

Aracruz and the Sustainability Challenge

Presentation to the TFD on IMPF

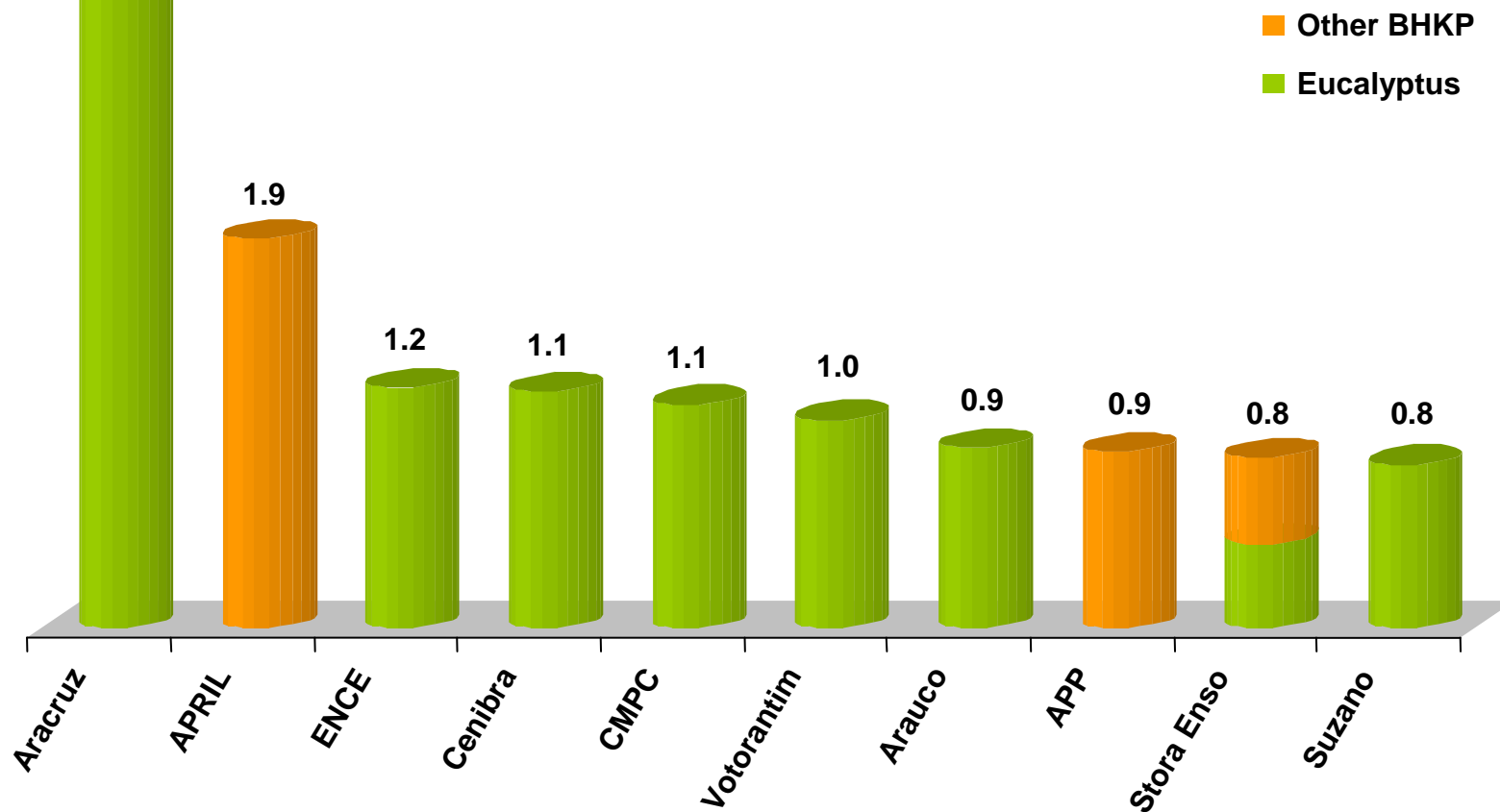
April 14th, 2008

Brazil

Aracruz – The Largest Producer

Top 10 BHK Market Pulp Producers

Capacity in 2007 ('million tons/year)



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Source: Hawkins Wright – December 2007, Bracelpa and Aracruz

Note: Veracel's production equally split between Stora Enzo (50%) and Aracruz. Not considering APP's Hainan Integrated Pulp.

Aracruz in brief



Three production sites totaling 3.3 million t/y.

- ✓ **2.3 million t/y. Barra do Riacho Unit**
- ✓ **450,000 t/y. Guaíba Unit**
- ✓ **550,000 t/y. Veracel (our 50% stake, in joint venture with Stora Enso)**

Market: 41% Europe, 34% U.S., 23% Asia, 2% Latin America.

