

# THE FORESTS DIALOGUE – TFD

## IMPLEMENTING REDD IN THE BRAZILIAN AMAZON: CONTEXTUALIZATION, DEBATES AND CHALLENGES

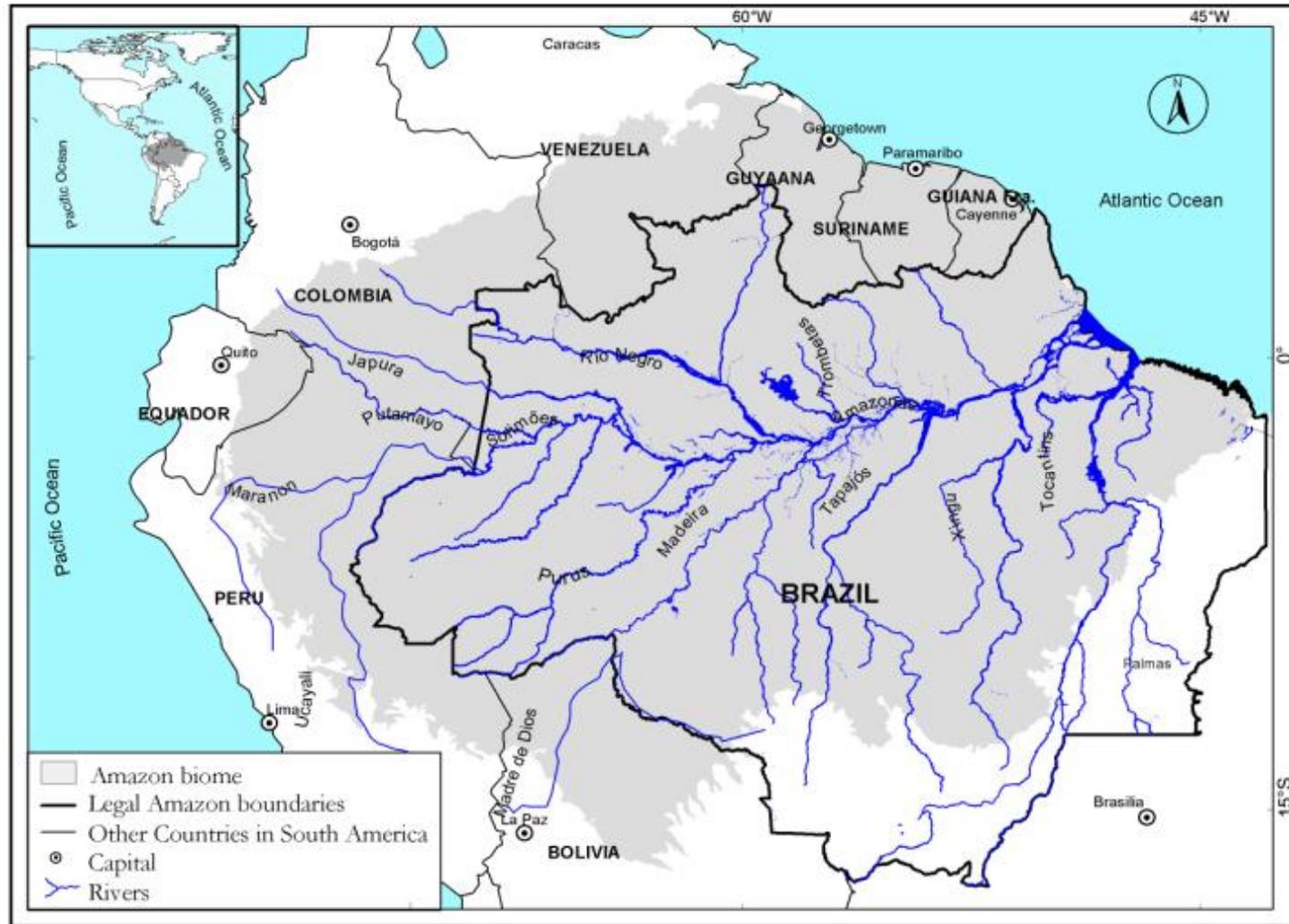
Background Paper for Field Dialogue in Brazil  
Belém – PA  
October 28-29, 2009

**Brent Millikan**  
Friends of the Earth – Brazilian Amazônia

# Organization of the background paper

1. The Brazilian Amazon: geographical and historical context
2. Key characteristics of contemporary Brazilian Amazônia
3. Recent trends and drivers of deforestation and forest degradation
4. Profile of Brazil's GHG emissions and evolution of positions and proposals on REDD.
5. REDD in the Brazilian Amazon: state of current debates and key challenges

# The Amazon forest biome and the "Legal Amazon" of Brazil

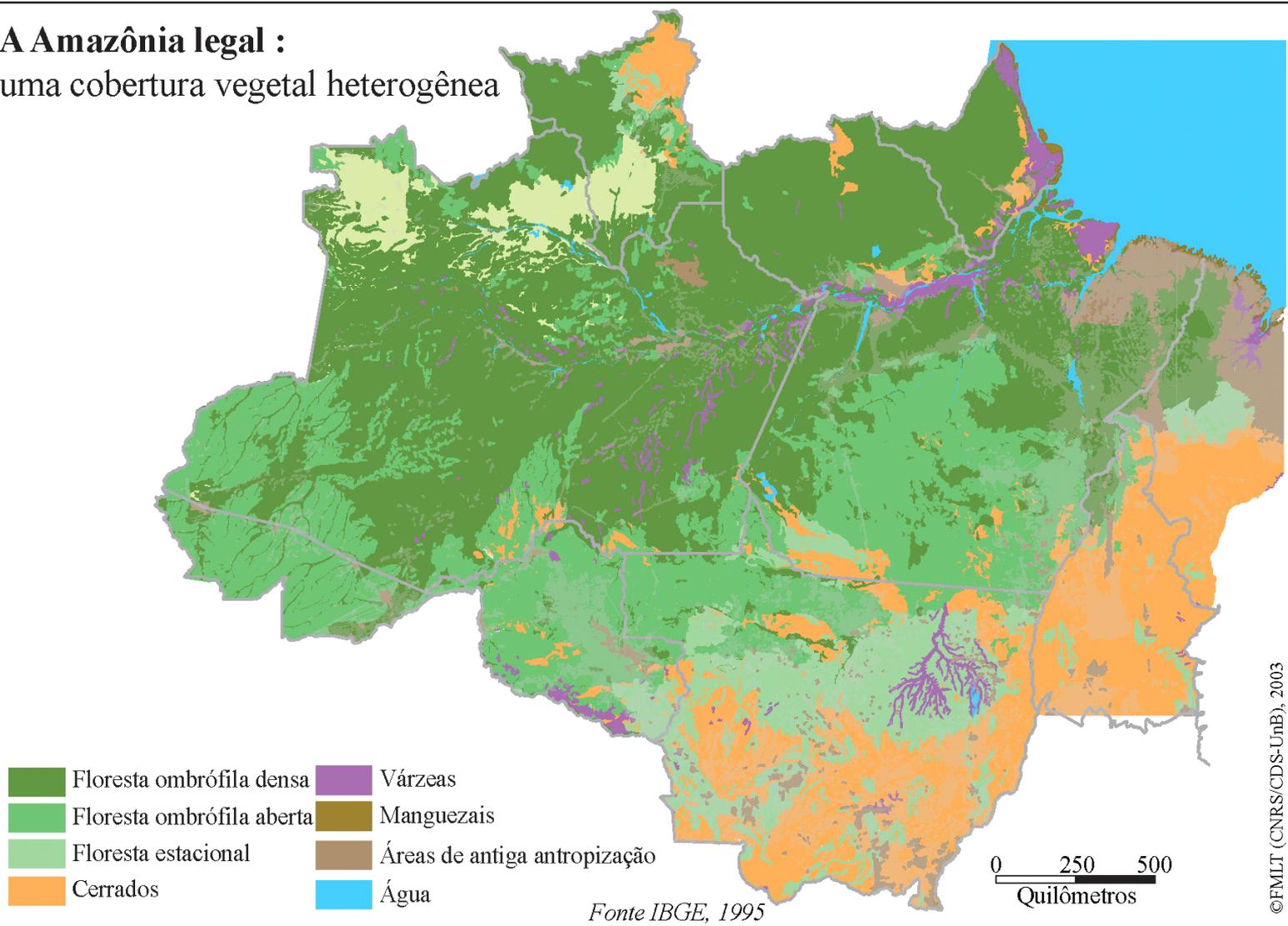


# States of the "Legal Amazon" of Brazil



# Major categories of natural vegetation

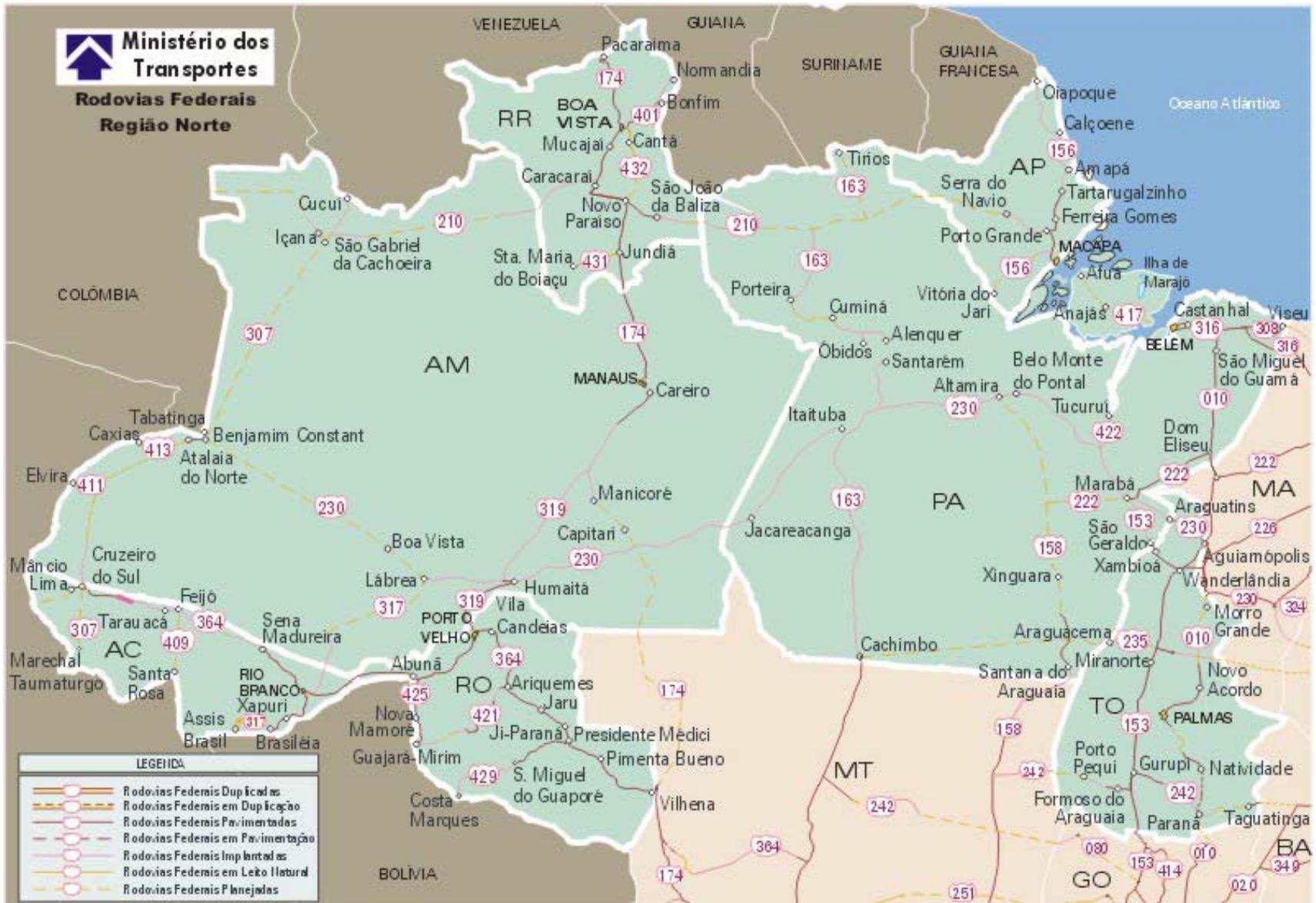
**A Amazônia legal :**  
uma cobertura vegetal heterogênea



