

Appendix C-10

The Brazilian National Communication to the UNFCCC

Economic and Environmental
Modeling Workshop
Rio de Janeiro, 19-20 March 2001

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National Communication

- 1 - General description of the steps taken or envisaged to implement the Climate Convention.
- 2 - Inventory of anthropogenic emissions by sources and removals by sinks of the greenhouse gases not controlled by the Montreal Protocol.

Steps taken to implement the Convention

- 1 - Programs Related to Sustainable Development
- 2 - Measures to Addressing Climate Change and its Adverse Impacts
- 3 - Research and Systematic Observation
- 4 - Education, Public Awareness and Training
- 5 - Monitoring Systems
- 6 - National and Regional Capacity Building
- 7 - Integration of Climate Change Concerns in Medium and Long-Term Planning

Sustainable Development Programs

- National Alcohol Program (Proalcool)
- Energy Conservation Programs
 - National Program for Electricity Conservation - PROCEL
 - National Program for the Rational Use of Oil and Natural Gas Derivatives – CONPET
- Power Generation from Sugar Cane Bagasse
- Renewable Energy Sources
- Charcoal-Based Steel and Iron Industry

Inventory of GHG Anthropogenic Emissions and Removals

- 1 - Energy Sector
- 2 - Industry and Solvents
- 3 - Agriculture
- 4 - Land Use Change and Forestry
- 5 - Waste Treatment

Inventory Methodology

- UNFCCC Guidelines - Decision 10/CP.2
- IPCC Guidelines (1995)
- 1996 Revised IPCC Guidelines
- IPCC Good Practice Guidance and Uncertainty Management
- Country Specific Methodology

Inventory Complexity

- Country size / Regional diversity
- Key Sources (economic diversity)
- Default methodology shortcomings
 - Agriculture
 - Land-Use Change

Inventory Organization

- Central Office
- Development Entities
 - Universities
 - Research Centers
 - Government Entities
 - Industry Associations
 - Consultants
- Objectives: efficiency ; capacity building

Inventory Financing

- USCSP - EPA
- GEF - UNDP
- Government Entities
- Industry Associations

Energy Sector

- Fuel Combustion
 - Top Down (CO₂)
 - Bottom-Up (CO₂ - Non-CO₂)
 - Stationary Sources
 - Mobile Sources
 - Biomass Uses (Non-CO₂)
 - Sugar Cane / Ethanol / Bagasse
 - Wood / Charcoal

Energy Sector

- Fugitive Methane Emissions
 - Oil and Gas
 - Coal Mines

Industry Sector

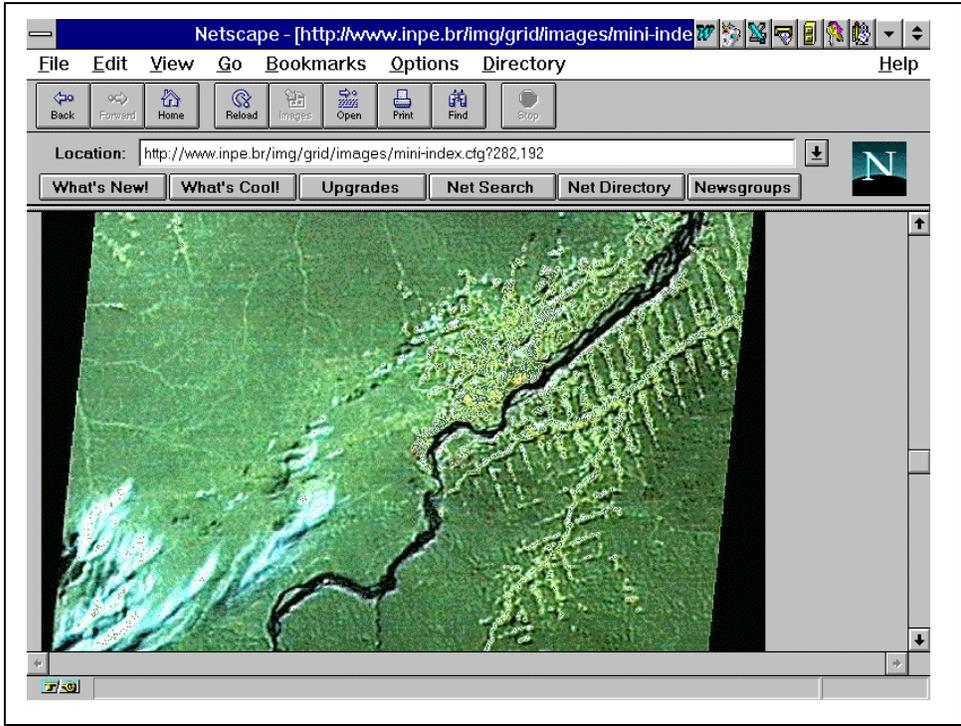
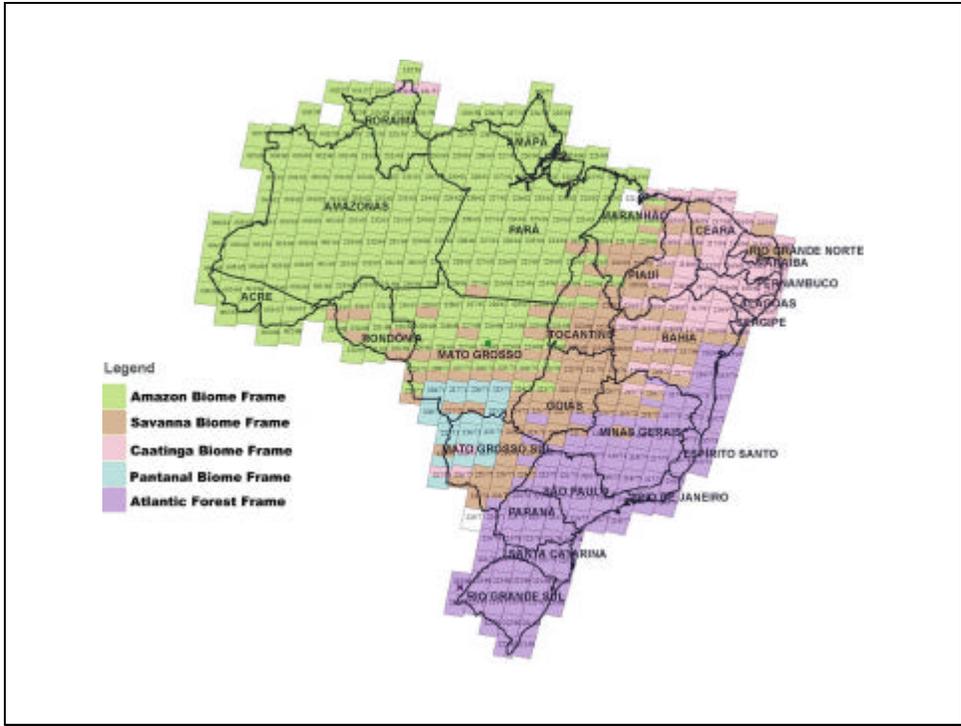
- Mineral Products
 - Cement (CO₂)
- Metal Industry
 - Iron and Steel (Charcoal) (CO₂)
 - Aluminum (CO₂, PFCs)
- Chemical Industry (CO₂, N₂O)
- Other Industry
 - HFCs , PFCs and SF₆

