

# Property and Commons

The new issues of  
shared access and innovation

International Seminar - Paris, 25-26 April 2013

*Socio-cultural context of ecosystem and  
biodiversity valuation*

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# **Socio-cultural context of ecosystem and biodiversity valuation**

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## **Séminaire international Project PROPICE**

*Propriété & Communs: les nouveaux enjeux de l'accès et de l'innovation partagés*

**Paris, April 25-26, 2013**

# Outline:

- The Balancing act of biodiversity and ecosystem valuation: Insights from the TEEB program**
- Legacies of valuing Traditional Ecological Knowledge and Intellectual Property Rights**
- Key Messages: **Trade-offs and challenges** of valuation

# The Economics of Ecosystems and Biodiversity - TEEB

.2001-2005: M.A. (Millenium Ecosystem Assessment)

.2007: Postdam Initiative (G8+5): Global economic significance of biodiversity loss

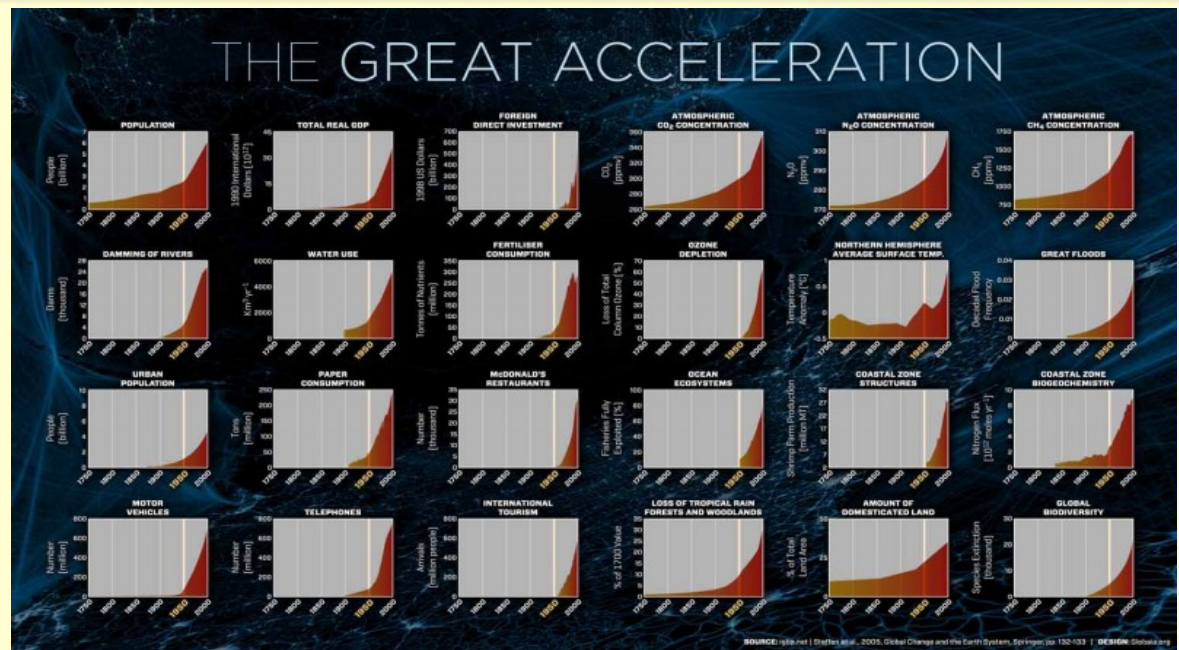
.2007-2009: TEEB

- international initiative to
  - Highlight the growing costs of biodiversity loss
  - Understand trade-offs
  - Draw together expertise
  - Mainstream valuation





# Motivations



IGBP 2004

- .Inability of GDP to account for environmental and social costs
- .Expanding commodity production and ignoring the economic importance of natural capital: „living at the expense of the poor and of future generations..‘
- .Hope on the ‘Kuznets pathway‘: environment and poverty solved through neoclassical economics

# Socio-Cultural Context of Valuation

## Chapter 4 The Socio-cultural Context of Ecosystem and Biodiversity Valuation

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In: Pushpam Kumar (editor) **The Economics of Ecosystems and Biodiversity: Ecological and Economic Foundations**. London, UK: Earthscan. 2010. 400pp.



