# National and Subnational REDD+ in Brazil: challenges and recomendations

Workshop on Linking Local REDD+ Projects to National REDD+ Strategies in Africa

April 29 - May 1, 2013, Hawassa, Ethiopia

### Mariano C. Cenamo

**Senior Researcher and Deputy Executive Director** 

E-mail: mariano@idesam.org.br



## **Outline**



- General context of REDD+ in Brazil
- A nested approach proposal for the Amazon
- The Amazonas State REDD+ Program
- Lessons learned and recommendations

# Why a JNR Program makes sense for National, Subnational and Projects

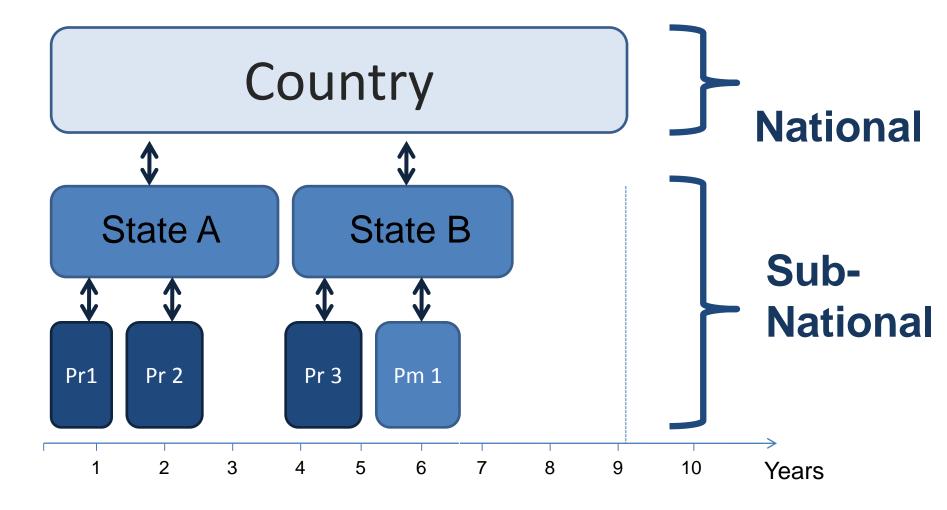
# National and Jurisdictional Governments

- ✓ Different regions, drivers and agents of deforestation
- ✓ Benefit from initial lessons learned and tools during readiness process
- ✓ "Free" REL for a significant portion of the country
- ✓ Maximize funding opportunities (markets + private sector)
- ✓ Leverage further projects with low implementation costs

### **Projects**

- ✓ Avoid future problems with baselines and leakage
- ✓ Allow multi-sectoral approach for reducing deforestation
  - ✓ Land use planning
- ✓ Strengthens regional government capacity (MRV)
- ✓ Maximize funding opportunities (funds + ODA, governments, etc.)

# REDD+ is being implemented at different levels in Brazil



Pr = Local Project

Pm = Municipal Project

## ✓ National regulation



- ✓ Federal Decree 7.390/2010 NPCC
  - > ~ 36% 39% ER target for 2020
  - Sectoral approaches: domestic Market for Brazil
- ✓ National REDD+ strategy and WPs (since 2010)
- ✓ REDD+ Bill (PL 195/2011 and 212/2011)

