

The impacts of market-based biodiversity conservation on Indigenous Peoples, local communities and women



A neoliberal market-based approach to biodiversity conservation:

- Give biodiversity and other environmental values marketable asset prices
- Let markets do their work
- Promote free trade



Tradeable “rights to pollute”

- 1960’ s: Ronald Coase (University of Chicago) promotes tradeable “rights to pollute” as a perfect market will “optimize” pollution to balance its costs and benefits.
- 1970’s: Attempts to incorporate emissions trading in US Clean Air Act, but required monitoring technology not yet available
- 1990: Incorporated in Clean Air Act, but “success” is meager compared to command and control approaches
- 1990 – 1992 (FCCC) – 1997 (Kyoto Protocol): US delegation and various NGOs promote carbon trade. Many environmental NGOs believed carbon trading was the price to pay for binding emission reduction targets
- 1997: US got its trading scheme incorporated in Kyoto, but did not ratify the Protocol.

Payment for Environmental Services (PES) schemes

- Area-based
(reducing deforestation, eco-tourism, watershed services)
- Use-restricting
(avoided deforestation)
- Public schemes
(taxes, subsidies, Integrated Conservation and Development Projects)
- Product-based
(certification, gene trade)
- Human-induced change
(reforestation)
- Private schemes
(market-based)

Main Environmental Services' Markets

- Carbon Trade (Kyoto Protocol)
- Biodiversity Offsets (CBD)
- Certification (FSC)
- Trade in Genetic Resources and related Knowledge (CBD, WIPO, WTO, ITPGR)
- Ecotourism (CBD, CSD, WTO)
- Watershed Services (CSD)

“Markets will be effective and equitable”:



- *If* all values are properly accounted for
- *If* they are equitably distributed to the proper “owners”
- *If* the market is properly regulated
- *If* those regulations are effectively enforced
- *If* there is an equal level playing field so that all biodiversity consumers and producers can participate equitably

So what do we do on planet earth?



The Challenge of Proper Valuation:



- Uncertainty about carbon sequestered by forests: Russia's forests' carbon interaction with the atmosphere in 1990 could be anything between 155 million tonne minus and 1209 million tonne plus (IIASA).
- Carbon errors as large as 500 percent (in China: 89%, in Dutch pine plantations: 49%)
- Trees can have positive or negative impacts on water tables
- Benefits from multilateral gene trade under FAO treaty insufficient to cover administrative costs (approx. 2.31 million USD)
- FSC timber includes highly destructive plantations

A certified “forest”



Proper accounting only includes human-induced change, but non human-induced change might be preferable



The challenge of establishing proper base-lines and verification

- Hard to define what would have happened in business-as usual situation.
- There is an incentive for “independent” consultancy firms to manipulate base-lines and/or be lenient, as they earn a living from Market-based schemes like carbon trade and certification (e.g. Det Norske Veritas verifies PCF projects of regular clients like Plantar)
- Leakage is inherent to forest-related carbon projects and many other PES schemes



Paraguayan PES Experiment



- The Law on the Valuation and Retribution of Environmental Services, adopted in September 2006
- Artificial Regulation adopted in 2007, real regulation being elaborated at the moment
- The Secretariat for the Environment has to annually value all Paraguayan environmental services
- Promotes biodiversity offsets for, amongst others, soy expansion
- Forest conversion for soy expansion was already illegal since 2004 in Eastern Paraguay

Main problems with the Paraguayan PES Law 3001/06

- The law stipulates that **all** owners of **land** and its natural components that generate environmental services **will have a right** to corresponding compensation for the provided services.
- There has been no calculation of the total budget this would require.
- Most of the funding will come from biodiversity offsets: Infrastructural projects that will have a major impact on the environment are required to buy environmental services' certificates of at least 10% of their budget. This provides a major incentive for the (governmental and non-governmental) conservation sector to allow and even promote destructive projects.
- Specifically, soy growers and other landholders who have conserved less than the legally required 25% of forest cover can now easily compensate this by buying environmental services' certificates. Hence there is no need to restore a qualitatively and quantitatively ideal forest cover anymore.
- This matches the Basel criteria for “responsible soy”, which allow for forest conversion by large landowners