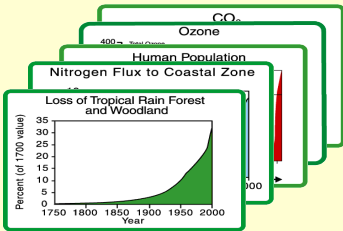
- Contrasting cultural perspectives to nature
- Long-term implications of commodifying nature
- Focus on institutional processes, not monetary value
- Scale challenges
- Trade-offs

# The dilemma:



.Valuation: A polysemic concept

.Utilitarian, intrinsic, intangible values



.Trade-offs of valuation: changing human perspective on nature

.Limitations of valuation in an interlinked world

# Key message 1: "A Balancing Act"

Economic valuation, as a **system of cultural projection**, imposing a particular  
worldview,  
mind set  
belief system.

It can also serve as a **tool for self-reflection and feedback, a form of behavioral change.**



## Key message 2

- Because of the multidimensional and socio-cultural embeddedness of value any exercise of valuation is relative to a given individual or group of people. In a multicultural and democratic context of biodiversity and ecosystem services valuation, this makes the question of choosing a value-articulating institution more important than that of finding a “correct” value.

## Key message 3

Economic valuation influences the **notion of ownership and property** applied to biodiversity and ecosystems, and **influence relationships** within and between groups. Over the long term may **change human relationship to the environment** in significant ways.

# Reflecting on the legacy of biodiversity valuation:

## Compensating for Traditional Ecological Knowledge through *Intellectual Property* tools

Hayden (2003)



→Commodification of knowledge and ethnic identity→

# Challenges of compensating for shared knowledge

Brush (1999) four problems: bioprospecting, IPR and compensation

## **1. General knowledge problem**

-whose knowledge? individual-group-group

## **2. Group identity problem**

-boundaries between groups

## **3. Legal status problem**

-whose right?

## **4. Market problem**

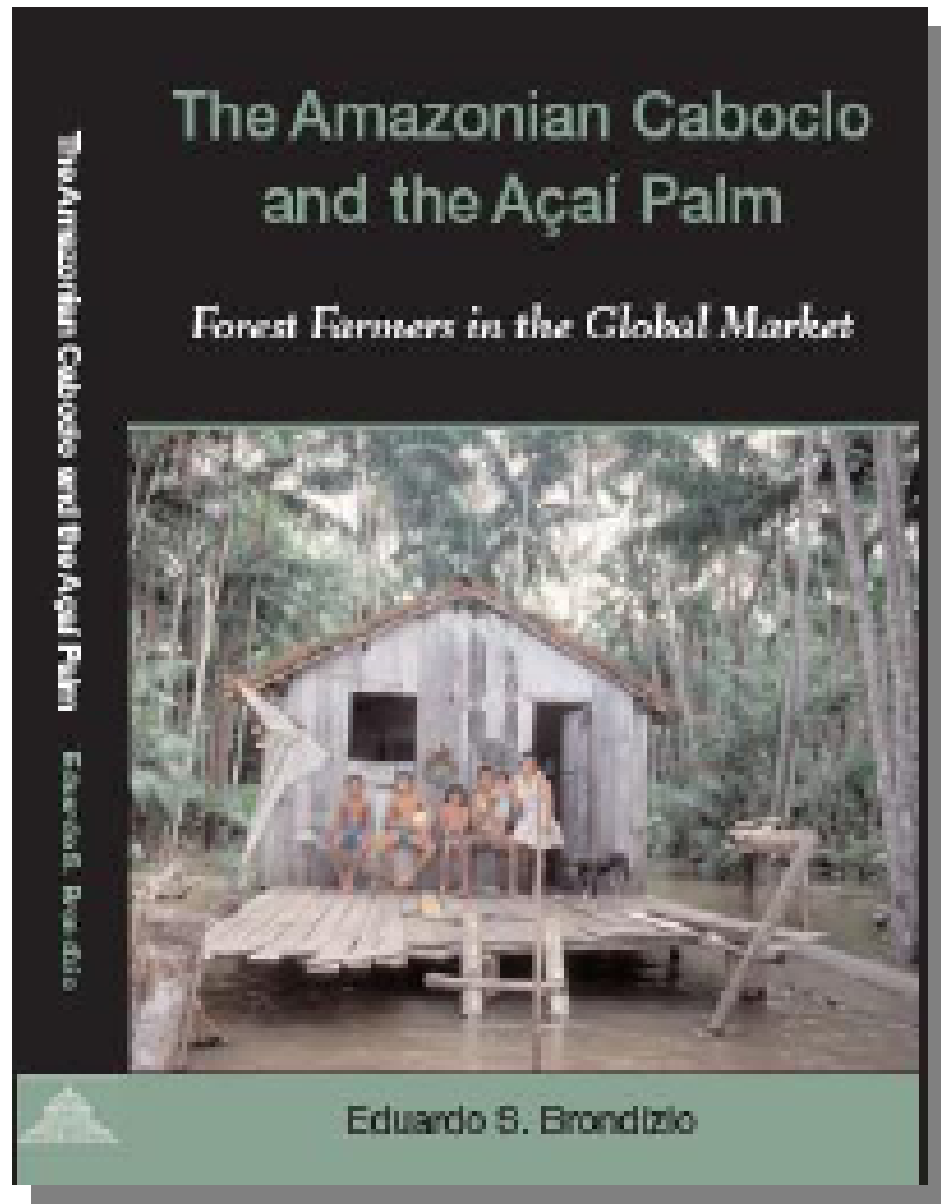
-what market, what price?