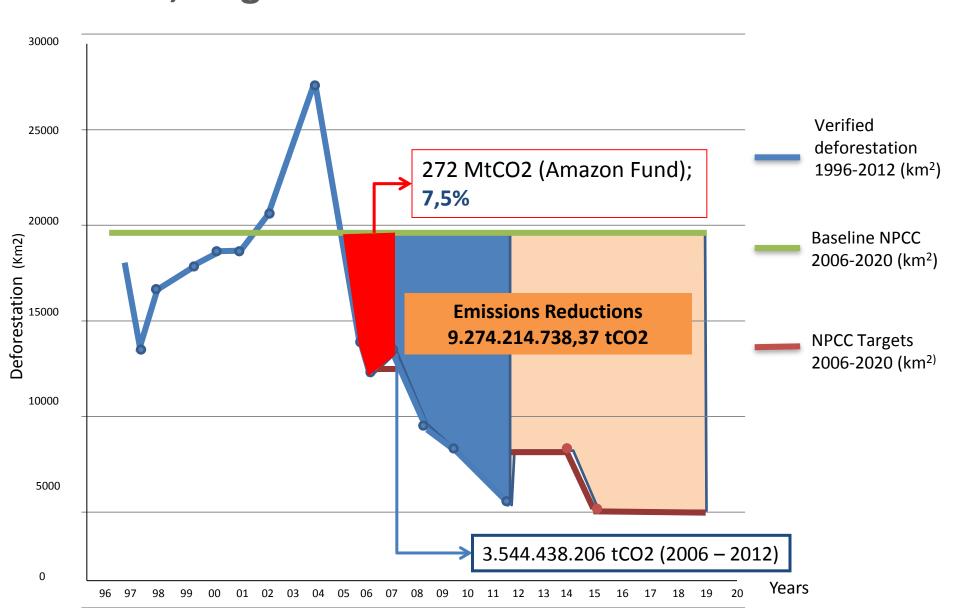
## ✓ Jurisdictional regulation (States)

- ✓ State REDD+ regulation:
  - ✓ Acre's State Law of Environmental Services (Approved in 2011)
  - ✓ Mato Grosso Law for REDD+ (Approved in 2012)
  - ✓ Amazonas's State Law for Environmental Services (Public Consultation since 2010) (PEMC 2007)
  - ✓ Amapá and Rondônia (under construction)

## ✓ At least 21 Projects under development

- √ 01 validated VCS + CCB (Surui REDD Project)
- √ 03 validated VCS (Cikel, Santa Maria and Purus)
- √ 01 validated at CCB (Juma)

# Emission Reductions in the Amazon (top down): Baseline, targets and REDD+ for 2020



# Amazon Fund financial flows (2009 - 2013)

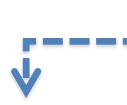


Committed (up to 2013): \$ 700 Million

(Norway, KFW, Petrobras)



Disbursed (2013): \$ 127 Million (17%)



Pipeline of Projects
35 Approved
U\$ 220 Millions

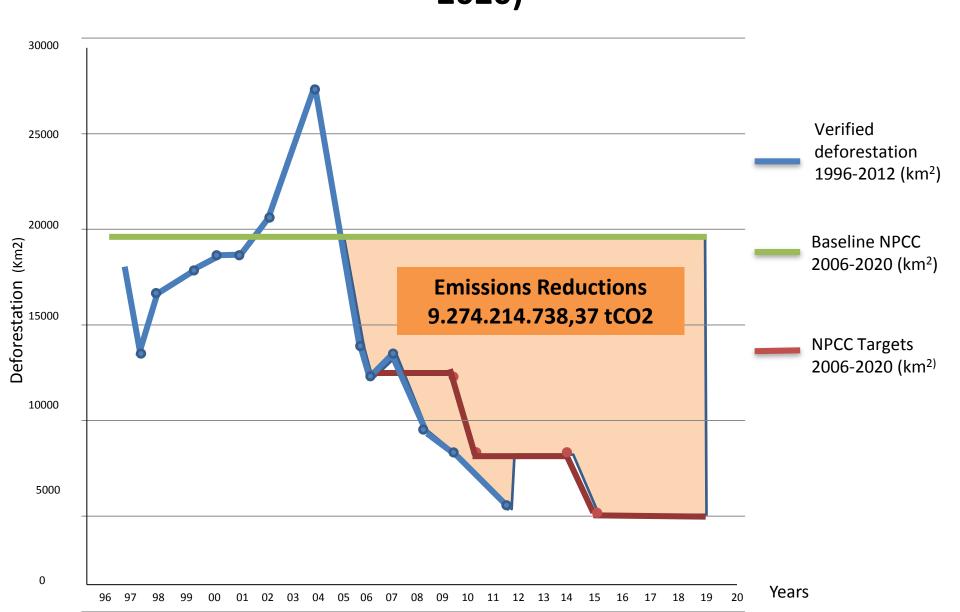
Disbursed to projects: \$ 74 MtCO2 (34%)