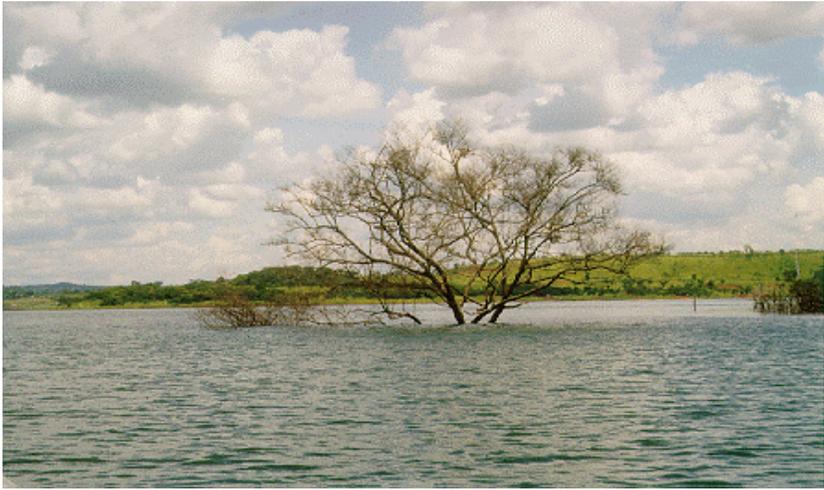
Agriculture Sector

- **Livestock (Cattle)** (CH₄)
- Rice Production (CH₄)
- Residues Burning (**Sugar Cane**) (Non-CO₂)
- Fertilizer Use (N₂O)
- **Prescribed Savanna Burning** (Non-CO₂)

Land-Use Change and Forestry

- **Forest and Grassland Conversion** (CO₂)
- Changes in Forest and Other Woody Biomass Stocks (Planted Forests) (CO₂)
- **Abandonment of Managed Lands (Regrowth)** (CO₂)
- **Carbon Emissions and Removals from Soils** (CO₂)
- **Hydroelectric Reservoirs** (CH₄)





Waste Sector

- Solid Waste Disposal
- Wastewater Handling
 - Residential
 - Industrial

<http://www.mct.gov.br/clima>



Background Reports

- Carbon Dioxide Emissions from the Energy Sector - Top-Down Approach - **COPPE/UFRJ**
- Fugitive Emissions from Coal Mining and Handling - **SNIEC**
- Methane Emissions from Livestock - **EMBRAPA**
- Methane Emissions from Rice Cultivation - **EMBRAPA**
- CO₂ Emissions and Removals from Changes of Stocks of Planted Forests - **FBDS**
- Methane Emissions from Waste Treatment and Disposal - **CETESB**

Background Reports

- Carbon Dioxide Emissions from the Energy Sector - Bottom-Up Approach - [COPPE/UFRJ](#)
- Nitrous Oxide Emissions from Agriculture Soils - [EMBRAPA](#)
- GHG Emissions from Agriculture Residues Burning - [EMBRAPA](#)
- Carbon Dioxide and Methane Emissions from Hydroelectric Reservoirs - [COPPE/UFRJ](#)

Background Reports

- GHG Emissions from the Industrial Sector
- Carbon Dioxide Emissions and Removals from Deforestation and Forest Regrowth - [FUNCATE](#)
- GHG Emissions from Savannah Burning - [IBAMA](#)
- Carbon Emissions and Removals from Soils - [USP](#)