## Key message 4

- **Value change along the commodity chain** has implications for the **distribution of benefits**, affects the level of incentives for conservation and represents an important methodological challenge for economic valuation.

An Amazonian example



Brondizio, E. S. 2008. *The Amazonian Caboclo and the Açaí palm: Forest Farmers in the Global Market.* New York: New York Botanical Garden Press. Pp. 402

# The Acai Palm



## Rural and Urban Staple Food ...



## ... to a National and Global Fashion Food

Oprah names Acai Fruit #1 Superfood for Age-Defying Beauty.

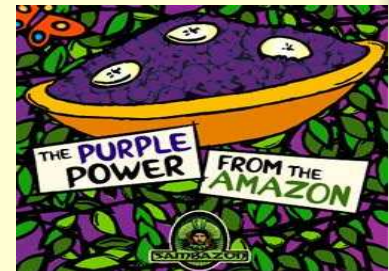


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Expires: Dec 07 05  
Views: 218

Oprah names Acai Fruit #1 Superfood for Age-Defying Beauty.

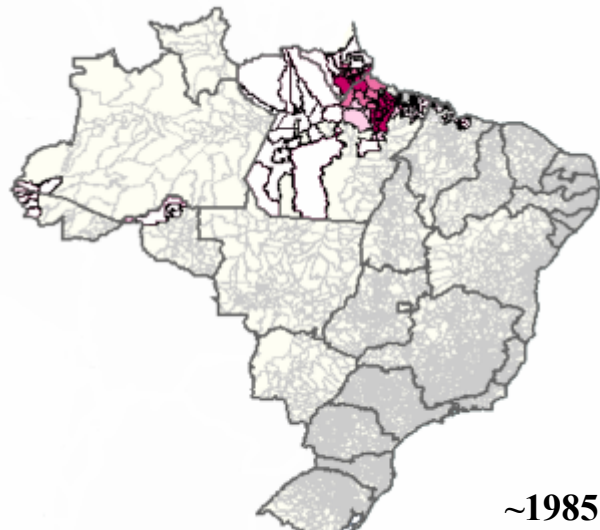
### Description

Team O Five is the ONLY group entering this new program! By fully concentrating on promoting your Team O Five website, as much as you can, over the next 7 days, you could find yourself in a position in 2005, that many others only dream of. Success is not just about being in the right place at the right time. It is about taking action, when you are in the right place at the right time. You've nothing