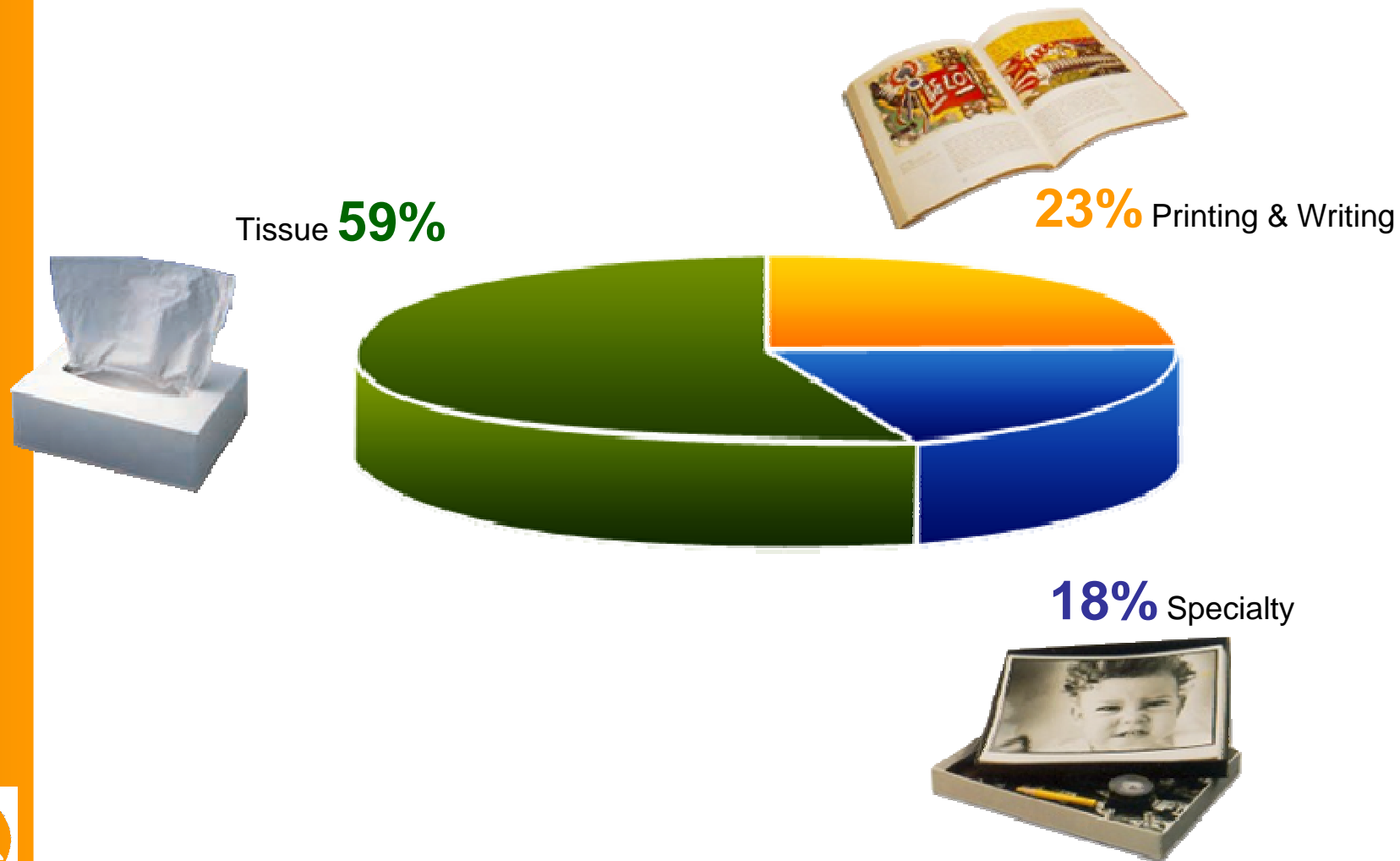
Net Sales Revenues – R\$ 3,847 million (98% exports)

Aracruz Capacity Expansions



- In 2008: Veracel fully ramped-up (+200,000 t/y)
- Increasing forest base in Guaiba to accomodate a 1.3 million t/y mill by 2010
- Veracel expansion (1.4 million t/y mill by 2012)

