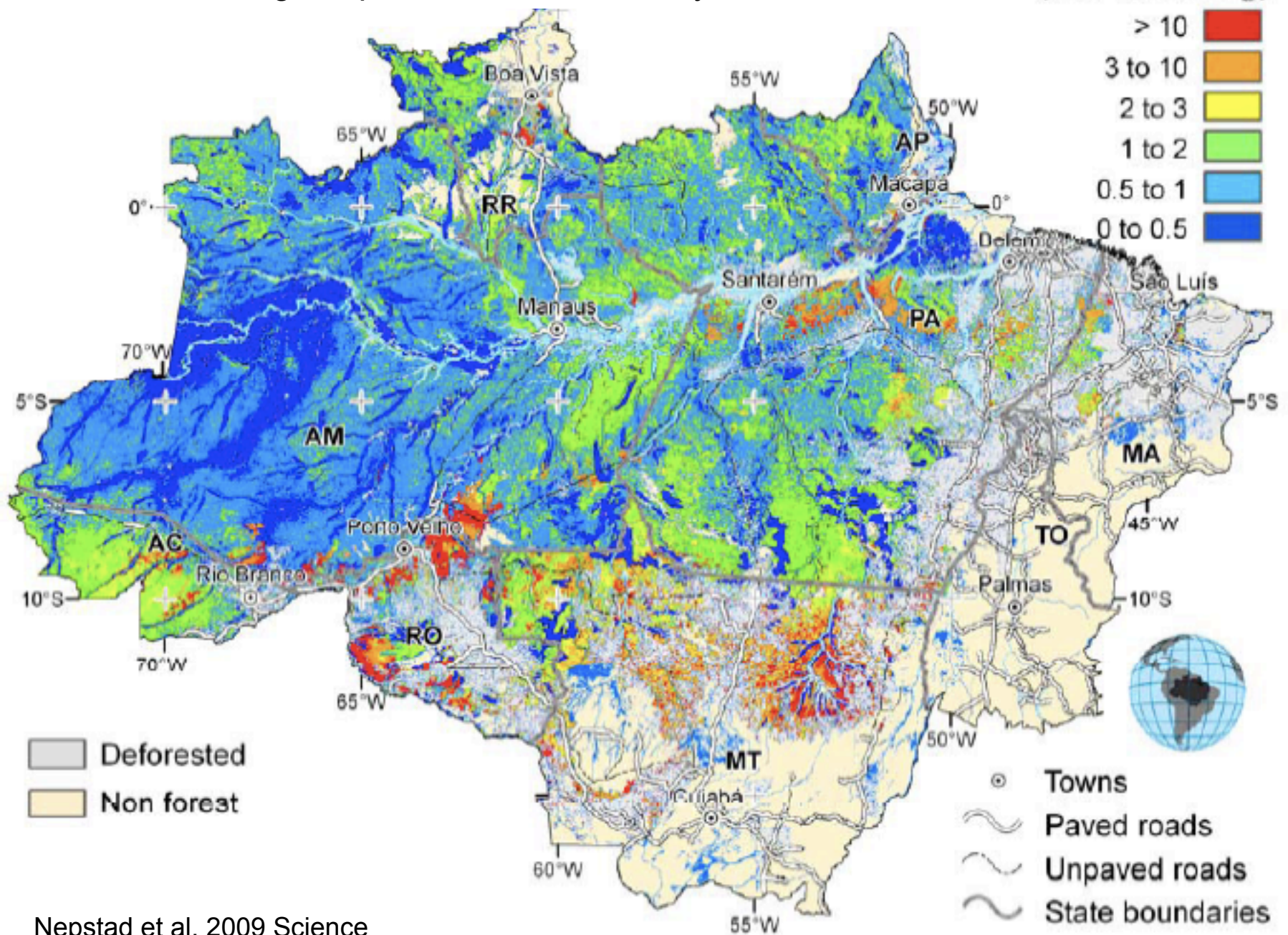


Nesting Frameworks: The Case of Brazil

Allocating Between State & Federal Programs



The cost of foregone profits from beef or soy, Brazilian Amazon (US\$ ton of CO₂)