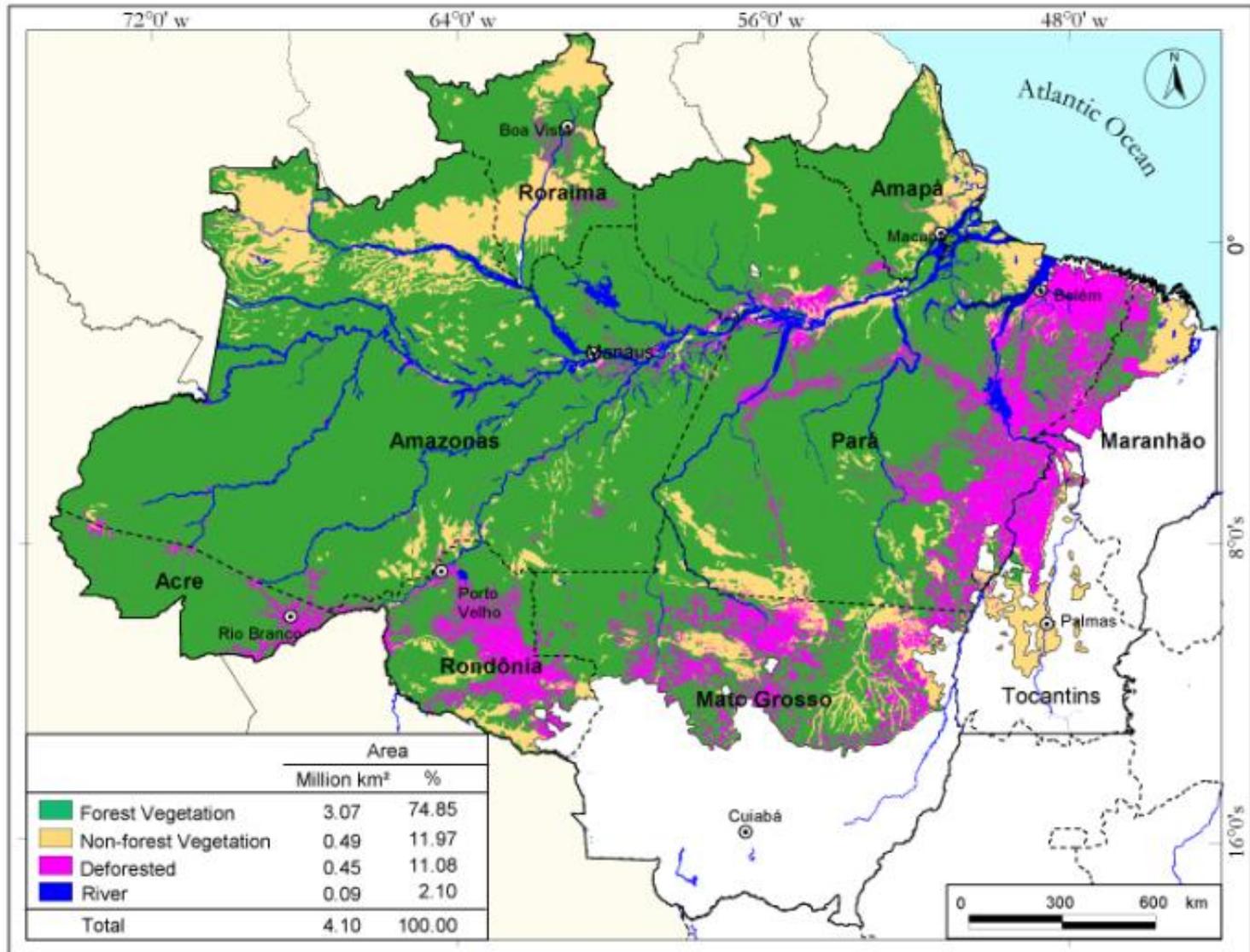
# Major biomes of Brazil



# Federal highways in the Brazilian Amazon



# Forest, Non-Forest Vegetation and Deforestation in the Brazilian Amazon



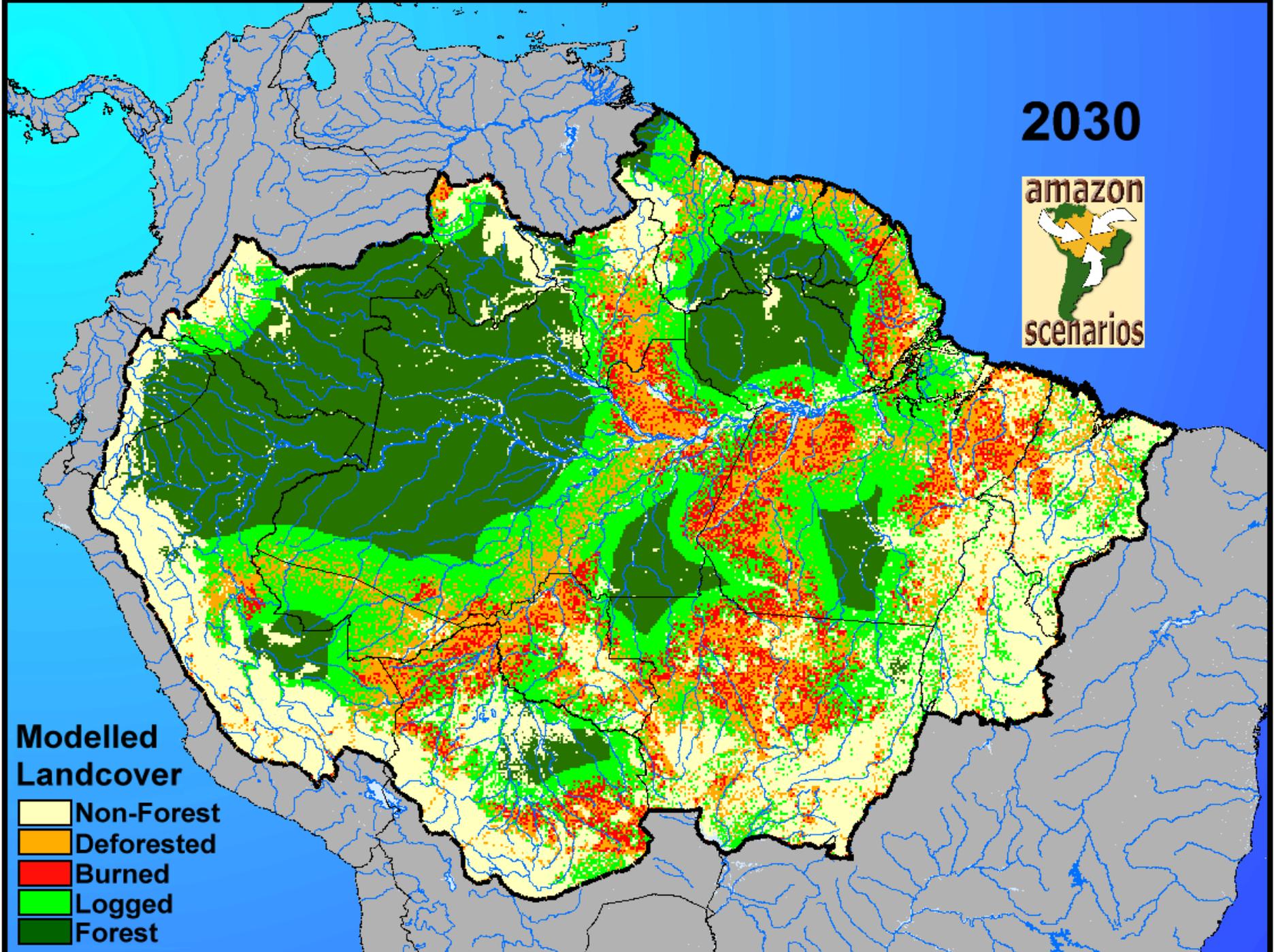


2030