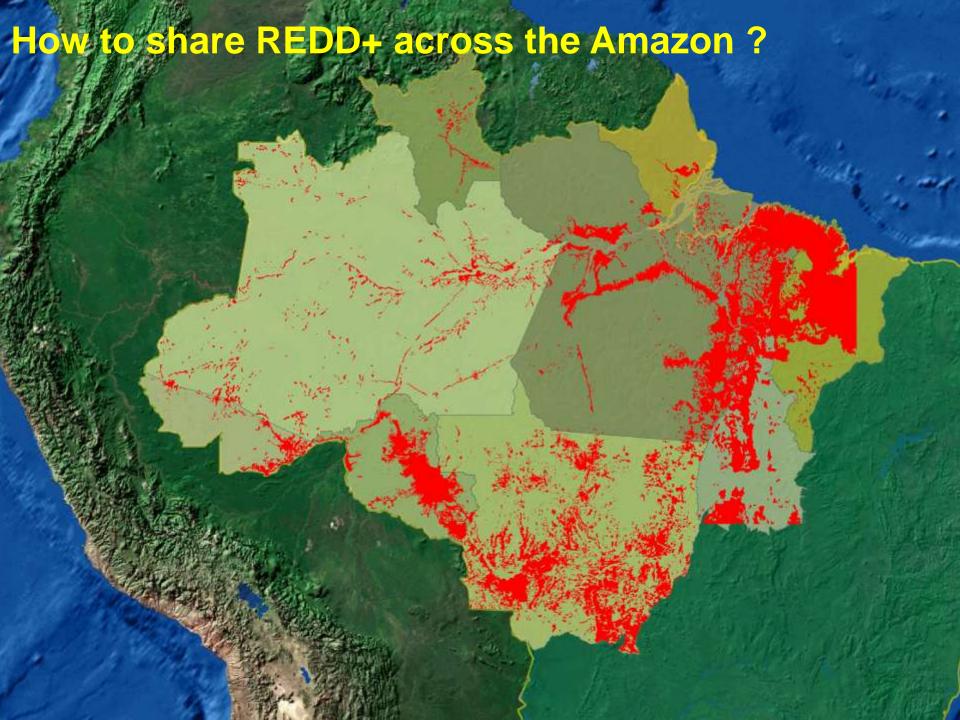
In BNDES accounts: \$ 53 MtCO2 (24%)



Negative Cashflow: \$ 93 MtCO2

# NPCC: Baseline and targets for REDD+ in the Amazon (2006-2020)







## Key issues for consideration



- ✓ The amazon region has different government policies, land rights, stakeholders, drivers and agents of deforestation... "one size does not fits all"
- ✓ Amazon states have autonomy and are moving towards implementation of their REDD+ programs
- ✓ It is necessary to avoid double counting between projects, jurisdictions and national programs
- ✓ <u>Maximize</u> funding opportunities from different sources: domestic, international, public and private, market and non market based mechanisms...