Invasion of SOY in Paraguay



Situación actual y tendencias
Década del 2000

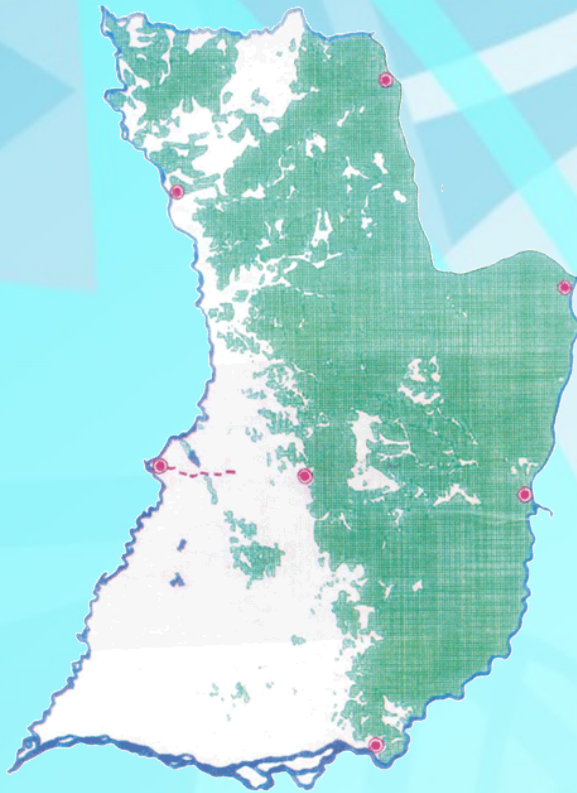
Increase of Paraguayan soy production between 1991 and 2004

Fuente: Cámara Paraguaya de Exportadores de Cereales y Oleaginosas (CAPECO)
Y Dirección de Censos y Estadísticas Agropecuarias (MAG)

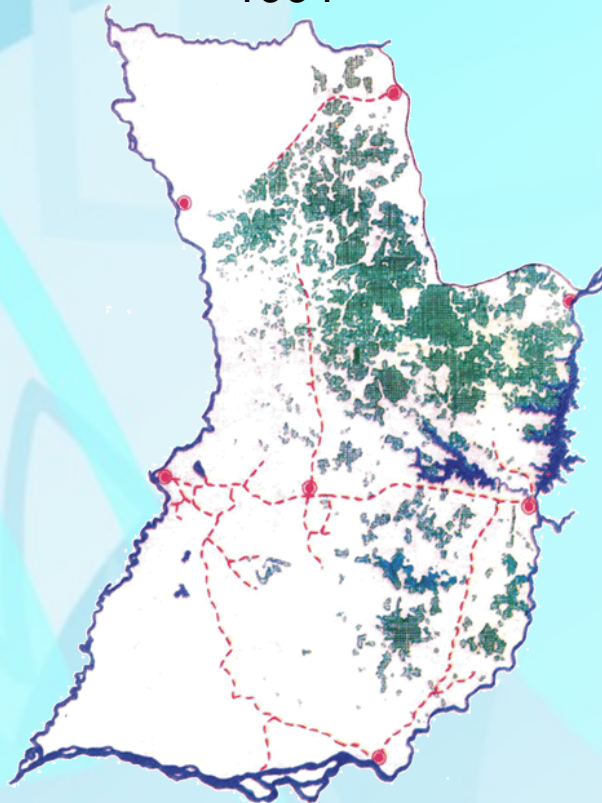
Año	Producción Toneladas	Área de Siembra Hectáreas	Rendimiento Kg./ha.
1991	1.170.666	552.657	1.868
1992	1.376.780	594.811	2.004
1993	2.008.941	634.993	2.325
1994	1.891.509	694.117	2.587
1995	2.307.603	735.503	3.088
1996	2.408.428	960.000	2.509
1997	2.771.000	1.050.000	2.639
1998	2.988.201	1.150.000	2.598
1999	2.980.058	1.200.000	2.483
2000	2.911.423	1.200.000	2.426
2001	3.502.179	1.350.000	2.594
2002	3.533.674	1.445.000	2.445
2003	4.558.015	1.550.000	2.915
2004	3.469.997	1.936.000	1.791

The advance of monoculture at the expense of the Atlantic Forest in Eastern Paraguay