Nesting Frameworks: The Case of Brazil

Allocation between federal and state levels:

- Undecided

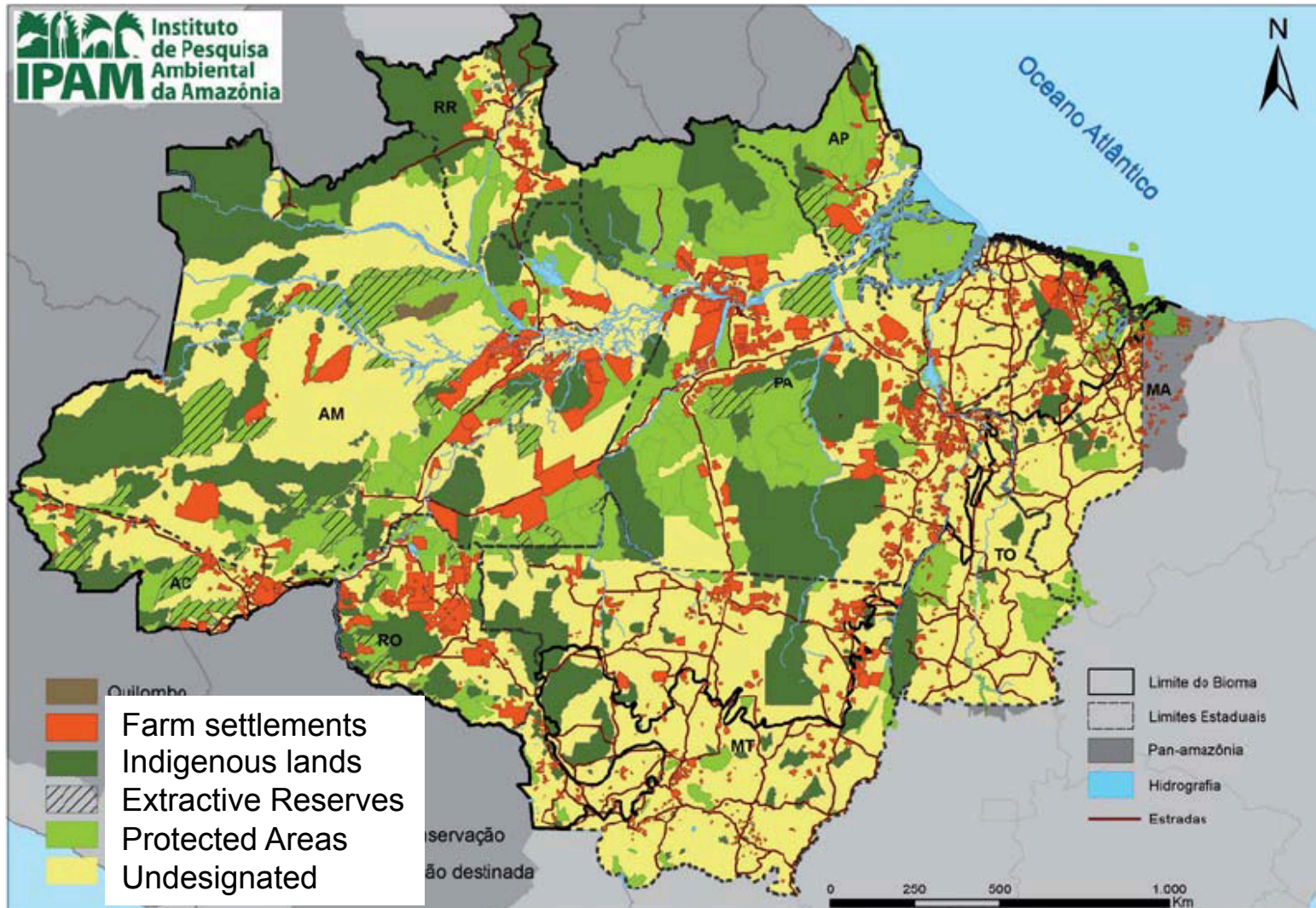
Allocation among states:

- Undecided, but political support for formula involving historical baselines, forest carbon stocks, and targets

$$\begin{aligned} \% \text{ of REDD revenue} &= A * (\text{reduction below historical baseline}) + \\ &B * (\text{forest carbon stock}) + C * (\text{progress towards target}) \end{aligned}$$

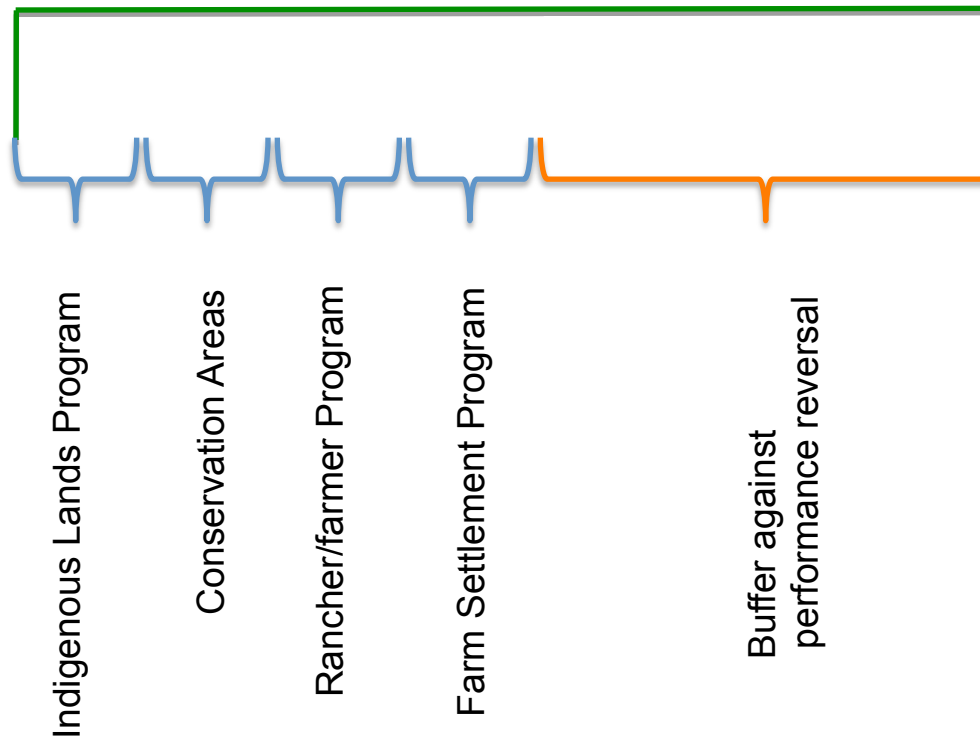
Nesting Frameworks: The Case of Brazil

Allocation among regional or national sectors?