Grades consuming most of Aracruz pulp



BARRA DO RIACHO UNIT



GUAÍBA UNIT



VERACEL



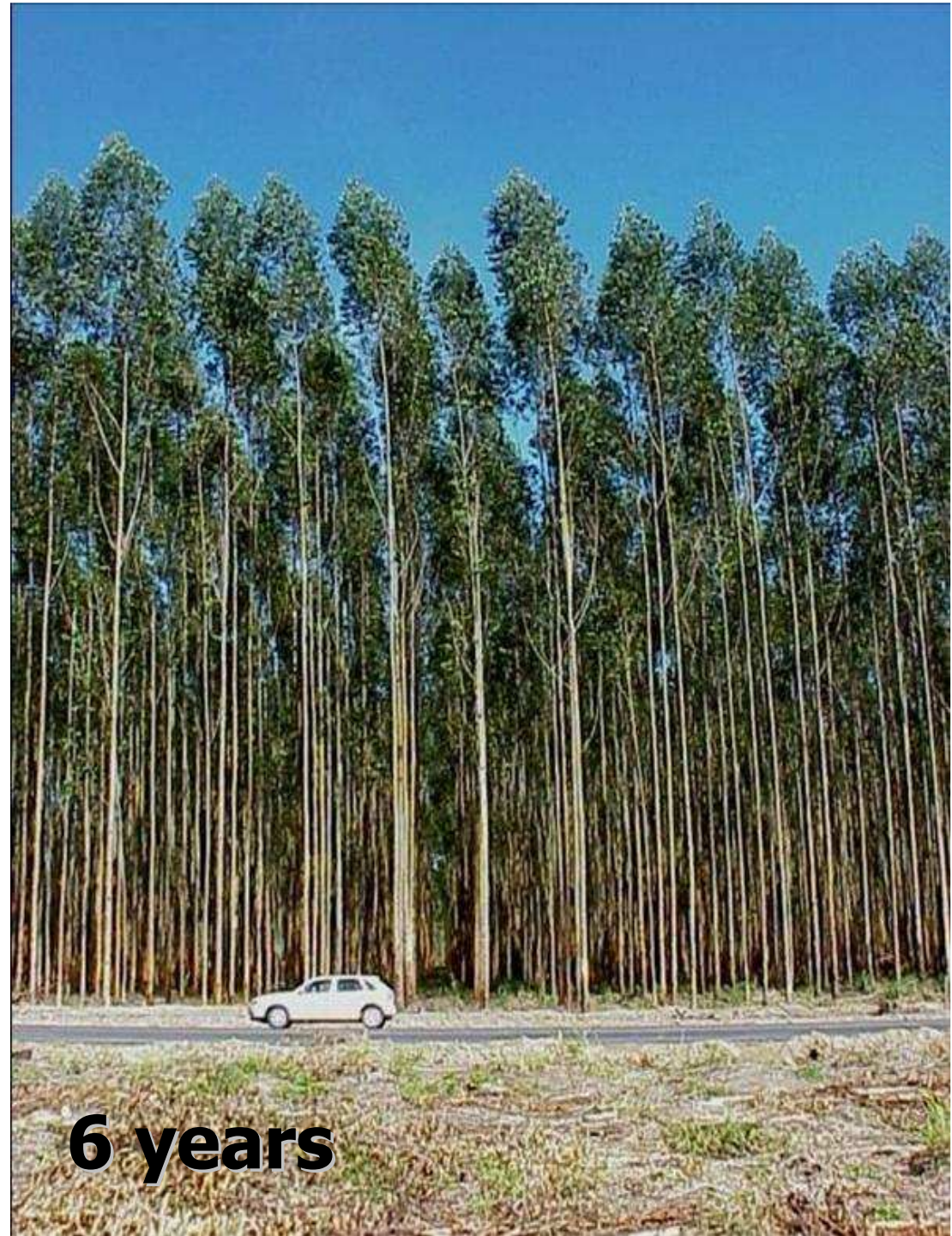
3 months



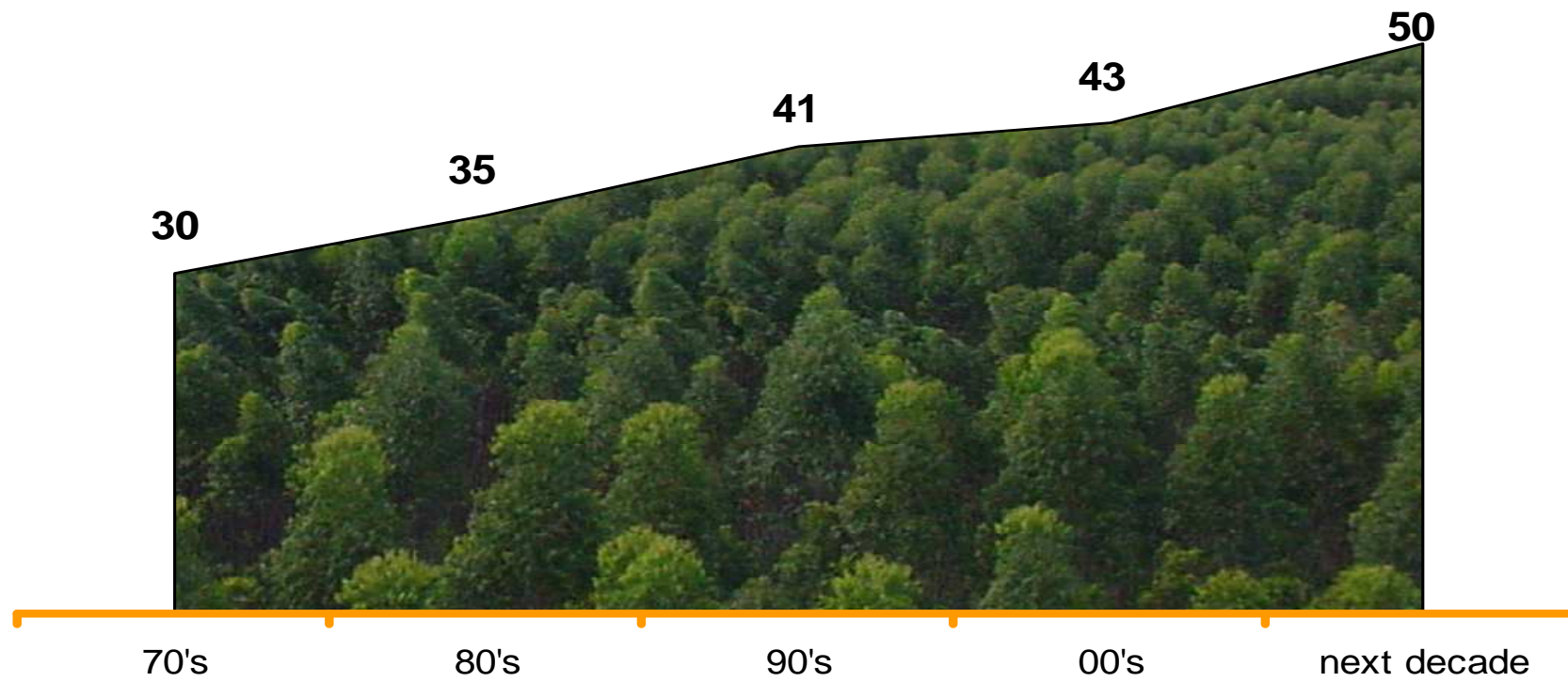
1 year



6 years

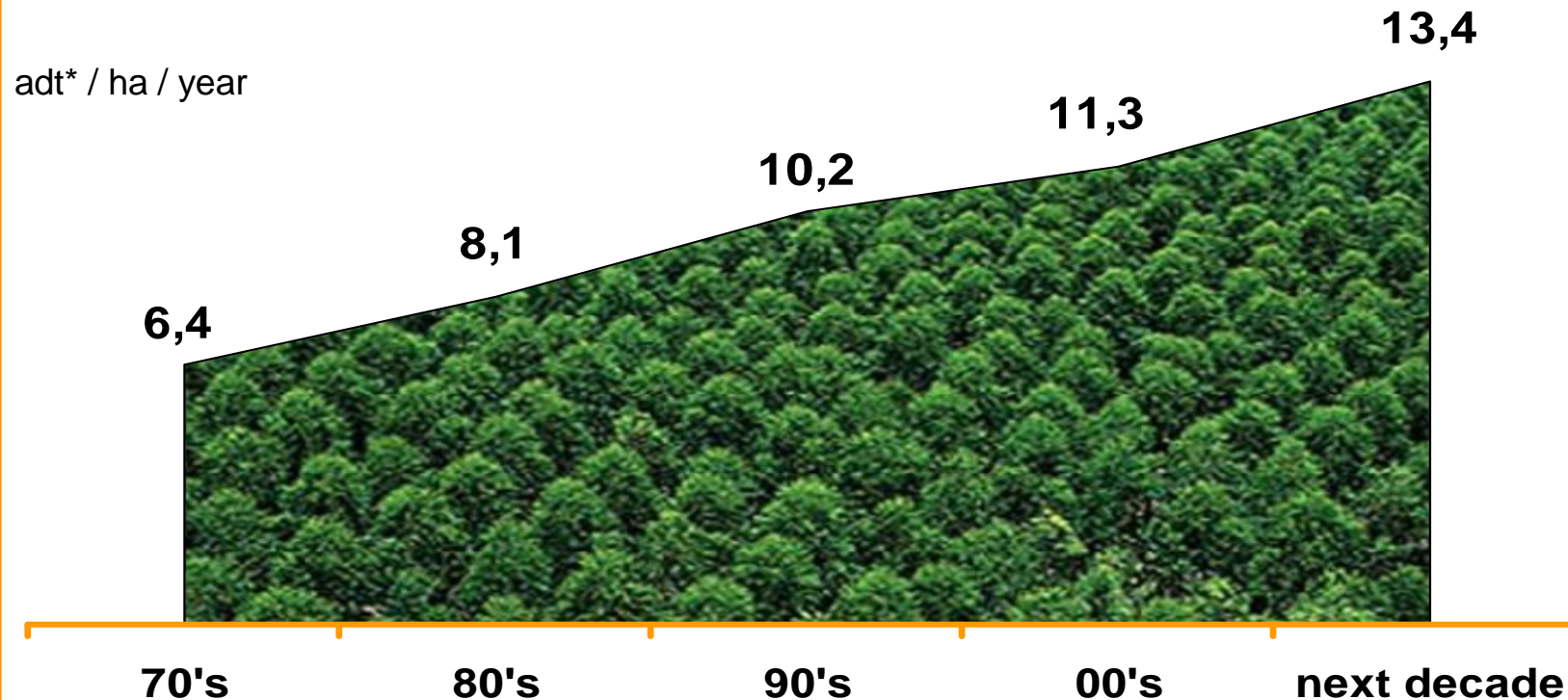


Improvements in mean annual increment
 $\text{m}^3 / \text{ha} / \text{year}$



Wood productivity gains provide a competitive advantage for Aracruz

Improvements in volume and specific consumption



Benefiting from consistent investments in Research & Development;
Our productivity per hectare planted with eucalyptus has almost doubled since the 1970s.