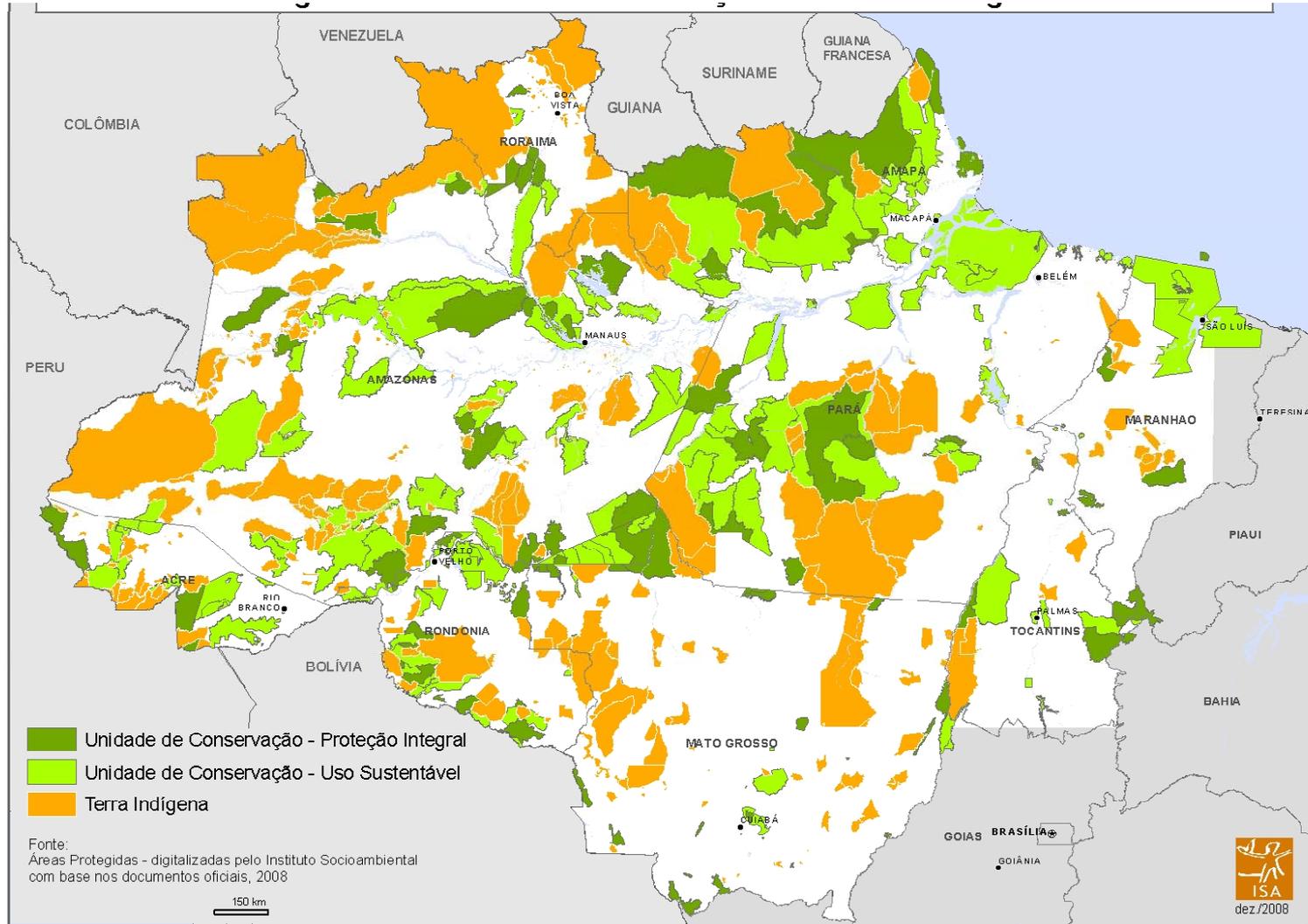


**Modelled  
Landcover**

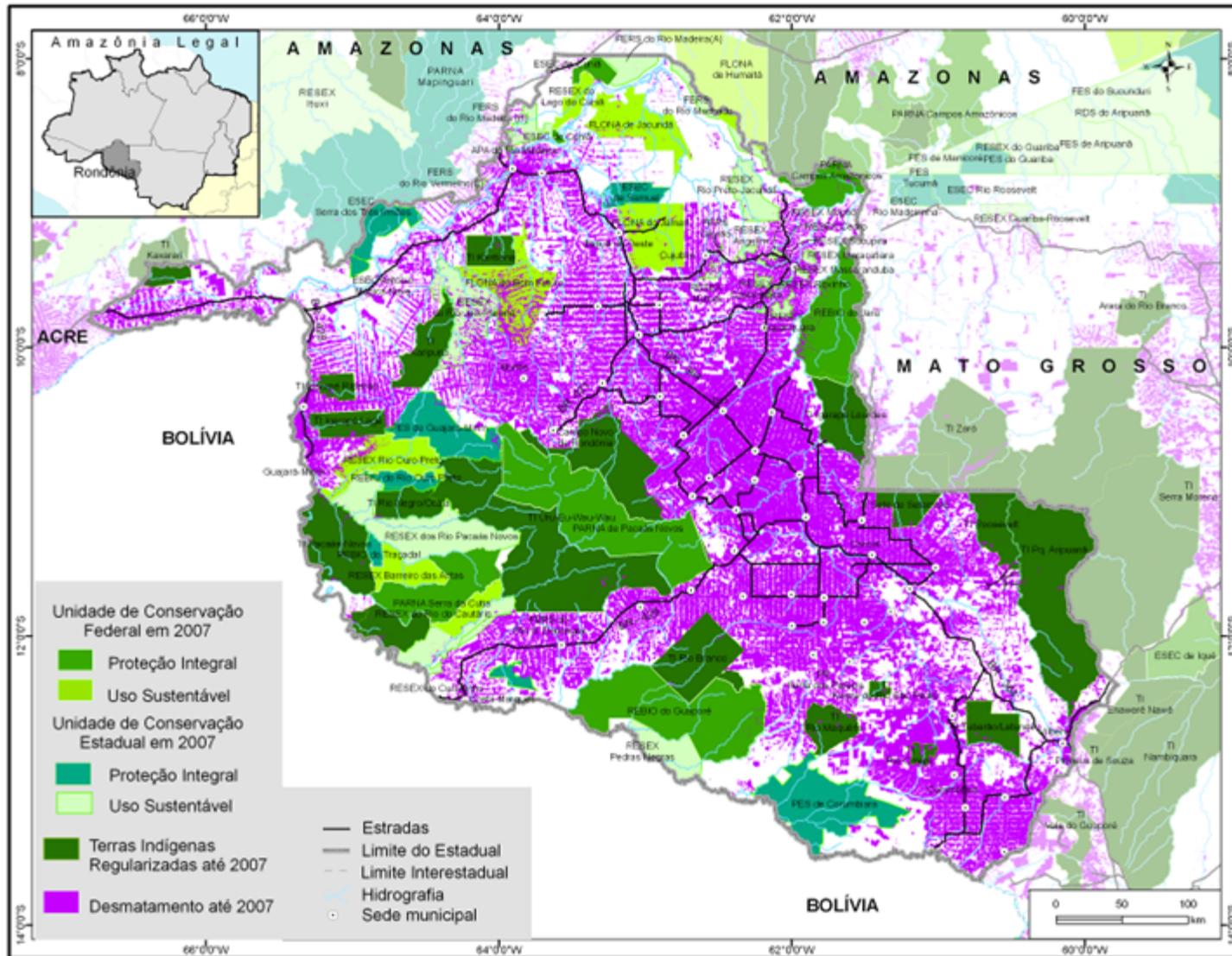
-  Non-Forest
-  Deforested
-  Burned
-  Logged
-  Forest



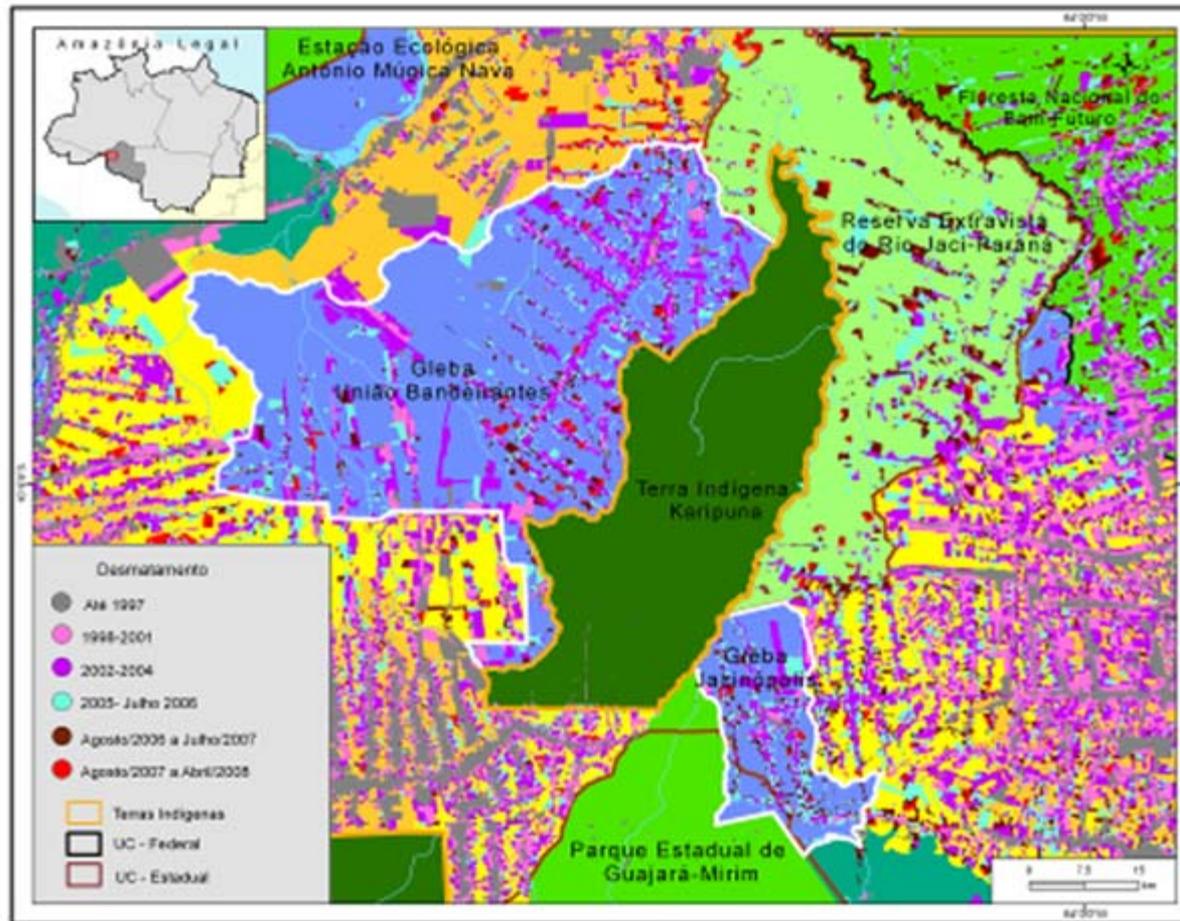
# Indigenous Lands and Conservation Units in the Brazilian Amazon