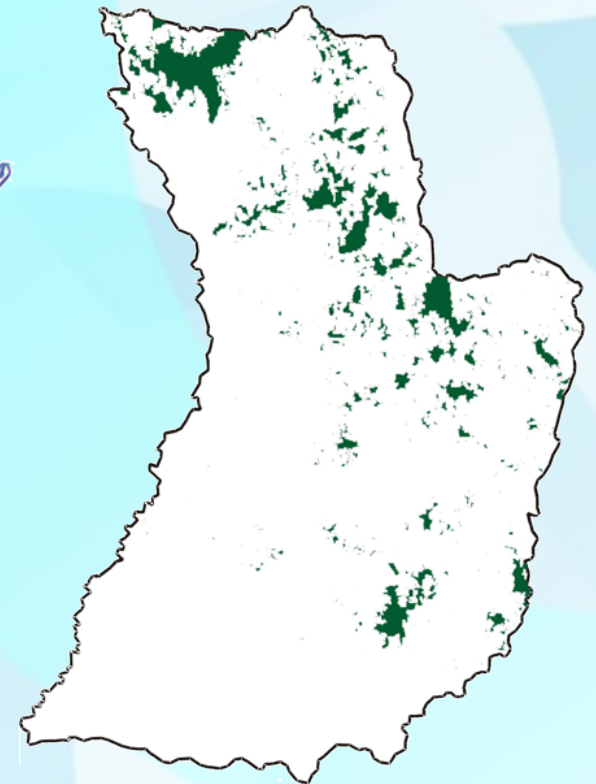
1945



1991



2002

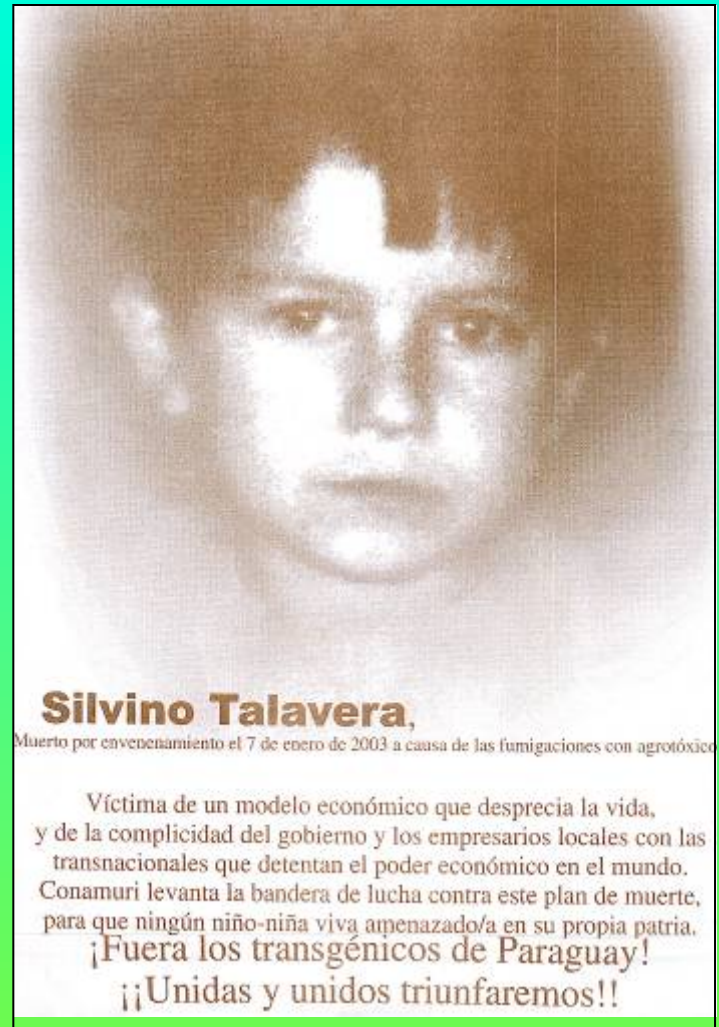




Once in the midst of a peasant community, this abandoned home rots in a soyfield of the Itapua Province