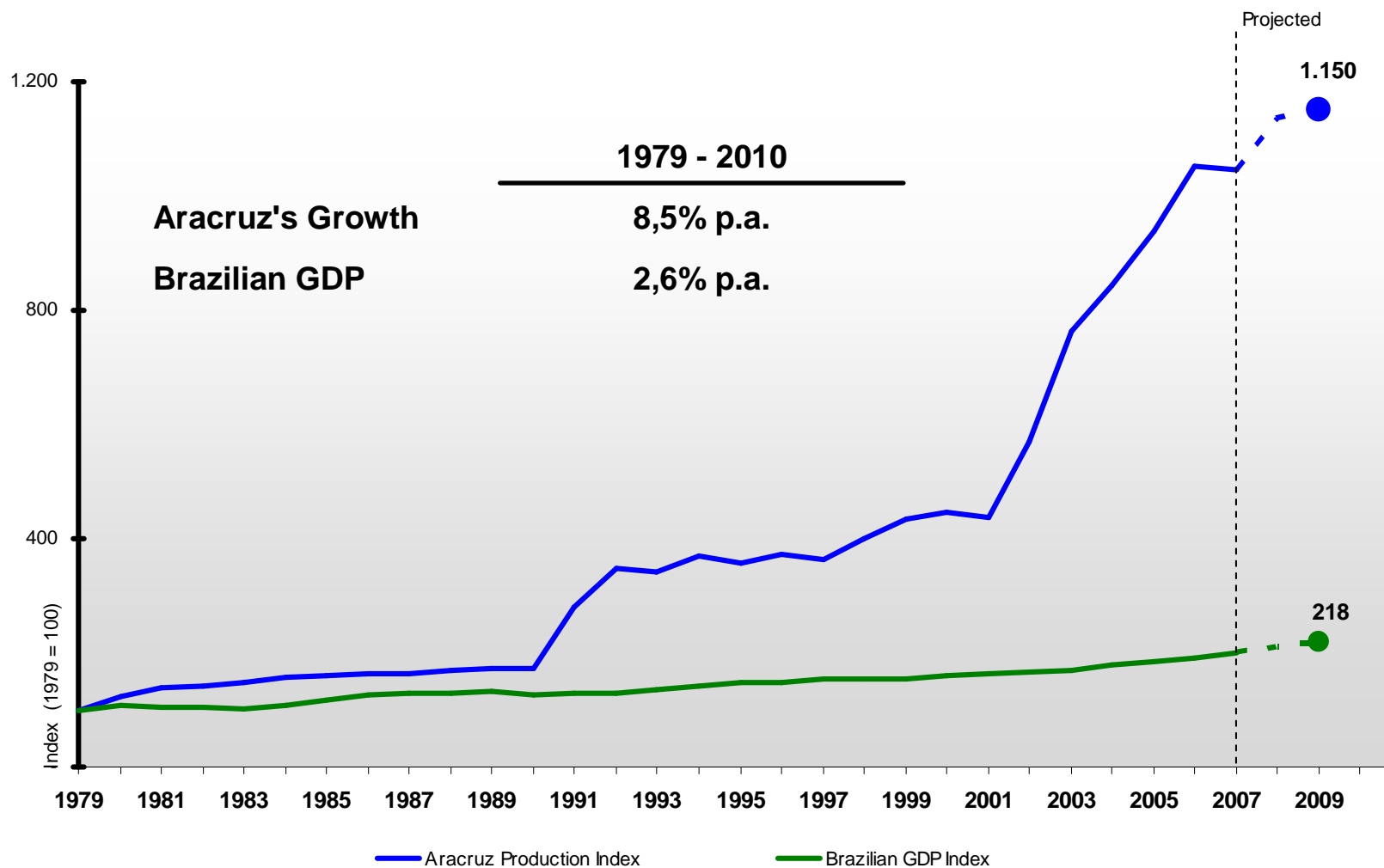


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*adt: Air-dried tons

Aracruz's growth versus Brazilian GDP

Index (1979=100)



**Aracruz has in general good
sustainability credentials**

Good sustainability credentials

- All production based on Eucalyptus (no use of tropical native trees)
- Preservation of native reserves (1/3 of the total area)
- State of the art technologies for pollution control in the mills
- A high investment in social programs
- ISO 14001 certified, all plantations certified by CERFLOR/ PEFC
- Listed in the Dow Jones and Bovespa Sustainability Indexes
 - DJSI - classified in 2005, 2006 and 2007 in the Supersector Basic Resources - Forestry & Paper (only company in 2007)



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Forest Plantations

2007

- Own Plantations
 - Eucalyptus – 286,100 ha
 - 105,300 ha in Espírito Santo
 - 98,600 ha in Bahia
 - 7,300 ha in Minas Gerais
 - 74,900 ha in Rio Grande do Sul
- Native reserves – 170,200 ha (~1 ha of reserves for each 1.7 ha of plantations)
- Forestry Partners: 92,700 ha in 161 municipalities
 - 3,907 contracts, average 24.65 ha/ contract