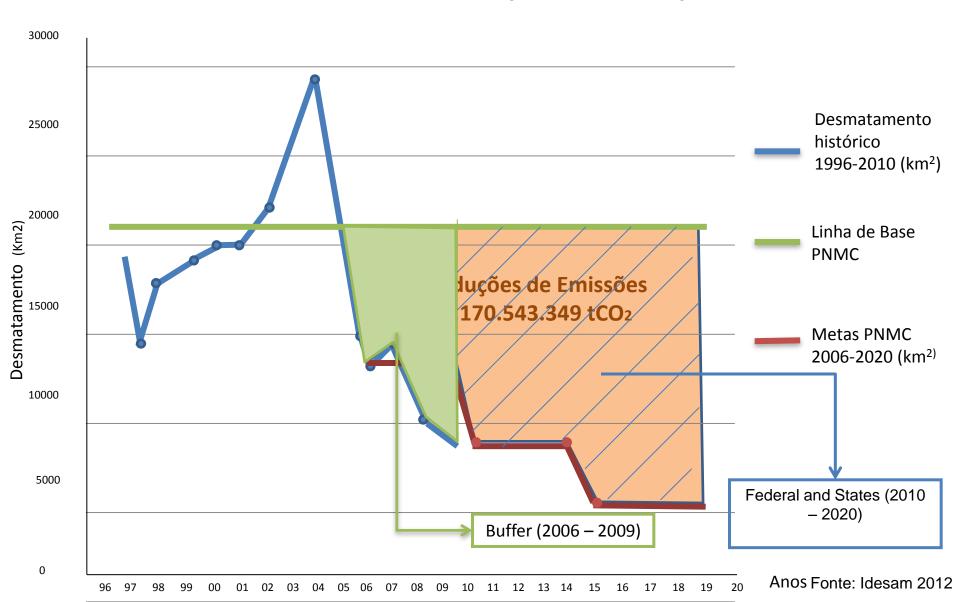


# A Nested Approach for REDD+ in the Amazon

A proposal from the Brazilian GCF States (Acre, Amazonas, Pará, Mato Grosso and Tocantins)

# UREDD+ allocation within Buffer, Federal Government and States (2010-2020)





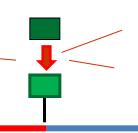
**80% 20%** 

#### 9.274.214.738 tCO<sub>2</sub> UREDD (2006 - 2020)



A National REDD+ Commission should define:

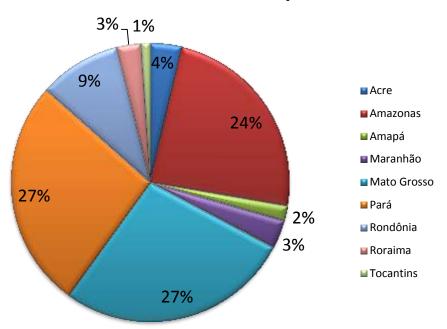
7,419 GtCO2

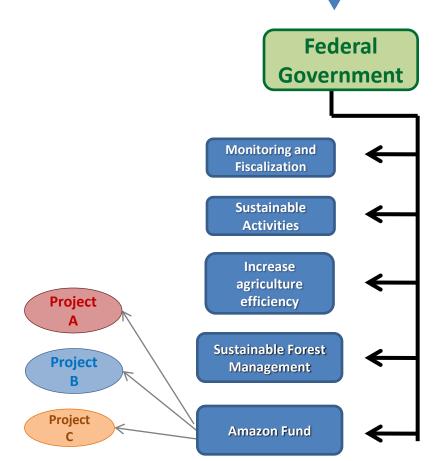


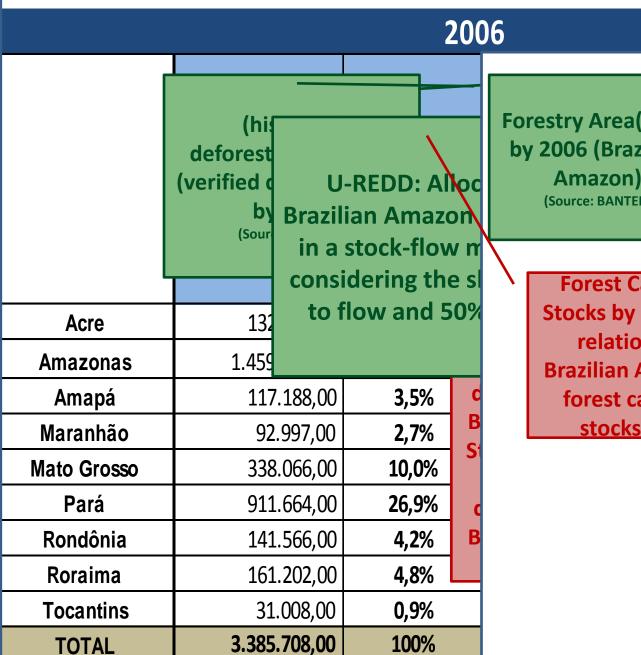
X% of UREDDs for Markets

Y% of UREDDs retail for domestic and performance page payments

#### Alocation UREDD - 2006/2020







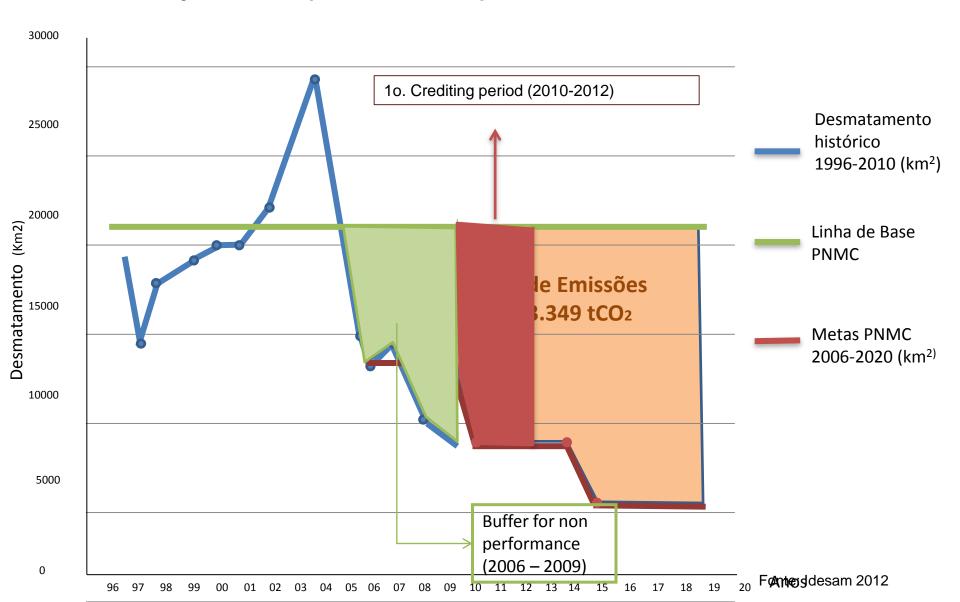
Forestry Area(km2) by 2006 (Brazilian Amazon) (Source: BANTER)

> **Forest Carbon Stocks by State in** relation to **Brazilian Amazon** forest carbon stocks (%)

Fontes: Cattaneo. A, 2009; OSIRIS, 2009; BANTER, 2010.