# Cumulative Deforestation and Protected Areas in the state of Rondônia (2007)



# Deforestation and Degradation in Protected Areas - Rondônia



## Zonas 1- Áreas de Uso Agropecuário e Florestal

- sub-zona 1.1: Áreas de intensa ocupação
- sub-zona 1.2: Áreas em processo acelerado de ocupação
- sub-zona 1.3: Áreas com baixa densidade populacional
- sub-zona 1.4: Áreas com alta fragilidade natural e baixa potencialidade econômica

## Zona 2: Áreas de Uso Especial

- sub-zona 2.1: Áreas de conservação dos recursos naturais, passíveis de uso sob manejo sustentável
- sub-zona 2.2: Áreas de conservação florestal, indicadas para criação de Unidades de Conservação

## Zona 3: Áreas Institucionais

- sub-zona 3.1: Áreas constituídas por unidades de conservação de uso sustentável
- sub-zona 3.2: Áreas formadas por Unidades de Conservação de Proteção Integral
- sub-zona 3.3 - Áreas formadas por Terras Indígenas

## **5. REDD in the Brazilian Amazon: *state of current debates and key challenges***

***5.1 Creation of a favorable policy  
environment for REDD***

***5.2 Managing REDD funds in the Amazon:  
strategic priorities and risks***

***5.3 Financing REDD in the Brazilian Amazon***

# **REDD in the Brazilian Amazon: *state of current debates and key challenges***

## **1. *Creation of a favorable policy environment for REDD***

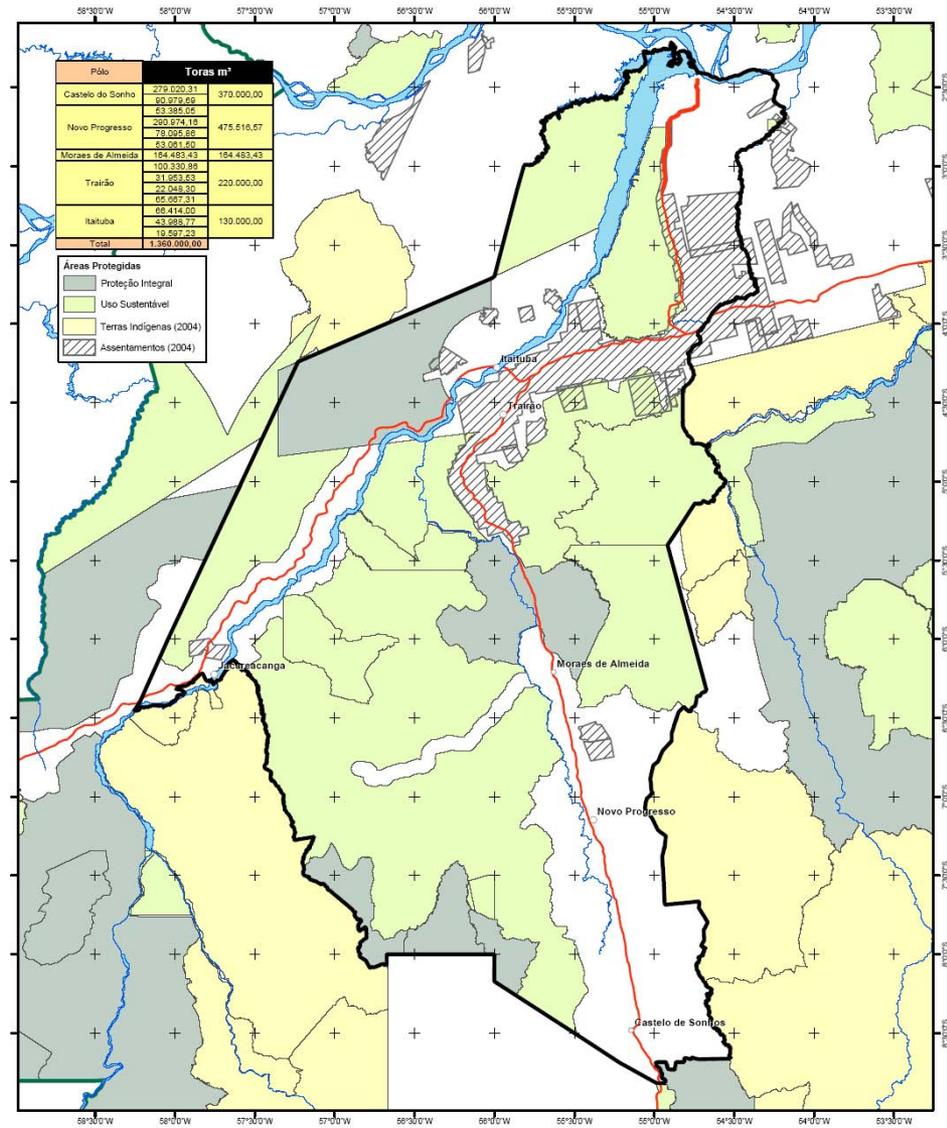
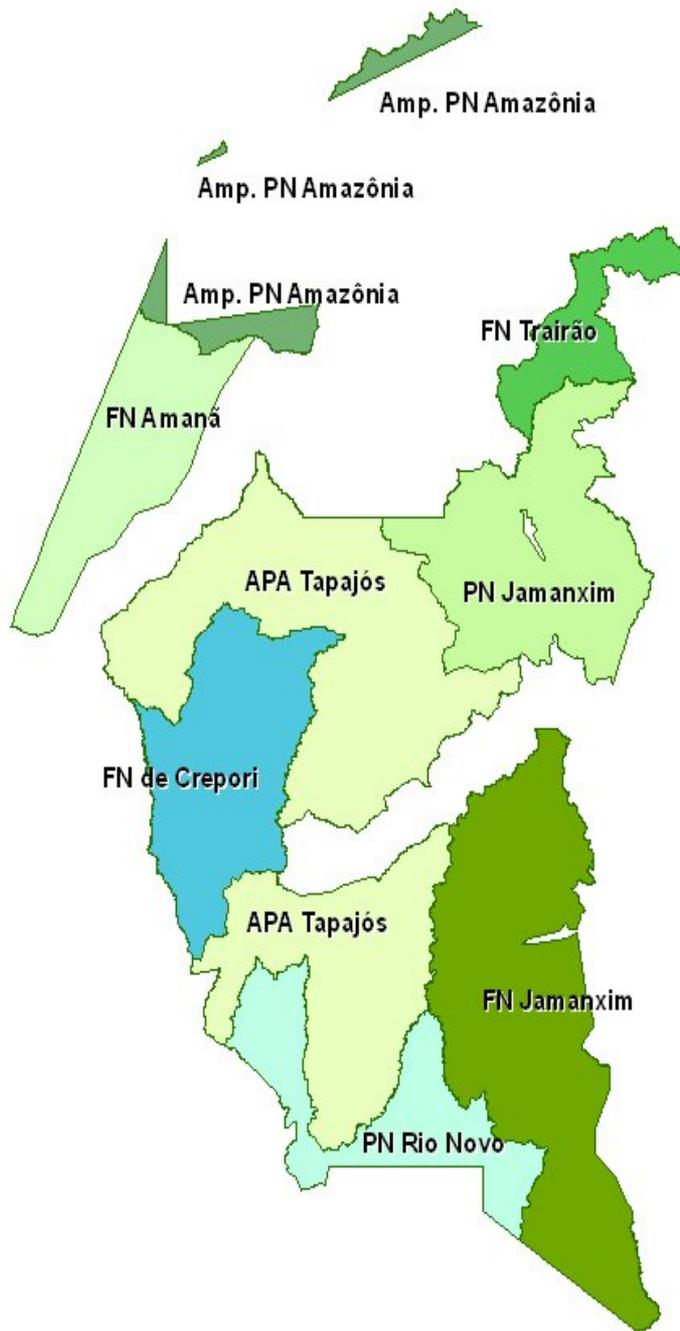
- A fundamental challenge for the success of REDD in the Brazilian Amazon is the creation of a policy environment conducive to the conservation of forests, with due attention to the rights of traditional communities, strengthening of forest governance and addressing the drivers of deforestation.

# 1. **Creation of a favorable policy environment for REDD - recent advances in Brazil**

- Development of state-of-the-art capacity in remote-sensing based monitoring of deforestation in the Amazon, under the leadership of the INPE, and its application in forest law enforcement and other policies;
- Between 2003-2008, creation of over 19 million hectares in new federal conservation units in the Brazilian Amazon, frequently in areas with intense pressures from illegal deforestation and predatory logging, such along the Cuiabá-Santarém (BR-163) in Pará state.
- Advances in the official recognition of indigenous lands, including the 1.7 million hectare Raposa Serra do Sol territory in the state of Roraima;
- in March 2006, approval of "public forests management law" (Law 11.284) and creation of the Brazilian Forest Service;

# 1. **Creation of a favorable policy environment for REDD - recent advances in Brazil**

- in June 2006, launching of Plano BR-163 Sustentável as a pioneer initiative to integrate a highway infrastructure project into a comprehensive sustainable regional development strategy, with active participation of civil society organizations.
- In December 2007, signing of Presidential Decree no. 6321/07, establishing specific procedures to intensify efforts in combating deforestation in municipalities identified as "hotspots" of forest clearing.
- In February 2008, approval of Resolution 3545 of the National Monetary Council, linked to the Central Bank of Brazil, establishing requirements for proof of legitimacy of land claims and compliance with environmental legislation as a prerequisite for access to rural credit for agricultural and ranching activities in the Amazon biome.
- In May 2008, initiation of preparations for state action plans for prevention of deforestation in the states of Acre, Mato Grosso, Tocantins and Pará, within context of PPCDAM