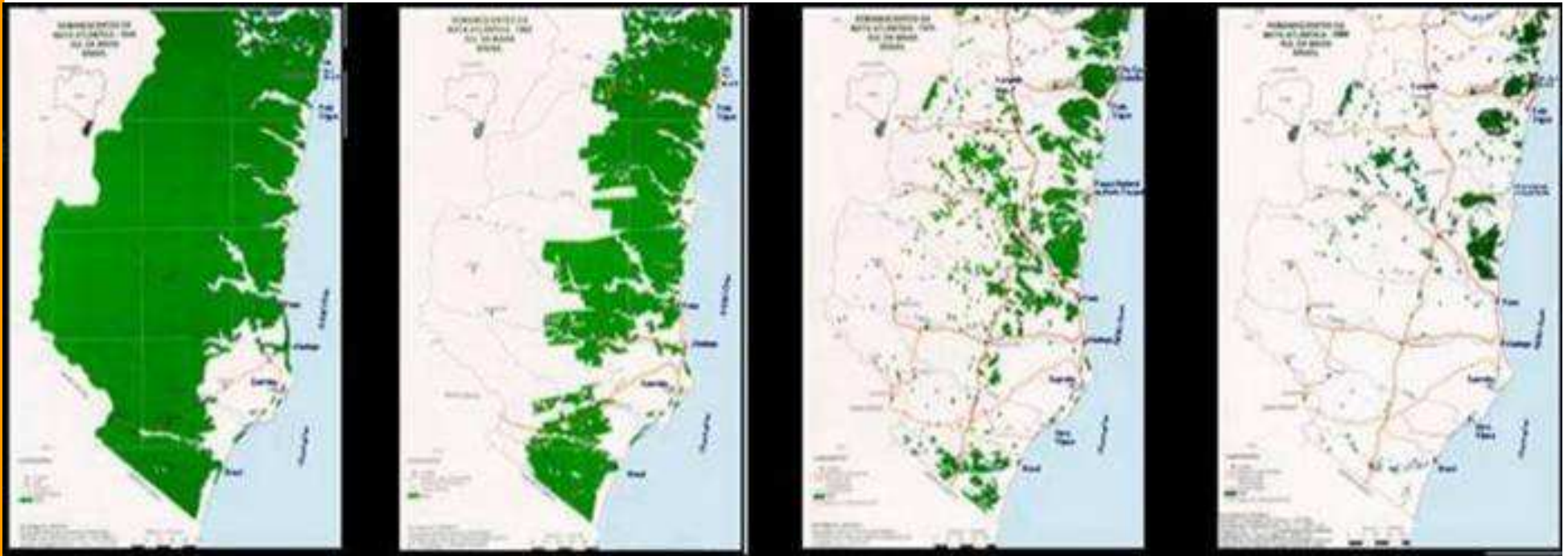
High productivity: 44 m³/ha/year, 7-year cycle for pulp

170,200 ha of native reserves



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Deforestation of the Atlantic Forest in the extreme south of Bahia



Until 1945 2 MM ha -
85%

In 1960

In 1974

In 1990 only 6%

**Today: only about 5% of the original
forest cover remains**

Source: SOS Mata Atlantica

Soil Use in Brazil

2007

| Use type (some examples) | Area (million ha) |
|--------------------------------------|-------------------|
| Agriculture (larger cultures) | |
| • Pastures (cattle) | 220.0 |
| • Soya | 20.7 |
| • Corn | 13.2 |
| • Sugar cane | 6.6 |
| • Forest plantations (1) | 5.5 |
| Agrarian reform (expropriated lands) | 70.9 |
| Indian lands (2) | 105.6 |
| | |
| Total Brazil (3) | 851.5 |

(1) Eucalyptus (3.5); Pinus (1.7) – 0.6 % of the country's area

(2) Demarcated and under demarcation

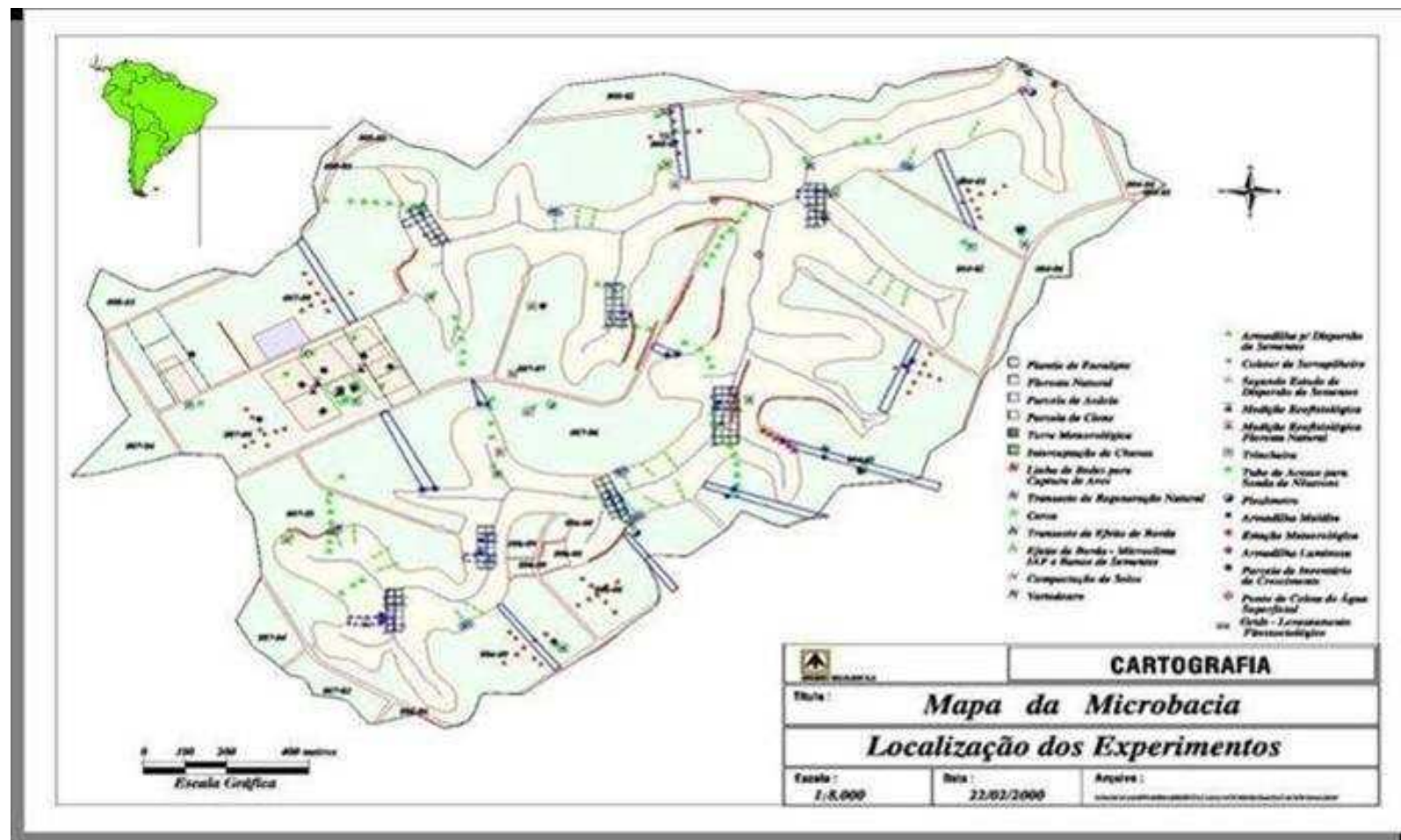
(3) Not the sum of the columns above

Sources: EMBRAPA, IBGE, INCRA, FUNAI, ABRAF



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Map of the Watershed Project