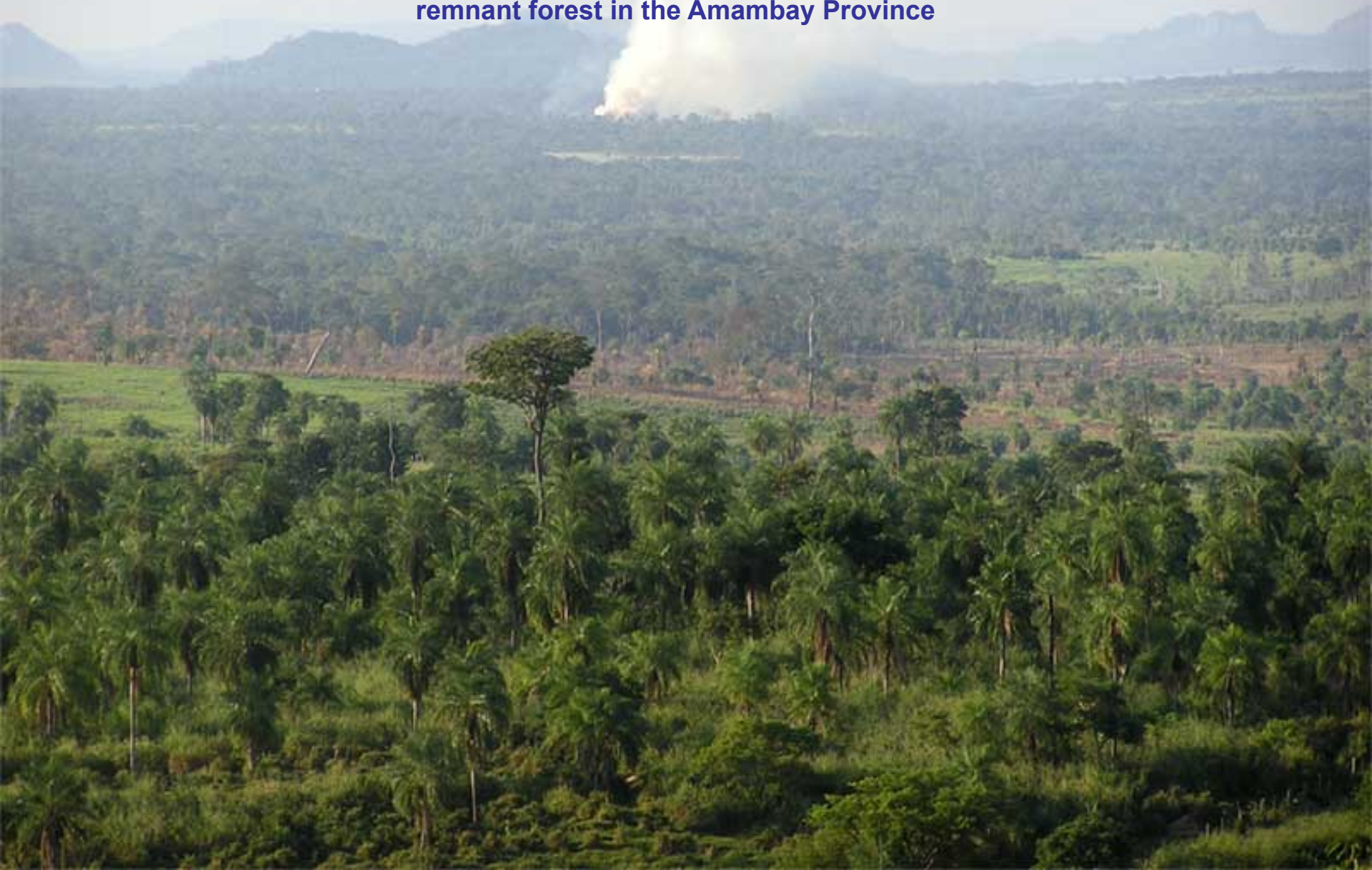
Impacts of soy

- 2.8 million hectares of soy are planned for cultivation this year. Soy planters expect to reach 4 million hectares within the next two years.
- 35 million liters of herbicides and insecticides were utilized during 2006: intoxications and water contamination
- Soy farms are overwhelmingly foreign-owned and provide very little employment per hectare of land: rural unemployment triggering expansion of the agricultural frontier and rural depopulation



IMPACTS OF SOY MONOCULTURE IN PARAGUAY

While many small farmers and Indigenous Peoples move to the cities, some move to the agricultural frontier, burning new forests to start a new farm: burning remnant forest in the Amambay Province



The National Federation of Farmers in Paraguay, the national association of NGO networks, and many other movements and NGOs reject the “Roundtable on Responsible Soy”; March against the “Responsible Soy” Initiative Asunción/ September 2006



San Rafael: biodiversity offsets for the expanding soy frontier?