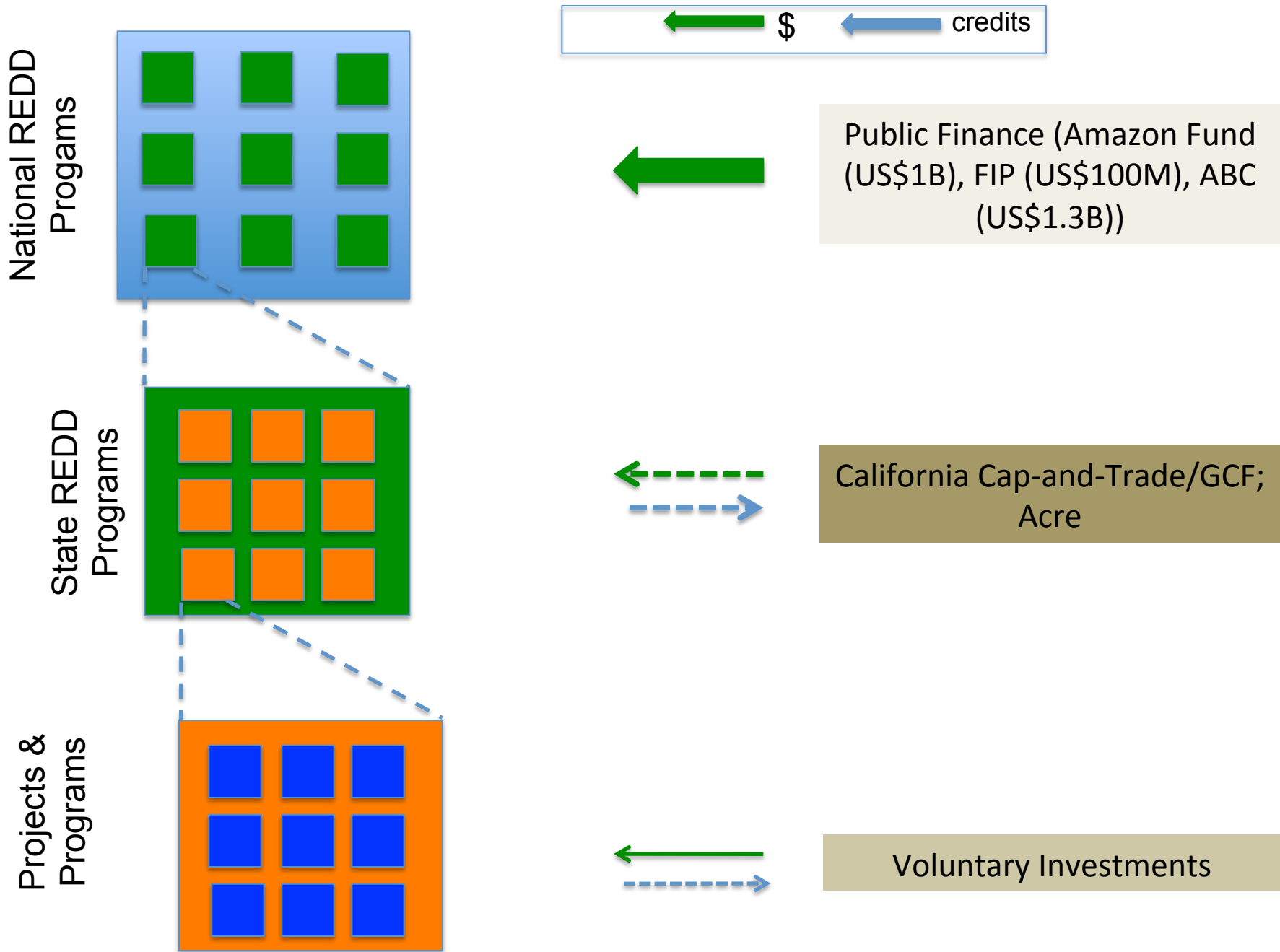


Nested, Programmatic Allocation of REDD-Based Emissions Reductions: Mato Grosso

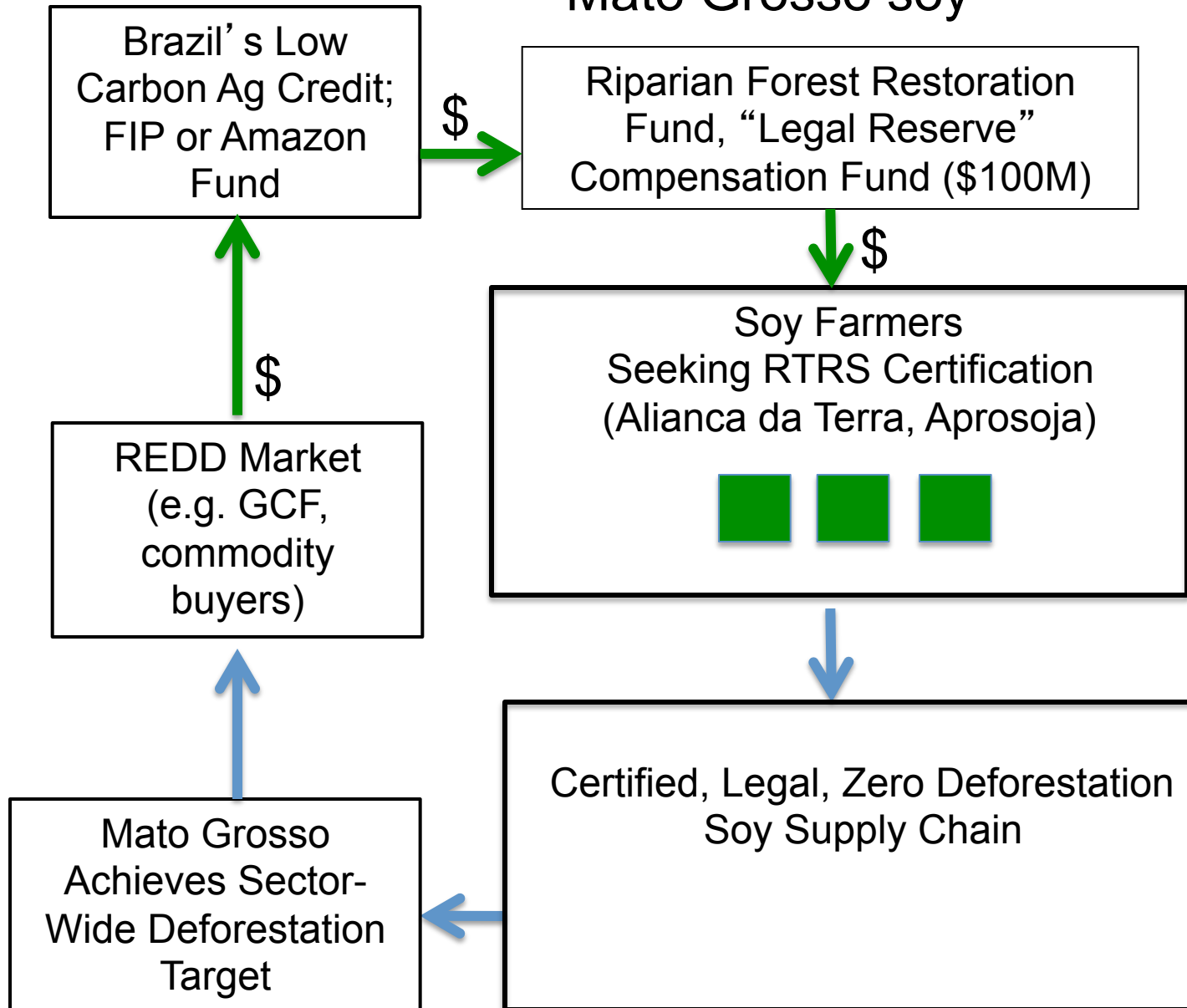
Mato Grosso's Emissions Reductions, 20XX-20XX