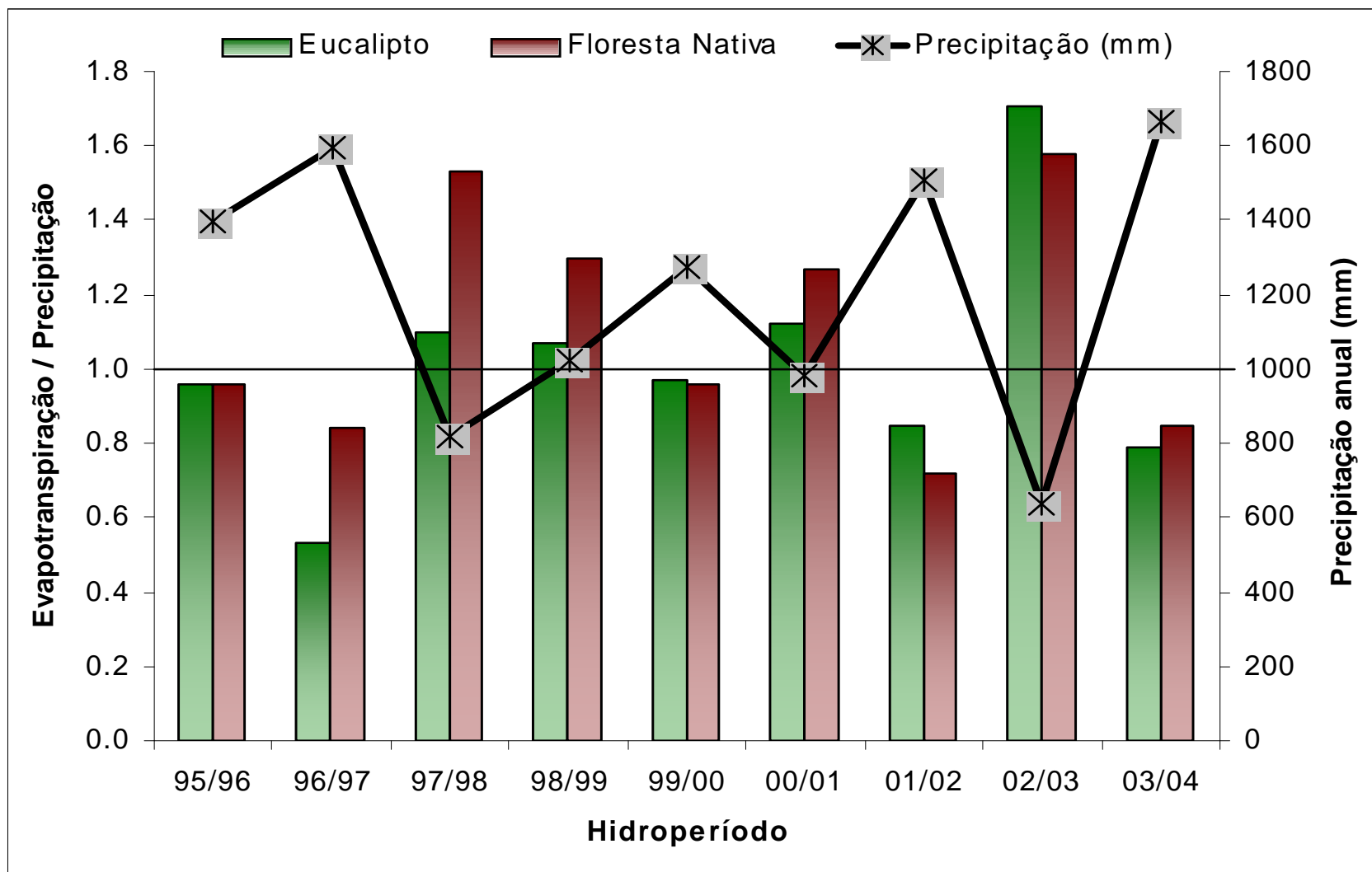
Main results of the Watershed project

- **Biodiversity:** 450 species of native trees/ ha; 556 species of birds (66 threatened species); 4,000 insects – rich biodiversity
- **Soil:** nutrient cycling allows maintenance and increase of soil fertility – the soil maintains high productivity after more than 30 years of use
- **Water:** The use of water by eucalyptus trees is equivalent to that used by native trees of the tropical **rain** forest.

The conclusions are specific to the Watershed project, but many are supported by data collected in other areas.



Water balance in the Watershed Project



Fertilizers and agro-chemicals

- **Fertilizers**

- Amounts well below other crops (kg/ha/7years):
Eucalyptus (317), sugar cane (1,860), coffee (8,910)