**BR-163**  
sustentável

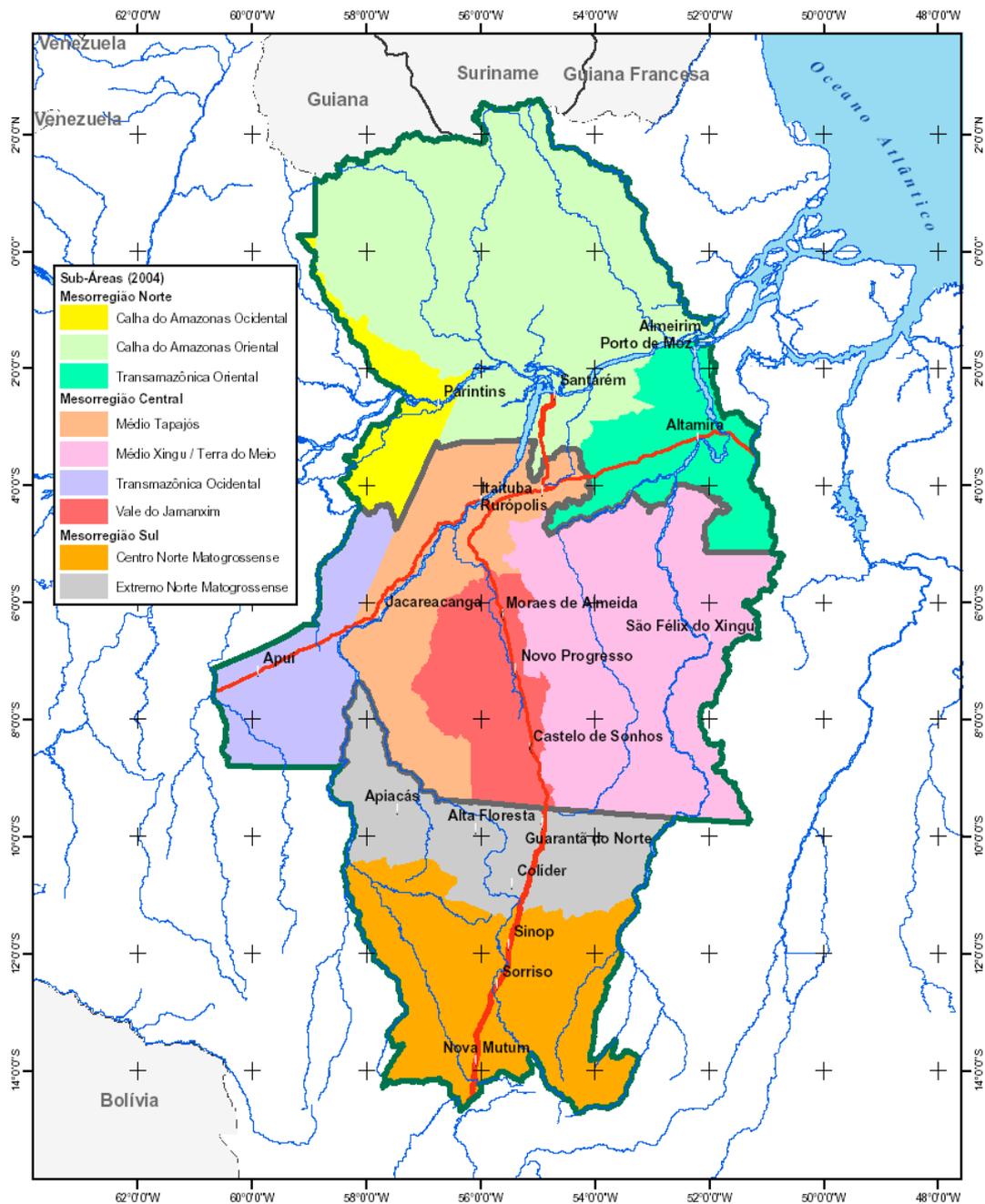
## DESAFIOS E SUSTENTABILIDADE SOCIOAMBIENTAL AO LONGO DO EIXO CUIABÁ-SANTARÉM

Encontro de Sinop, 18 a 20 de novembro de 2003



Plenária final

250 pessoas, incluindo 100 lideranças indígenas



# Plano BR-163 Sustentável

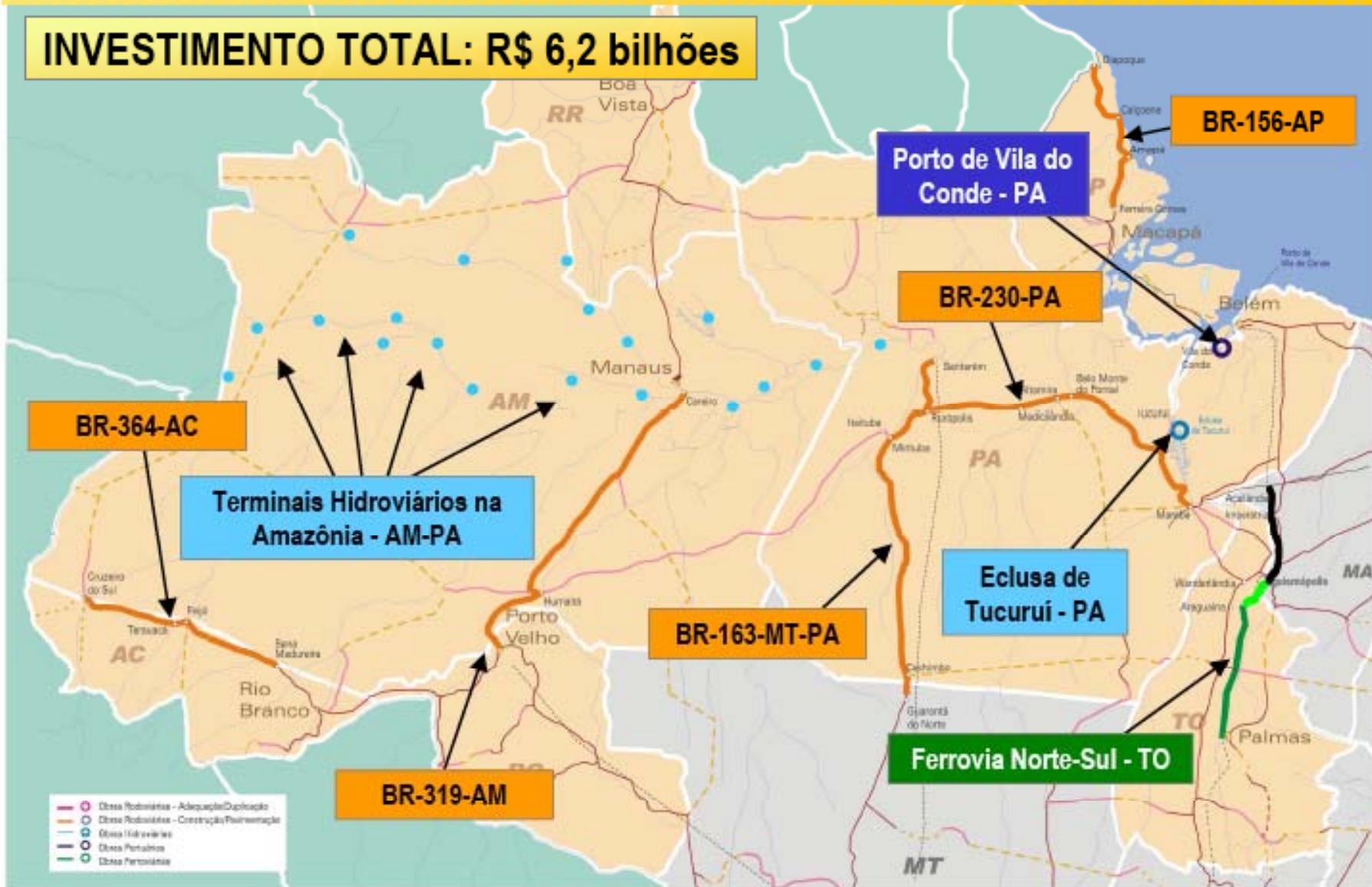
# 1. Creation of a favorable policy environment for REDD – contradictory policies

- *Persistence of rural credit programs that stimulate extensive cattle ranching* at the level of ranches and slaughterhouses, without due measure to prevent expansion of ranching in areas of illegal deforestation, and needs to improve productivity and pasture management. Key role of BNDES (administrator of Amazon Fund).
- *Implementation of large infrastructure projects* under PAC in the transportation and energy sectors, lacking strategic analyses of socio-environmental impacts, economic efficiency and alternatives, multi-stakeholder dialogue and conflict resolution. Major controversial projects also funded by BNDES (p.ex. Complexo Madeira)
- *Recent attempts to undermine the Brazilian Forestry Code and other environmental legislation* within Brazilian Congress.
- *Changes in land tenure legislation – Medida Provisória P 458 / Federal Law 11.952*, with serious risks for increasing land speculation, social conflicts and deforestation.