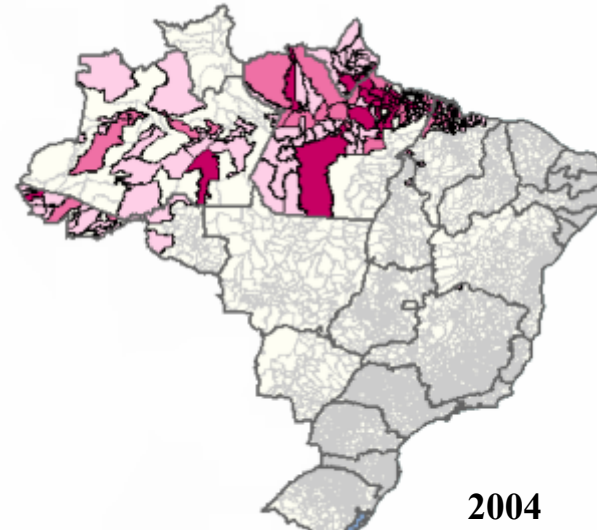




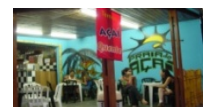
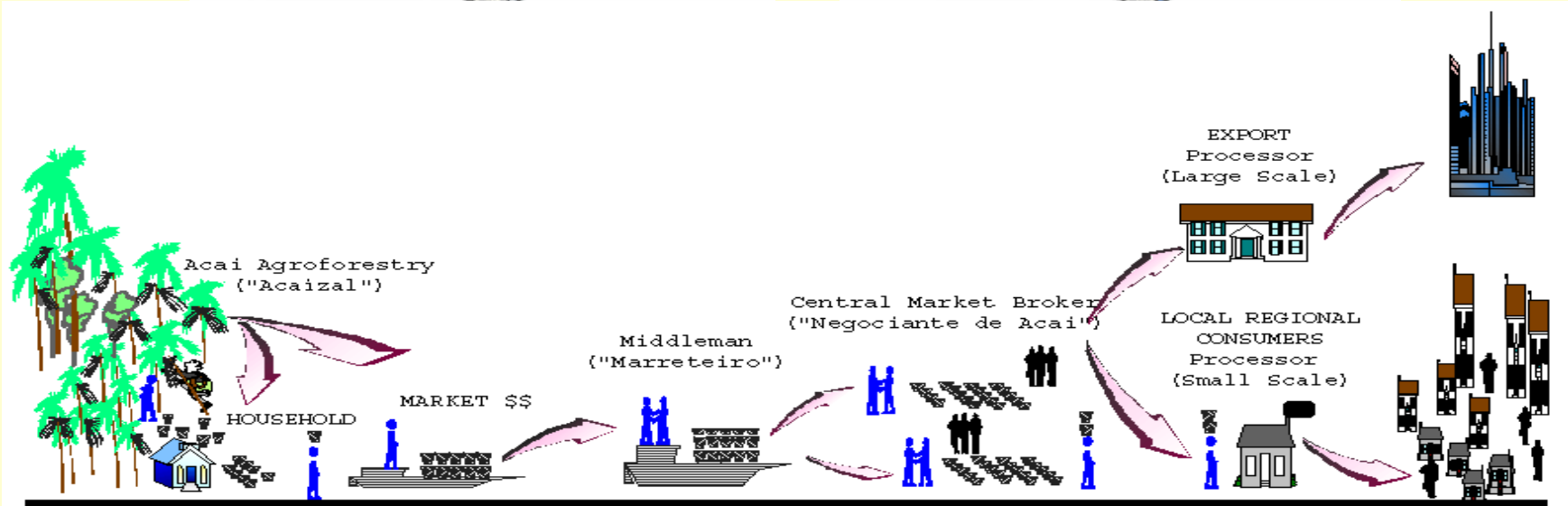
Expansion of municipalities producing acai fruit, 1985-2004 according to IBGE data (Map derived from IBGE – SIDRA)\*