# UREDD+ allocation based on crediting periods (2010-2012)

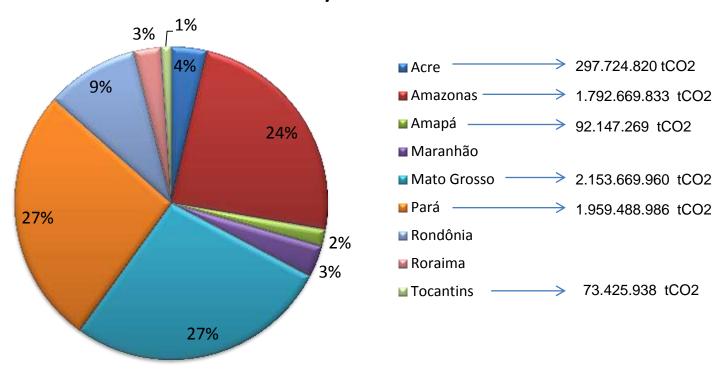




# Alocations for Amazon GCF States (2010 – 2020)



#### **UREDD allocations - 2010/2020**



Fonte: Idesam 2012

# The State of Amazonas Environmental Services and REDD+ Proposal



# The Amazonas State REDD+ System: a nested approach proposal for the Amazon



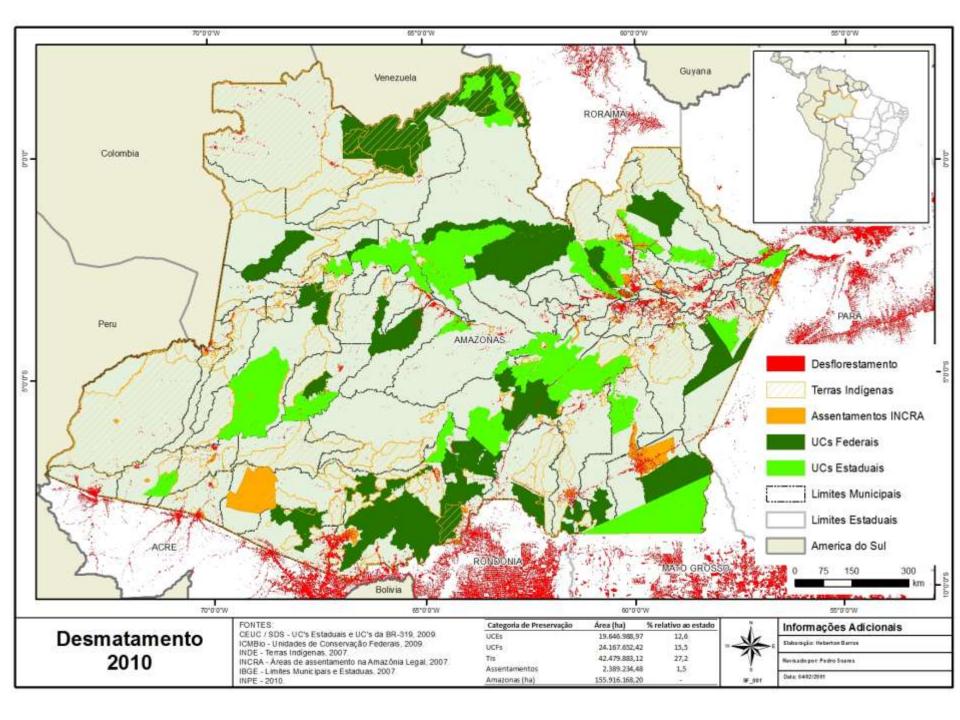


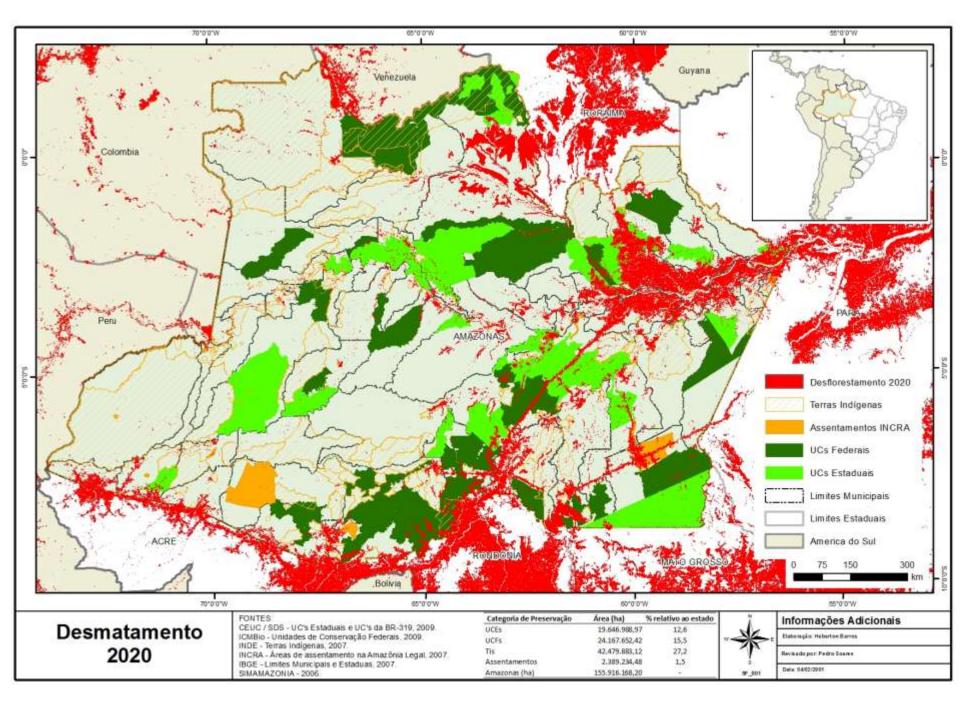