# REGIÃO NORTE

PREVISÃO DE INVESTIMENTO EM TRANSPORTES 2007-2010

INVESTIMENTO TOTAL: R\$ 6,2 bilhões



Plataforma Multimodal de Marabá R\$ 76 mi

Eclusas de Tucuruí R\$ 1,5 bi

Derroc. Drag. e Sinaliz. R\$140 mi

Projeto Eclusa de Estreito R\$8 mi

Eclusas de B. Esperança R\$52 mi

Projeto Tapajós T Pires R\$ 20 mi

Eclusa de Lageado R\$ 800 mi

Dragagem do Jacaré R\$ 4 mi

Projeto Eclusa de São Simão

Projeto Eclusa de Cach. Rio Verde

Projeto Eclusa de Itumbiara

Derrocagem do Guaíra R\$ 16 mi

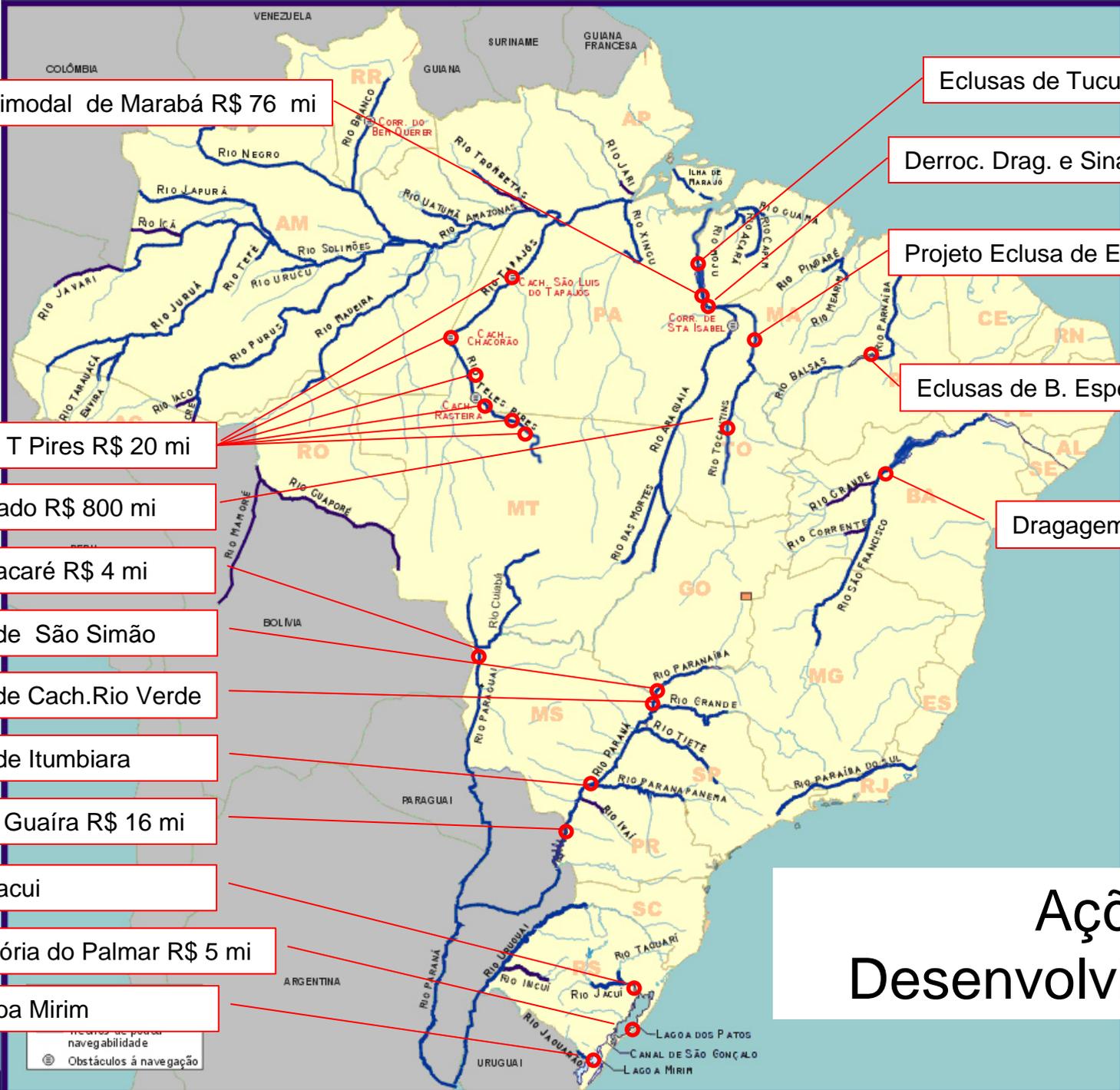
Dragagem do Jacuí

Porto de Sta Vitória do Palmar R\$ 5 mi

Sinalização lagoa Mirim

Dragagem S. Francisco

# Ações em Desenvolvimento

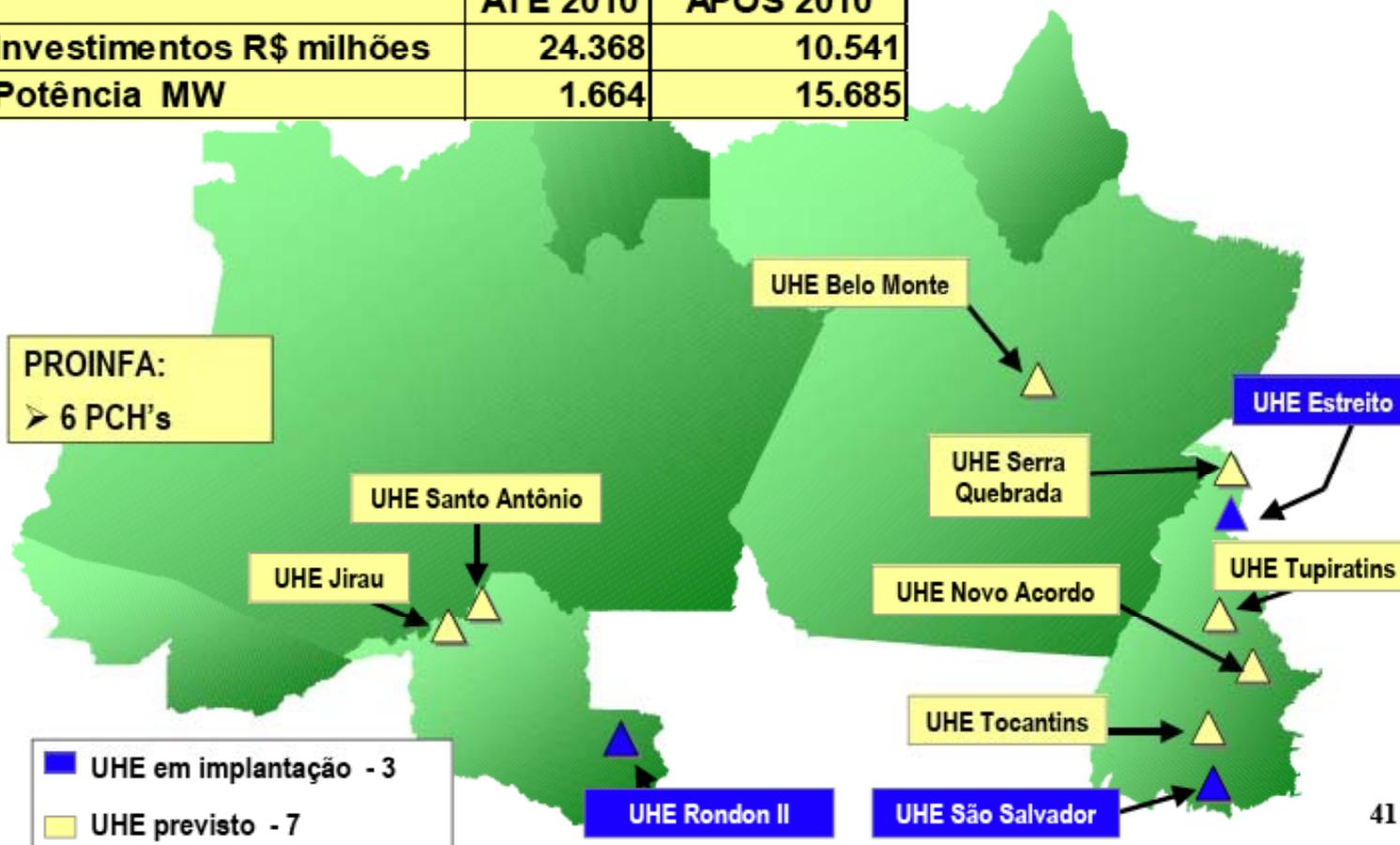


Áreas de potencial navegabilidade  
Obstáculos à navegação

## REGIÃO NORTE

### GERAÇÃO DE ENERGIA ELÉTRICA

	ATÉ 2010	APÓS 2010
Investimentos R\$ milhões	24.368	10.541
Potência MW	1.664	15.685



# ESTUDOS DE INVENTÁRIO HIDRELÉTRICO DE BACIAS HIDROGRÁFICAS

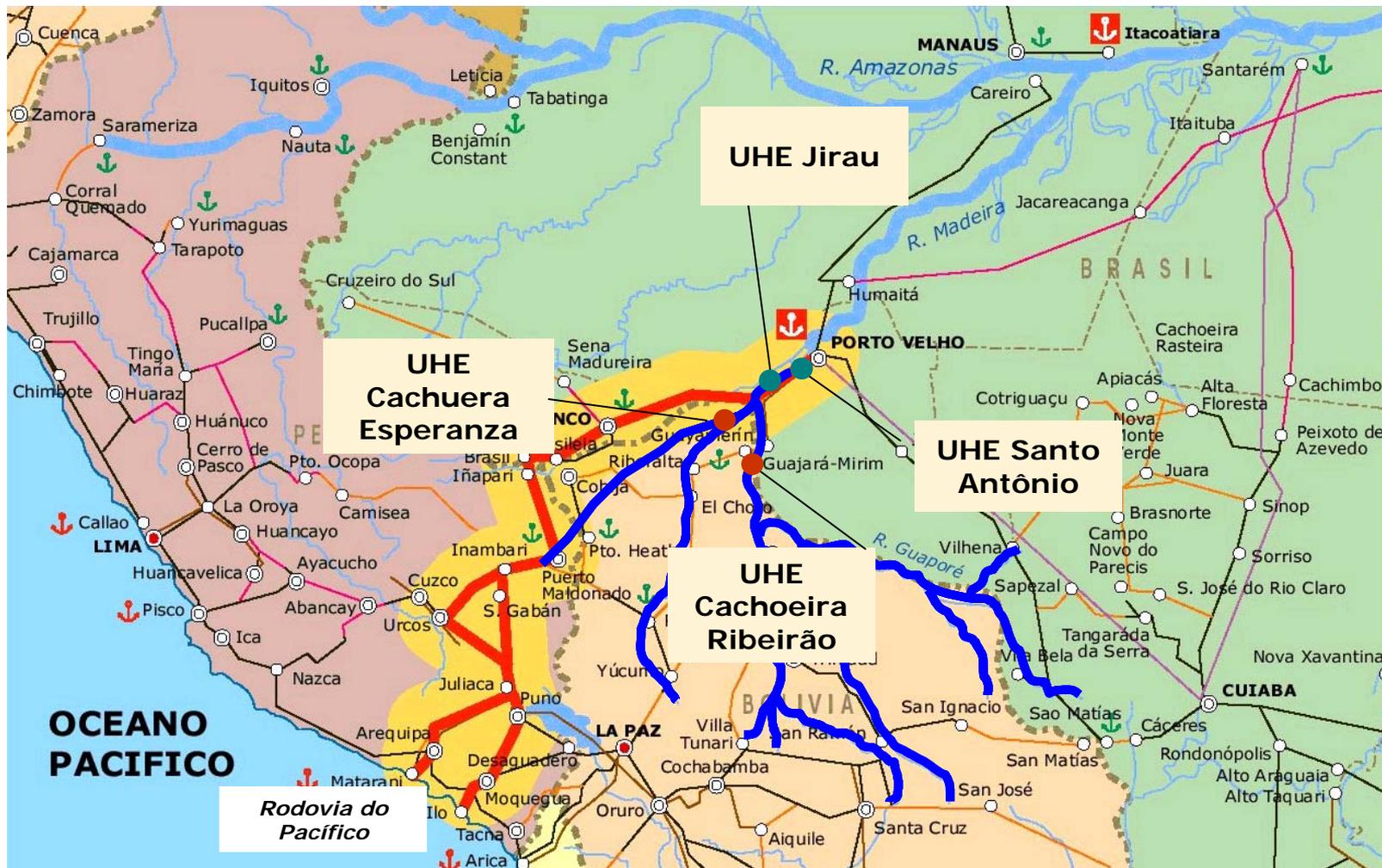


Bacia Hidrográfica	Conclusão dos Estudos	Potência a inventariar (MW)
Tapajós	31/07/2007	14.000
Aripuanã	30/06/2008	3.000
Trombetas	30/06/2008	3.000
Juruena	30/06/2008	5.000
Araguaia	31/09/2008	3.100
Sucunduri	31/12/2008	650
Branco	31/12/2008	2.000
Jari	31/03/2009	1.100
Itacaiunas	30/06/2010	450
Jatapu	30/06/2010	650
<b>Total</b>		<b>32.950</b>