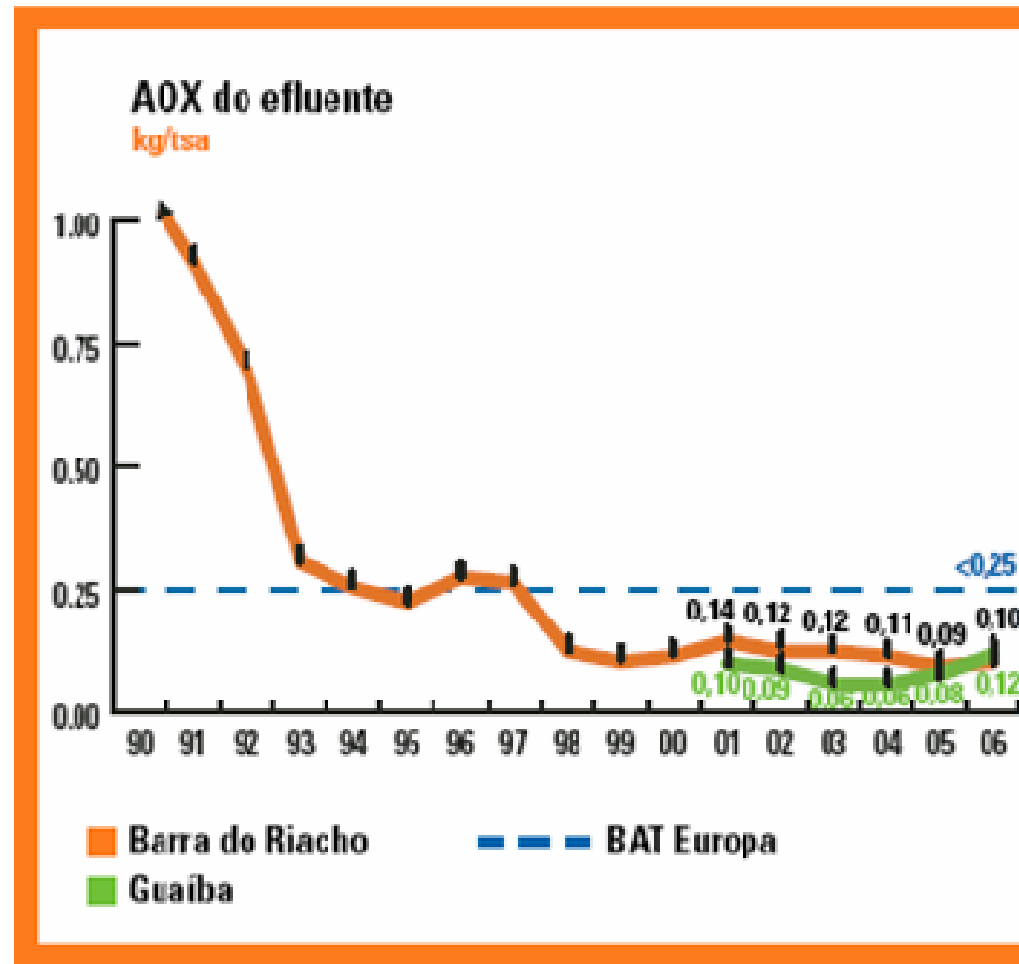
- **Agro-chemicals**

- Product used to control weeds - Scout NA, also used for other crops
- Licensed by the Ministry of Agriculture and by IBAMA.
- Based on glyphosate and used practically only during the first year of the planting, and rarely afterwards.
- Systematic monitoring of soil, water and worker's health indicate no problems.



Liquid effluents

AOX – Adsorbable Halogenated Compounds



Employees

2007

- More than 12,000: 2,495 own employees and 9,515 permanent outsourced employees. Thousands of indirect jobs.
- Voluntary benefits: medical-dental assistance, meals, transportation, pension plan (Arus), profit sharing
- Employees represented by 7 unions, 98% covered by collective bargaining agreements



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Social development

- **Activities:** direct activities in 5 states; Forestry Partners Program in 161 municipalities
- **Business tree:** R\$ 1,9 billion for suppliers, attraction of many companies to the regions where it operates
- **Taxes:** R\$ 208.3 million
- **Social investments:** US\$ 4 million/ year
 - Education: school for employees; teacher training; grade school, middle school, vocational and university education; needy youths; help for those with special requirements.
 - Health: medical and dental offices, orientation and prevention.
 - Income generation: tree nurseries; agro-forestry, beekeeping, different projects developed with communities



Are these credentials enough to meet the current sustainability challenges ?

- A new business environment with a new set of requirement from customers, shareholders and investors – may affect growth and competition
- Increasing demands from local communities and social conflicts, especially in developing countries,
- Need to keep commitment and support from employees and collaborators
- Sustainability as a key dimension of reputation and brand



May, 2005 – Land Invasion



October, 2005 - Mill's Invasion



March, 2006 – Destruction of research lab



March 2006 – Destruction of Barba Negra Forest Nursery



Social conflicts

Land question

- Campaigns for the agrarian reform started in the 60's, and were boosted in this decade by the MST and others.
- Discussion shifted focus along the time: unproductive lands x social needs; family agriculture x agribusiness; agribusiness and market economy as a whole.
 - It involves the entire agricultural sector, including forest companies.
 - Main recent target has been Vale, a mining company (10 invasions in 2008)
 - Use of violence (peaceful invasions) and challenge of Court's decisions
- Aracruz's position:
 - The agribusiness and family agriculture can coexist.
 - Brazil is already self-sufficient on all basic food (except wheat). Within 12 years, it will be the world largest agricultural producer (FAO)
 - Agribusiness generated 18 million jobs and R\$ 40 billion in exports.
 - Forestry companies own 3.2% of the agricultural area of Brazil
 - Any changes in the Brazilian land and agriculture policy or the economic system must be made by discussions and changes in the legislation, and not by violence



Social conflicts

Indigenous communities

- **Timeline (main events 2007)**
 - Ministerial edicts expanded the reservation by 11,000 ha
 - Aracruz had the option to appeal to the Courts, but decided to negotiate an enduring solution.
 - On December 7th, an Agreement (TAC) was signed by Aracruz, the Indian Communities, Funai and the Federal Public Prosecutor's Office.
 - Main provisions: Indian reservation expanded by 11,000 ha, legal assurances that the Reservation won't be furtherly expanded, Aracruz to fund an ethnic – environmental study and to support (R\$ 3 MM) projects selected by the Indians.