~1985\*

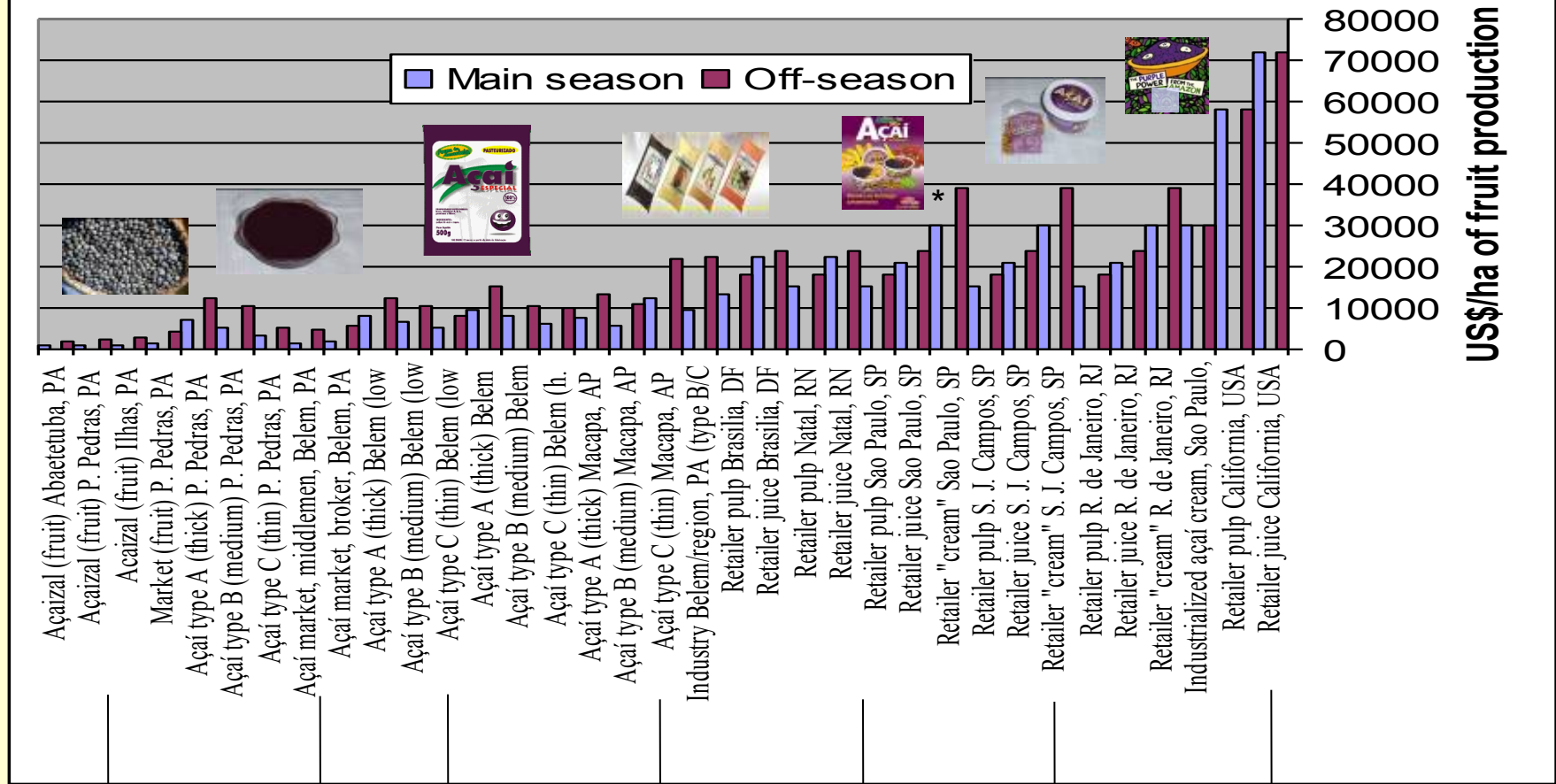


2004



# Value added to açai fruit and transformed products across commercialization venues

## Adding value, 1 hectare production of acai fruit



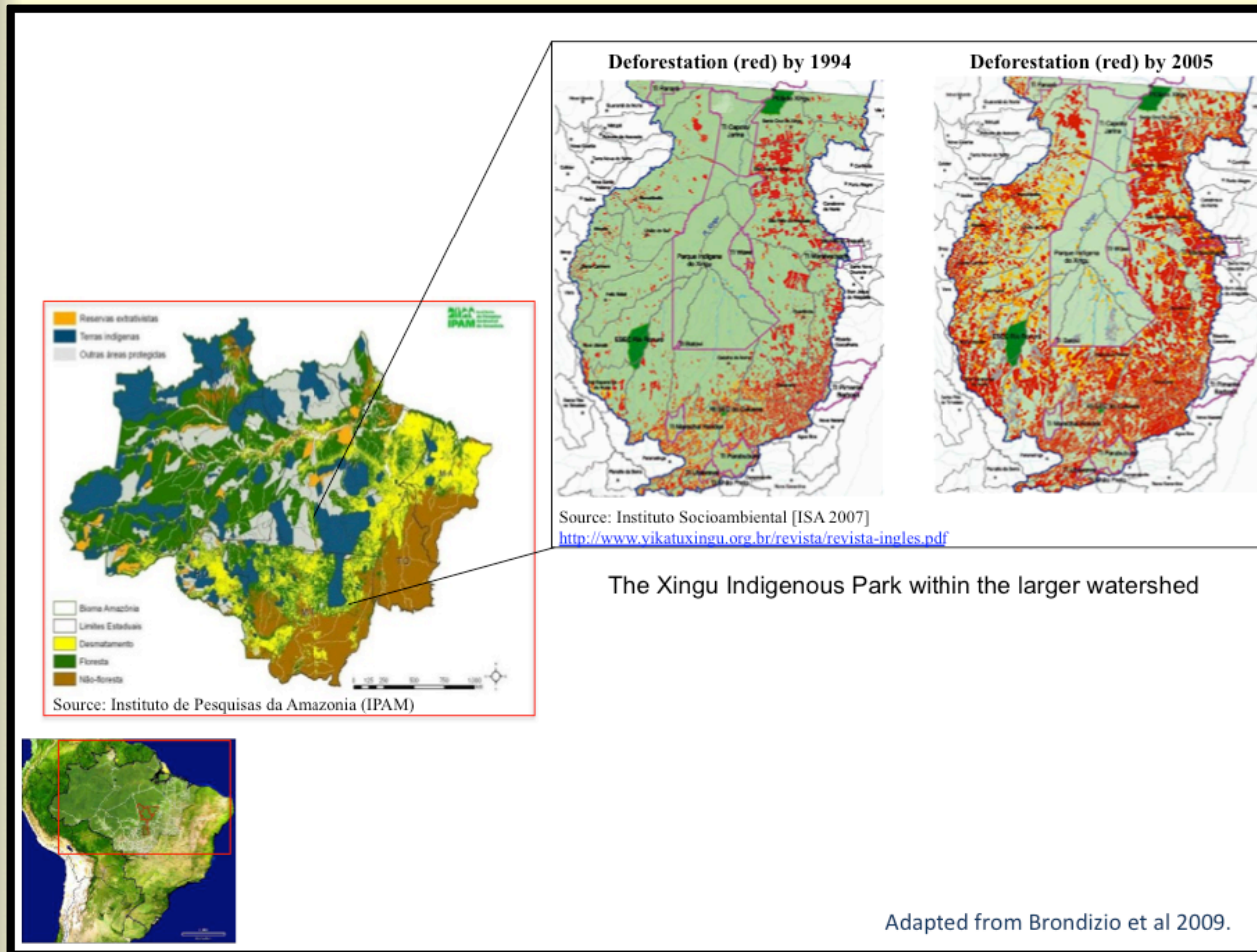
\*Assume: Production ~9,000 kg/ha; average conversion fruit/pulp (A) 2.4, (B) 1.9, (C) 1.4 kg/l; prices collected for the year 2000

# Key message 5

- Economic valuation is a complex, spatial and institutional **cross-scale problem**. Many efforts focusing on particular parts of ecosystems or species, while effective at one level, lack the scope to control the pressure of commodity markets for land resources surrounding them. As such, and depending on their biophysical context, they may be limited to capturing the linkages and vertical interplay created by a **growing functional interdependency of resource use systems nested within larger ecosystems**.



# Cross-scale Interdependencies



Brondizio, E. S., E. Ostrom, O. Young. (2009) Connectivity and the governance of socioecological systems: the role of social capital. *Annual Review of Environment and Resources*. Vol 34: 253-278

# Final remarks

- Needs broader participation of the **social sciences: pluralistic** methodological frameworks
- Spatially and temporally explicit assessments: **ecological functioning and social value are contextual, anthropocentric, and time specific**
- Explicit recognition of **informal and formal institutional** and governance arrangements
- Recognition of **trade-offs and alternative choices**
- Beyond GDP: **New “measuring sticks” to assess progress** (e.g., Inclusive Wealth)



# Final remarks

- Economic valuation may contribute to address our inability, reluctance or ideological intolerance to adjust institutions (also those which are value articulating) to our knowledge of ecosystems, biodiversity and the human being.
- As such, it can contribute to more inclusive economic accounting and planning, and a more inclusive view of non-human beings.
- In other ways, **however**, it can also contribute to separating people and nature further apart by simplifying its meaning and value to human societies.
- In this balancing act, one hopes valuation approaches will **not be taken as panaceas**, but as tools which may contribute in the long run to internalize a respect for nature into western cosmology and social life.

**Thank**



**You**