**32.950 MW de Usinas  
Inventariadas até  
2010**

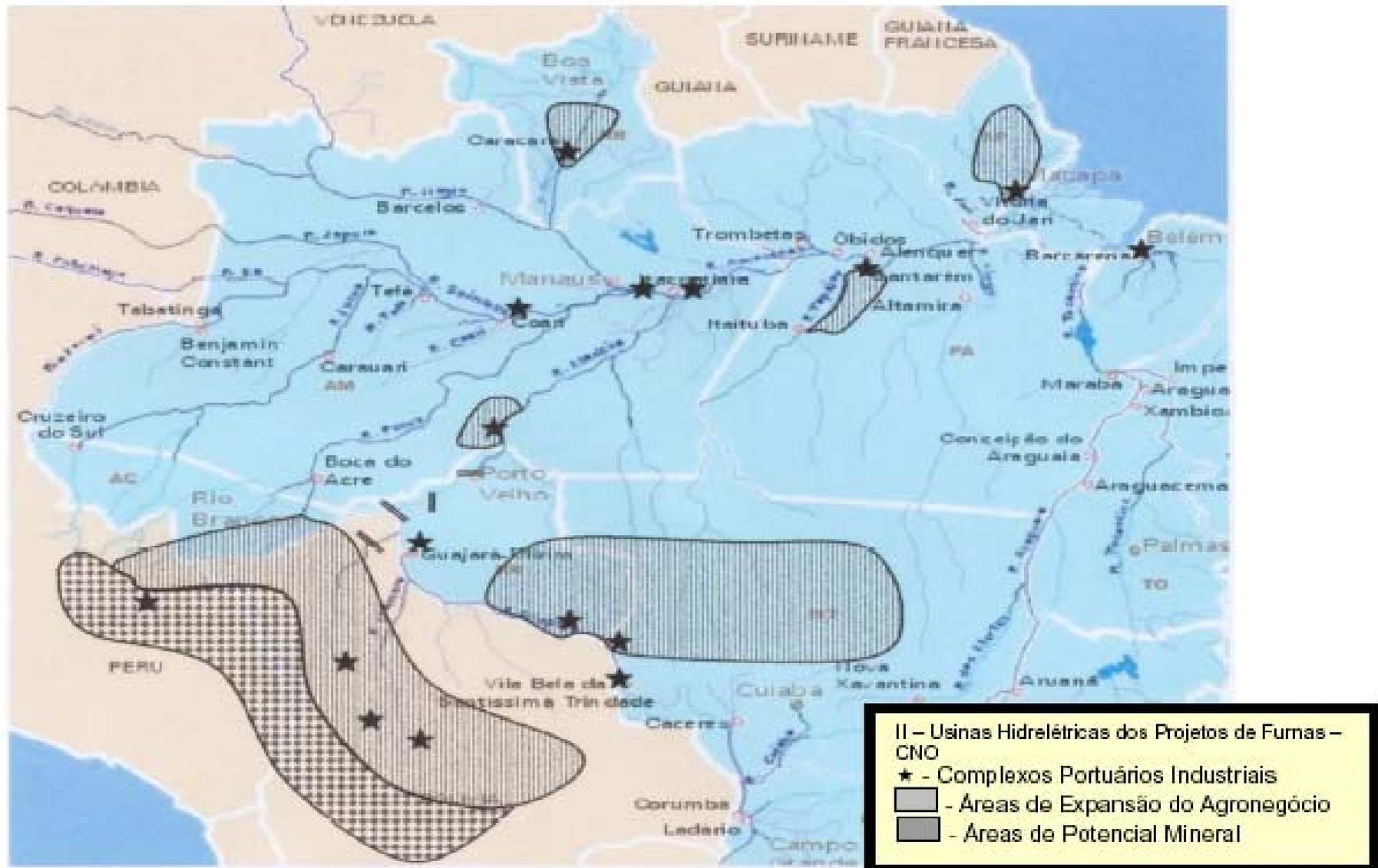
# COMPLEXO DO RIO MADEIRA

## LOCALIZAÇÃO DOS APROVEITAMENTOS NOS RIOS MADEIRA, MAMORÉ E BENI E DAS HIDROVIAS



Fonte: Furnas/Odebrecht

# Projected areas for expansion of agribusiness and mineral exploitation, associated with Madeira River Complex



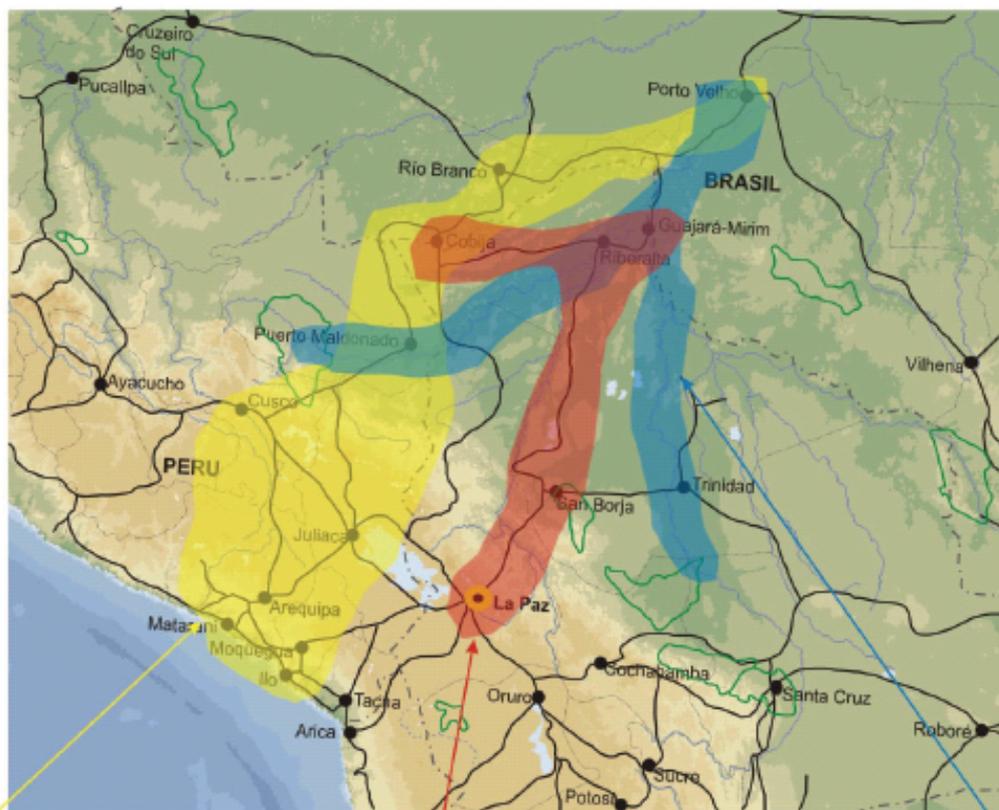
Fonte: Interocean

# Transportation of Soybeans on the Madeira River



# Iniciativa de Integração Regional da Infra-estrutura Sul-Americana - IIRSA

Mapa N° 54 – Agrupamentos do Eixo Peru-Brasil-Bolívia



**Grupo 1:**  
Corredor Porto Velho-Rio Branco-Puerto  
Asis-Puerto Maldonado-Cuzco / Juliaca-  
Portos do Pacífico

**Grupo 2:**  
Corredor Rio Branco-  
Cobija-Riboralta-Yucumo-La Paz

**Grupo 3:**  
Corredor Fluvial  
Madeira-Madre de Dios-Beni

# Eixos de Integração e Desenvolvimento - IIRSA



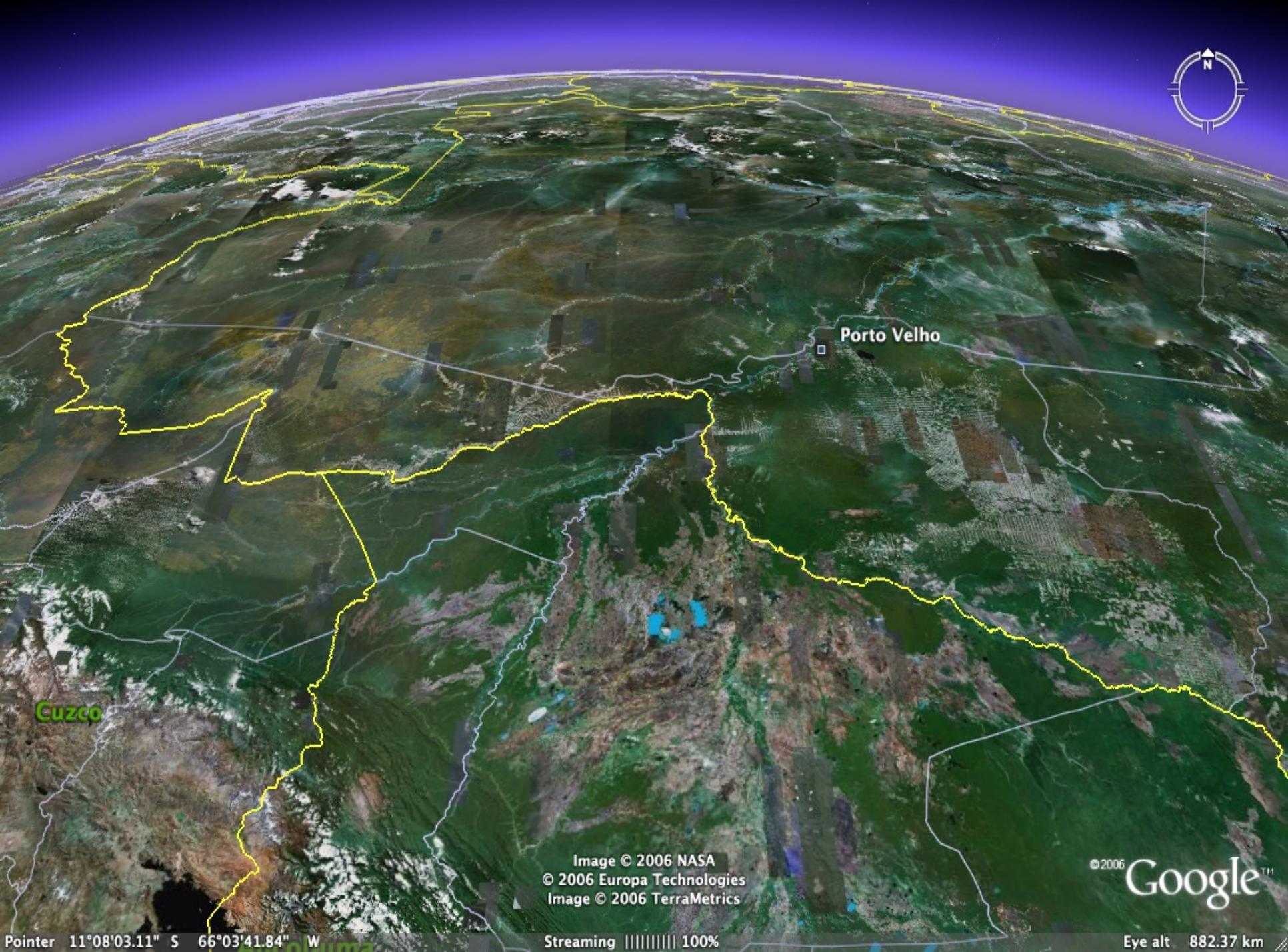


# Águas Turvas

ALERTAS SOBRE AS CONSEQÜÊNCIAS DE BARRAR  
O MAIOR AFLUENTE DO AMAZONAS



Glenn Switkes, organizador  
Patrícia Bonilha, editora



Porto Velho

Cuzco

Image © 2006 NASA  
© 2006 Europa Technologies  
Image © 2006 TerraMetrics

© 2006 Google™

Pointer 11°08'03.11" S 66°03'41.84" W

Streaming ||||| 100%

Eye alt 882.37 km

# JIRAU - RESERVATÓRIO



**FOTO NO PERÍODO DE SECA**









Killing of at least 11 tons of fish during construction of coffer dams at Santo Antonio – December 2008