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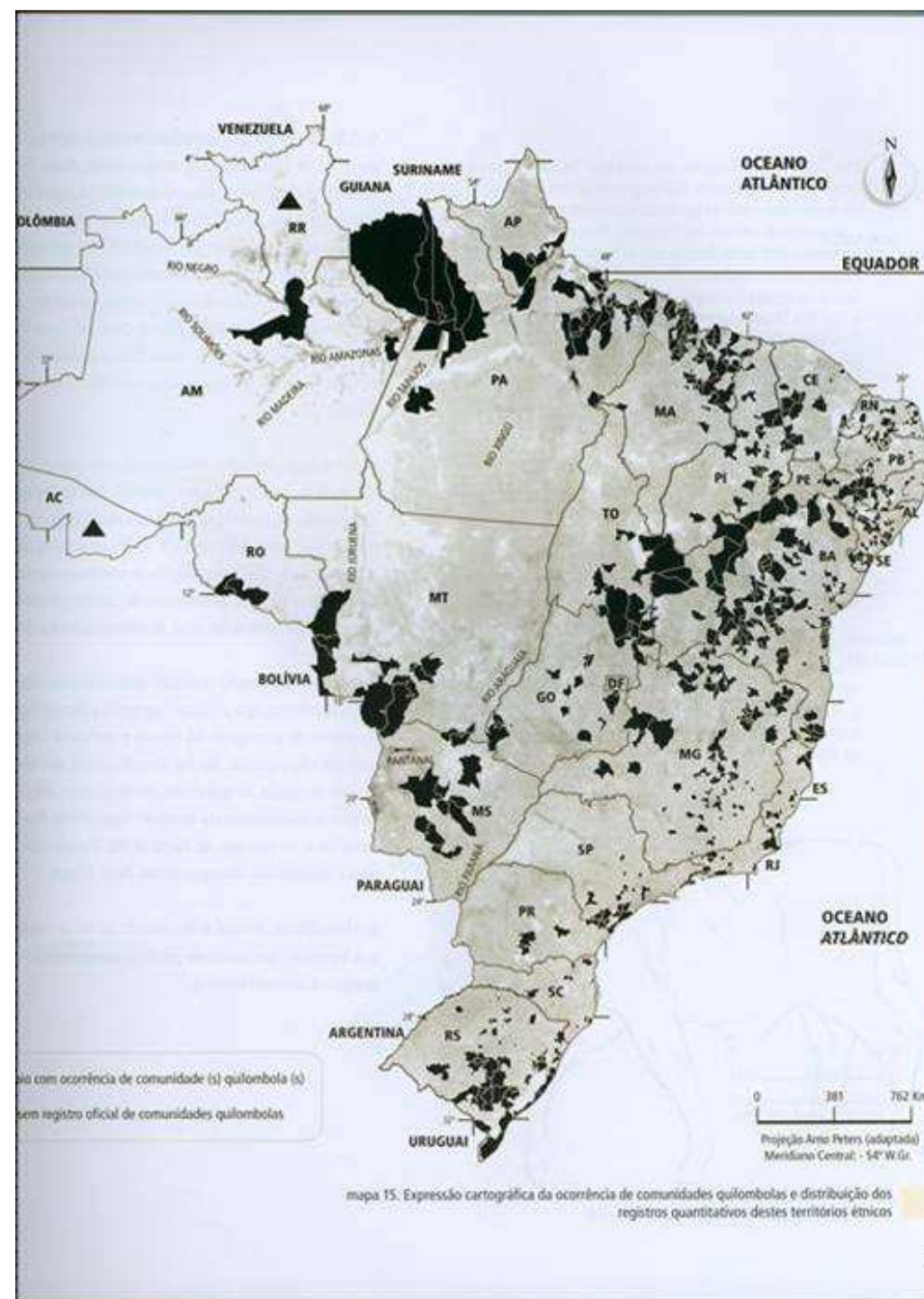
Social conflicts

Quilombola communities (descendants of escaped slaves living in small communities hidden in the forests – Quilombos)

- 1988 Constitution: Quilombolas communities had the right to the definitive possession of the land they occupied > It did not affect third parties rights.
- Decree 4887, 2003 – changed the Constitution's provisions > New rights created, in conflict with 3rd party existing property rights
- Expected registration of 3,500 – 5,000 quilombolas communities (15 neighbors to Aracruz), estimated area to be expropriated: 28 million ha
- Decree 4887 being challenged as unconstitutional at the Supreme Court (decision expected this year); Lower Courts have started to decide against processes based on the Decree.



Quilombolas



Social conflicts

Quilombola communities

- **Aracruz position**

- Difficult issue: a likely unconstitutional decree **X** poor communities; new rights **X** property rights; racial conflicts
- The adopted expropriation criteria are totally random (0.65 to 466 ha/ family)
- Apart from the legal aspects, Aracruz is working with some Quilombolas Communities in order to help them to develop.
 - Main projects underway: tree nurseries; agro-forestry; subsistence farming; beiju production (traditional product based on manioc flour); forest residues collection (for charcoal production); youngsters training programs.



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Are Aracruz credentials enough to face the current sustainability challenges?

How to handle such difficult challenges in consistency with the requirements of the new business environment?

What to do to improve the company's sustainability performance and to make it generally perceived as moving forward?

What are the internal and external factors to be more deeply worked out?

Need to further steps: Sustainability Plan

Dimensions: Governance, Transparency, Relationship with Stakeholders, Environmental Aspects, Social Aspects

Sustainability plan – main developments

- **Governance:** Restructuring of the Board's Sustainability Committee (3 independent members) and Sustainability Department; Review of the Vision, Mission and Principles; Review of the Code of Conduct; Preparation of a risk management matrix; Plans for a future certification by the FSC.
- **Transparency:** Review of all communication materials, integration of the Sustainability Report into the Annual Report, launch of a new Home Page
 - Abolition of a public relations tone of speech (self-praise), exposure of successes and failures, discussion of critical questions and dilemmas, analysis and opinions by stakeholders



Sustainability plan – main developments

- **Relationship with Stakeholders:** Programs to change culture and behavior (Learn to Listen); Mapping of stakeholders; 2 pilot programs and development of a structured & integrated model of relationship with communities; participation in multilateral dialogues (regional, national, international) and direct dialogues with NGOs and stakeholders.
- **Environmental aspects:** Creation of 3 Private Natural Heritage Reserves (RPPNs), totaling 2,800 ha; study to create 2 more RPPNs (6,000 ha), Development of a biodiversity conservation vision and strategy (landscape approach)



Sustainability plan – main developments

- **Social aspects:** Solution to the land dispute with the Indians; seeking to help Quilombolas communities while the Supreme Court does not take a decision; New Social Investment Plan
 - **New Social Investment Plan**
 - **Strategy:** investments decided through engagement and dialogue, partnerships with NGOs and communities
 - **Priority focal points:** education, health, income generation
 - **New priority locations:** poor communities in the company's areas of influence
 - **Professional structure:** Aracruz Institute, specialized staff



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Our lessons, in summary

➤ Sustainability

- Is a new value of modern societies and must be incorporated by companies as a core value. **It affects the company's value.**
- Is a road with a moving end. Although you never seem to reach the end, it is necessary to keep moving.
- Has many dimensions, and cannot be measured by the show room. All the factors behind it must be considered.
- The most important factor is the internal culture. A deep change may take generations for some, but it is important to start.
- The companies have learned that partnerships are the best way to work with suppliers, customers, employees and investors. Now they must learn how to build and strengthen partnerships with non-business stakeholders.