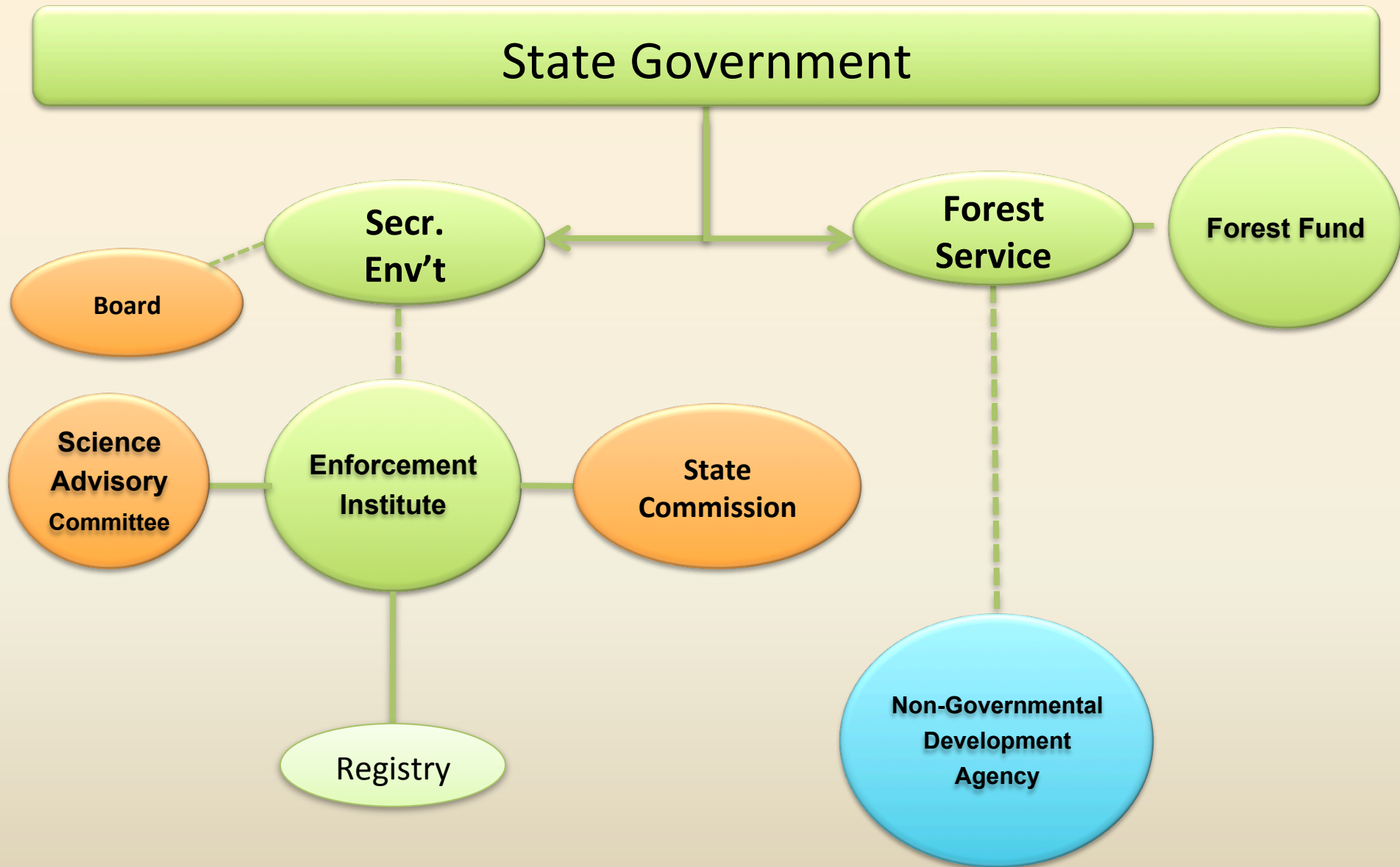
REDD+ finance today: precarious



Public finance as stepping stone to REDD market: Mato Grosso soy



Institutional Architecture of Acre REDD Program



References

- EPRI. 2010. (IPAM, Forest Trends, Tropical Forest Group, WHRC)
- IPAM and Government of Brazil. 2011. REDD in Brazil: The Case of the Amazon.
- Nepstad et al. 2009. The end of deforestation in the Brazilian Amazon. *Science*
- MCGRATH, D.G.; NEPSTAD, D.; STICKLER, C.: **Smallholders, Rural Development and REDD in the Brazilian Amazon. November, 2009**

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www.ipam.org.br

Conclusions

- REDD success will depend upon policy reform, policy alignment, enforcement, positive incentives, negative incentives
- Need for sector-wide programs that provide systemic changes for low carbon development
- Integrity will depend upon baseline intercompatibility
- Brazil's nesting framework still under negotiation; proposal for stock-flux-cap solution for allocation among states
- Funding Gap: Public finance as bridge to markets (case of FIP and GCF/commodity markets)
- Development agency as crucial institutional structure for private sector involvement