CANAL YODA  
E. DE PROTECCION

51

# 1. Creation of a favorable policy environment for REDD

- Valuing of ecosystem services of forests – such as climate regulation, hydrological regimes, and biodiversity conservation – has yet to be sufficiently internalized within a series of relevant public policies in Brazil.
- To what extent might enthusiasm over the prospect of international REDD schemes tend to divert attention from needed reforms in existing public policies, in terms of promoting sustainable management and maintenance of ecosystem services of forests?
- According to one of Brazil's leading experts on environmental law, Herman Benjamin, the country's most important contribution to reduced global emissions from deforestation should be implementation of the country's advanced environmental legislation.

# 1. Creation of a favorable policy environment for REDD

- Common problem among contradictory policies is a lack of multi-stakeholder dialogue, mechanisms of conflict management and transparency. Problems need to be understood in political-institutional context.
- Fragility of PPCDAM as a strategic instrument for influencing contradictory policies, particularly with regard to large infrastructure projects, land tenure and agribusiness;
- National Plan on Climate Change (*Política Nacional de Mudanças no Clima*) remains to be effectively operationalized (including institutional spaces for multi-stakeholder dialogue)
- To date, no clear links exist between Amazon Fund, PPCDAM and PNMC

# **1. Creation of a favorable policy environment for REDD**

- What contributions could REDD and related initiatives make to strategic initiatives such as PPCDAM, Amazon Fund and PNMC (e.g. strengthening multi-stakeholder dialogue, strategic planning, monitoring and evaluation, capacity-building, transparency)?

## 2. Managing REDD funds in the Amazon: strategic priorities and risks

- **a) *Addressing the drivers of deforestation:*** To date, not much discussion in Brazil about how REDD should be linked to an overall strategy to address the causes or "drivers" of deforestation and forest degradation. Although strategic guidelines of Amazon Fund mention compatibility with PPCDAM, it is not clear to how this will be accomplished, especially when considering the fund's complementary role in relation to other key policy initiatives.
- A strategic priority for the Amazon Fund could be to support "pacts" among different stakeholders, aimed at collective construction of solutions to causes of deforestation and sustainable alternatives.

## 2. Managing REDD funds in the Amazon: strategic priorities and risks

- **b) *Traditional populations and forest conservation:*** importance as a strategic priority; key questions: i) land tenure security, ii) strengthening collective management of natural resources, valuing traditional knowledge, iii) reaching isolated forest communities with appropriate support for grassroots mobilization and capacity-building, iii) strengthening the subsistence base and income-generating capacity of local communities, avoiding risks of new forms of dependence on external funding, iv) free, prior and informed consent for REDD projects that affect territories of traditional populations.
- **c) *REDD and Protected Areas:*** Despite compelling arguments for the inclusion of protected areas among the beneficiaries of REDD funds, discussions on appropriate strategies have only recently been initiated.

## 2. Managing REDD funds in the Amazon: strategic priorities and risks

### *d) REDD and avoided deforestation:*

- An emerging consensus is that compensated reductions and maintenance of stocks should be considered in REDD+ programs
- Recent proposals to "compensate" individual landholders for avoided deforestation as part of REDD mechanisms have raised the following questions:
  - Given that a significant percentage of deforestation is practiced by occupants of public lands without legitimate titles, including "land grabbers" (*grileiros*), wouldn't REDD programs become engaged in "paying the criminals"?
  - Should private landowners be paid to comply with the Brazilian Forestry Code, in terms of maintenance of legal forest reserves and areas of permanent protection (APPs), or should REDD credits ensure *additionality*?

## 2. Managing REDD funds in the Amazon: strategic priorities and risks

- **d) *REDD and avoided deforestation:***
  - How will issues of permanence be addressed in "compensated reduction" schemes on individual landholdings, given the ephemeral character of REDD payments? In a post-REDD scenario, to what extent would government budgets have the capacity to cover such payments to landholders?
  - How to ensure against "leakage", whereby economic activities associated with deforestation, such as beef production, simply migrate elsewhere to attend market demands?
- According to Herman Benjamin, an additional risk is the creation of a legal precedent for artificially inflating property values, in a manner that renders land expropriations for establishment of protected areas prohibitively expensive.

## 2. Managing REDD funds in the Amazon: strategic priorities and risks

### e) *REDD in the regional economy:*

- REDD payments aimed at simply substituting economic activities linked to deforestation and forest degradation will tend to generate negative impacts on employment and local economies, given multiplier effects of conventional activities such as the timber industry.
- This argument is compatible with the notion that a strategic priority of REDD should be to support processes of *economic transition* from extensive practices of resource use, such as high-grading of timber and cattle ranching, towards activities based on the sustainable use of forest biodiversity and value-added through local processing industries, with due attention to addressing long-standing bottlenecks.

## 2. Managing REDD funds in the Amazon: strategic priorities and risks

### f) *REDD and timber-based forest management:*

- At the international level, there has been considerable debate over whether timber-based forest management, especially at the industrial level, should be included within REDD programs. In particular, questions have been raised about the extent to which management plans in tropical forests can be classified as sustainable, and problems of additionality.
- In the Brazilian case, relevant challenges for REDD initiatives would also include improvements in technical assistance, monitoring of management plans and support for expanding independent certification mechanisms.

### g) *REDD and reforestation/afforestation:*

- Need for further debate in Brazil regarding inclusion of reforestation and afforestation in future REDD+ mechanisms.
- There is considerable agreement that reforestation must not involve conversion of native vegetation to planted forests, and that native species that are environmentally-appropriate should be prioritized.
- This topic is relevant to current discussions on implementation of the Brazilian Forestry Code

## 2. Managing REDD funds in the Amazon: strategic priorities and risks

- **h) *Strengthening forest governance:*** Several recent studies and proposals have emphasized that REDD initiatives should be linked to the strengthening of forest governance in such areas as multi-stakeholder dialogue, institutional coordination, enforcement of forest legislation, transparency and capacity-building among local communities.
- **i) *Project monitoring:*** Within the Amazon Fund, much remains to be defined in terms of strategies for monitoring projects, particularly with regard to:
  - i) methods for estimating impacts on emissions from deforestation and degradation, with due consideration to potential countervailing forces in project areas, such as land speculation, inadequate law enforcement and market demands for beef and agricultural commodities,
  - monitoring complementary project objectives, such as capacity-building, biodiversity conservation and strengthening of local livelihoods, and
  - use of monitoring and evaluation systems as strategic tools in the management of individual projects and the Amazon Fund in general, as opposed to mere bureaucratic exercises.

## 2. Managing REDD funds in the Amazon: strategic priorities and risks

### j) *Reducing emissions in other biomes:*

- Notwithstanding the importance of the Amazon, there has been increasing debate in Brazil on the importance of reducing emissions in other biomes, especially the tropical savannah or *cerrado*.
- A new study has revealed that deforestation in the *cerrado* averaged 21.000 km<sup>2</sup> during the period of 2002-2008 - significantly higher than in the Amazon. During this period, the cumulative area cleared increased from 41.0% to 48.2% of the total area of the biome (approximately 2 million km<sup>2</sup>).
- Currently, GHG emissions from deforestation and land use change in the *cerrado* are similar to those of the Amazon biome.
- Major drivers of conversion of the *cerrado* include cattle ranching, mechanized soybeans and other export-oriented agricultural commodities.

# 3 Financing REDD in the Brazilian Amazon

- There is still a high degree of uncertainty regarding the potential supply and effective demand for REDD funds in the Brazilian Amazon.
- On the demand side, it may be argued that new external sources of REDD funding should be linked to more efficient use of existing sources of domestic financing for activities such as implementation of protected areas (WWF-Brasil, 2009).
- Much of the controversy over REDD in Brazil has centered on the appropriateness of linking mechanisms of "compensated reduction" to international carbon markets. , especially with regard to: i) the potential dangers of a massive influx of REDD credits for depressing international prices of carbon, ii) potential risks for industrial countries to use relatively cheap forest carbon credits as a means to circumvent urgently-needed transitions to low carbon economies.

# 3 Financing REDD in the Brazilian Amazon

- Despite enduring controversy, there is growing agreement that if REDD is linked to carbon markets, safeguards such as maximum levels of fungibility will be needed in order to avoid potential conflicts with efforts to promote transitions to low-carbon economies in industrialized countries and a flood of cheap forest credits on the international market.
- Some NGOs have proposed minimum levels for use of REDD credits by industrialized countries in carbon markets, as a means to ensure more reliable sources of financing

# **3 Financing REDD in the Brazilian Amazon**

- A still unresolved issue of debate is whether access to international REDD funding should be mediated by a national mechanism such as the Amazon Fund, or if state governments and even individual projects should be allowed to access funds individually through cap-and-trade agreements involving forest carbon markets, along the lines suggested by the Forum of Amazonian Governors and the international Governors' Working Group on Climate and Forests.**
- There has been relatively little discussion in Brazil regarding the inherent unsustainability of REDD over the medium to long term, assuming that carbon offsets on the international market are linked to mechanisms of "compensated reduction" that employ a periodically-adjusted historical baseline.**



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