#### **Apoio financeiro:**

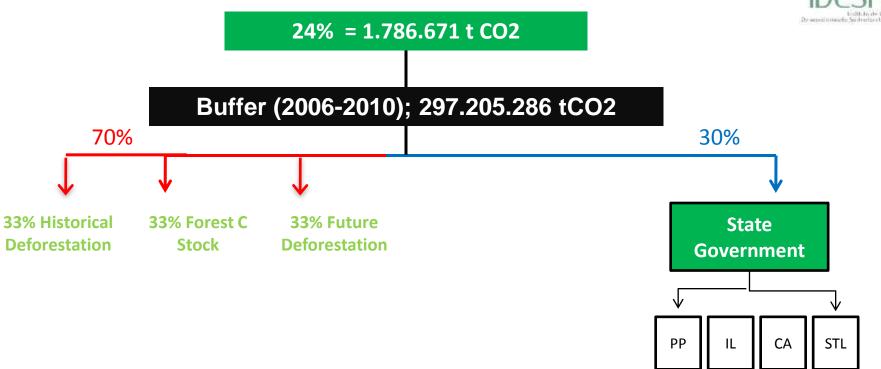






### U-REDD AM (2006 - 2020)

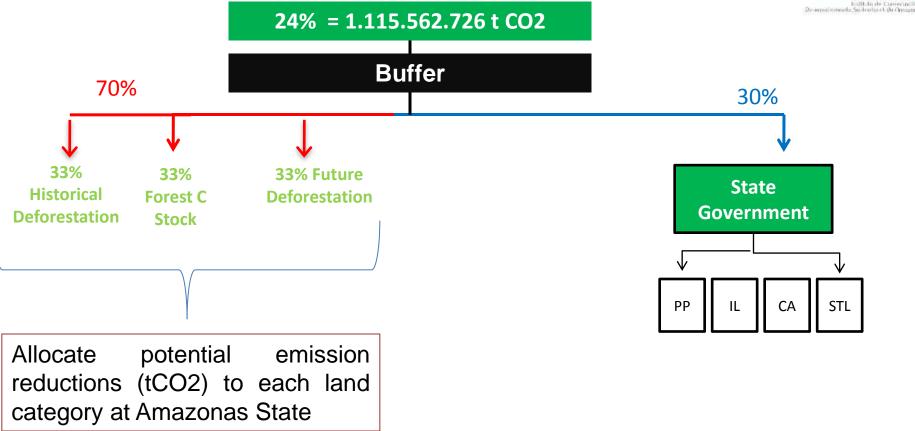


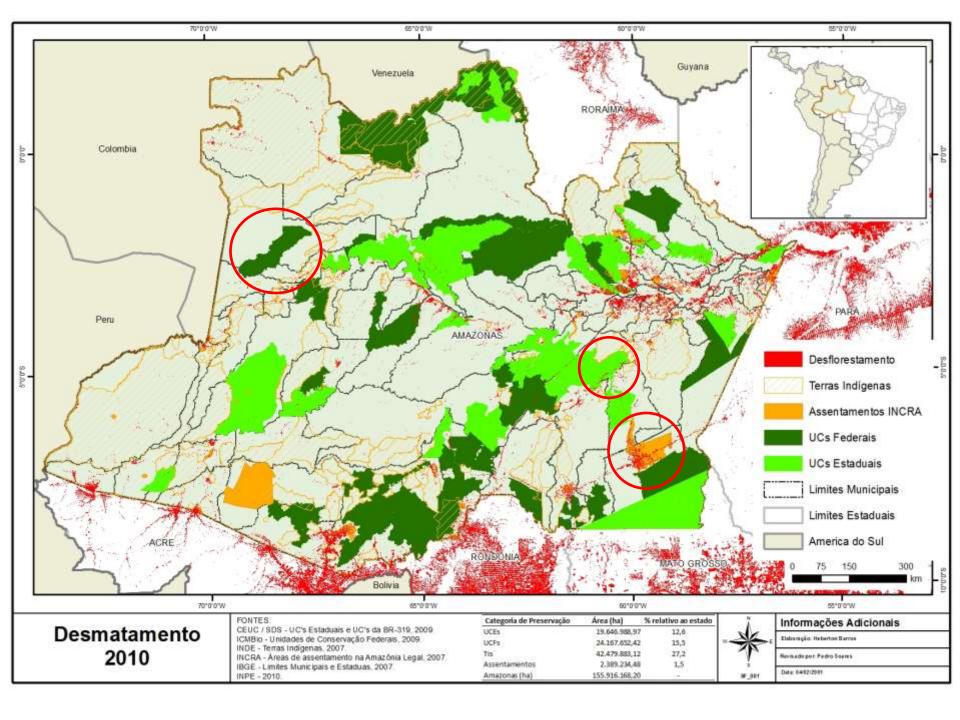


- **Historical Deforestation Rates (flow):** Allocation to consolidated deforestation frontier
- Forest Carbon Stocks (stock): Balanced distribution to nonthreatened areas
- Future Deforestation Risk Map: Allocation to future deforestation frontiers

### **U-REDD AMAZONAS (2006 - 2020)**







#### Indigenous Land Médio Rio Negro





Forestry Area: 1.673.240 ha, without historical deforestation rates and without projected deforestation (Forest C Stocks)

# State Protected Area (RDS Rio Madeira)



Forestry Area: 216.178 ha, with low historical deforestation rates and with projected deforestation (Forest C Stocks + Future pressure)

## Rural Settlement (PA Juma)



Forestry Area: 449.063 ha, with historical deforestation rates and with projected deforestation (Forest C Stocks + Historical deforestation + Future pressure)



## T.I. Médio Rio Negro



### Step 1. Carbon Stocks (33%):

T.I. Médio Rio Negro: 1.673.240 hectares of tropical forests Amazonas State: 145.857.084 hectares of tropical forests

Thus, T.I. Médio Rio Negro represents 1,14% of Amazonas´s forest carbon stocks

### Step 2. Consolidation

Allocation to T.I. Médio Rio Negro: (0,33\* 0,0114) = 0,38% of Amazonas Allocation or 3,27% of allocation for Indigenous Land 2.357.802 tCO<sub>2</sub>



### **RDS RIO MADEIRA**



### Step 1: Carbon Stocks (33%)

RDS Rio Madeira: 216.178 hectares of tropical forests

Amazonas State: 145.857.084 hectares of tropical forests

Thus, RDS Madeira represents 0,14% of Amazonas's forest carbon stocks

#### Step 32: Porsielial etilo Deforestation until 2020 (33%)

Allogation to P.D. Madeira: (0.33\*0.0014) et (0.33\*0.0008) ± (0.33\* 0.0007) = 0.1% of Amazonas state of 10.2756.353 t CO2

Thus, RDS Madeira represents 0,08% of Amazonas's projected deforestation

#### **Step 2: Historical Deforestation (33%)**

RDS Madeira: 60 ha/yr

Amazonas State: 81.031 ha/yr

Thus, RDS Madeira represents 0,07% of Amazonas's historical deforestation 10



### Rural Settlement of Apuí – PA Juma



Step 1: Carbon Stocks

PA Juma: 449.063 hectares of tropical forests

Amazonas State: 145.857.084 hectares of tropical forests

Thus, Apuí represents 0,3% of Amazonas´s carbon stocks

Step 4: Historical Deforestation (33%)

Approximate Applia 1978 Settlemento restation hectares of deforestation Amazonas State: Average of 81.031 ha/year of deforestation (0,33\*0,003)+(0,33\*0,085)+(0,33\*0,023) = 3,66% of Amazonas Allocation or 37%; Application for systems of the system

Step 3: Projected Deforestation until 2020 (33%)

Apuí: 145.023 hectares of deforestation until 2020

Amazonas State: 6.291.920,94 hectares of deforestation until 2020

Thus, Apuí represents 2,3% of Amazonas´s projected deforestation

# U-REDD Allocation (2010-2020)



T.I. Médio Rio Negro: 2.357.802 t CO2



RDS Rio Madeira: 756.353 t CO2



Rural Settlement of Apuí: 22.833.452 t CO2



### National Emission Reductions 9.179.641.733 tCO2

# Questions and lessons learned



- ☐ Preliminary baselines + targets are an important step for early moving, but should be flexible for future changes
- ☐ Subnational is important to channel funds for readiness and jurisdictional programatic activities
  - ✓ Should be efficient, transparent and multi-stakeholder
  - ✓ Amazon, SISA Company, FAS
- ☐ Target: reducing deforestation and improving livelihoods
  - ✓ What is the best implementation arrangement?
  - ✓ Importance of learning lessons with pilots









Institute for Conservation and Sustainable Development of Amazonas