Impacts of biodiversity offsets on Mbya Guarani communities in San Rafael

Impacts of soy:

- Freshwater resources are dangerously contaminated due to the surrounding soy plantations
- Due to increased land pressure there are regular invasions: The forest of the Arroyo Claro community was cut by invading farmers

Impacts of private reserves:

- Hunting areas have been severely restricted, leading to overexploitation and malnutrition
- Current land rights claims are being frustrated by the perspective of PES for private reserve owners
- The property of these private reserves and other land in the area is disputed by the Mbya, who consider the entire area as their “tekoha”, which they have always managed sustainably.



Could Mbya communities benefit from PES?



Mbya Guarani might be able to claim PES themselves, but:

- Language barrier and lack of legal and marketing skills
- Changing the currently mainly non-monetary economy into a monetary one will devastate many cultural environmental values and traditions
- Money will not buy them uncontaminated water - the distances to paid services are too large
- Women are likely to suffer most, as they are underpaid in formal labour and responsible for providing clean water and other non-monetary services for the family

Indigenous environmental refugees: Mbya Guaraní people on the streets of Asunción



Additional problems with the Paraguayan PES law

- Paraguay has the most inequitable distribution of land on earth: The overwhelming majority of funds will go to large landholders.
- The law will frustrate land reform programs and ongoing land rights claims of Indigenous Peoples as it will increase the value of land.
- Specifically, it will stimulate the establishment of false private reserves that are set up to criminalize land occupations.
- The requirement to obtain an Environmental Impact Assessment will also inhibit the participation of poor landholders in the system, as this is a very costly process.
- The system will most likely be subject to serious governance problems: It is likely that politically influential groups will have far better access to the funds than politically marginal groups like Indigenous Peoples and small farmers: Bad governance and market-based conservation mechanisms are a risky combination



Some final points about Payments for Environmental Services:

- **Markets cannot work without privatization. Do we need to privatize and put a price on all elements of biodiversity to make markets work? Is this feasible? Equitable? Ethical? Who has the right to own biodiversity? Is biodiversity a “BioNullius” to be colonized?**
- **The most efficient PES schemes are not equitable: Paying large destructive landholders is more efficient than community-schemes and/or paying Indigenous Peoples who were not planning to destroy their forest anyway (same at international level in REDD discussions)**
- **The Costa Rican experience: carbon and genetic resources markets only developed as a result of government intervention, ODA and other governmental support. As soon as they were left on their own, they proved economically unviable.**
- **Moreover, the success of the Costarican PES scheme might have been the result of the fact that deforestation was illegal. The efficiency of PES as a conservation instrument can be disputed: Command and control measures like deforestation moratoria have proven to be more successful (86% reduction in Paraguay between May 2004 and May 2005), applying the Costarican system in the Amazonian frontier would cost 5 billion USD per year (Capobianco)**
- **Do we need to pay people to comply with the law? (Costa Rican and Paraguayan example of a deforestation moratorium in combination with PES, and PNG example of demanding compensation for World Bank loan good governance conditions)**

¿Property = a right to destroy?
PES = The Polluted Pays Principle?



Impacts PES on Indigenous Peoples and other economically marginalized groups

- They loose out as providers: language barriers, lack of legal and marketing skills, no economies of scale. The market is totally consumer-driven.
- They loose out as buyers: they suffer most, so are they supposed to pay most according to the polluted pays principle?
- They loose out through indirect impacts, especially on land reform and land rights claims, and the impacts of the environmental problems these offsets compensate for (soy, climate change)

These negative impacts can be avoided in strictly regulated initiatives.

- There seems consensus that we need to control market-forces through strict regulations and effective enforcement; But why promote markets when they only contribute to biodiversity and the poor if strictly regulated?
- Markets tend to complicate public governance, not strengthen them.
- The best “PES” schemes are actually conventional subsidy or integrated poverty and development projects.
- Rebaptizing them as PES is supposed to mobilize political will amongst economically powerful sectors, but REDD discussion demonstrates the main interest is still in the conservation sector

The role of multilateral and bilateral trade agreements

There is a tendency by certain governments to:

- Reclassify conventional subsidy schemes and other forms of public support for biodiversity conservation as “Markets for Environmental Services”
- Include them in bilateral and multilateral agreements on “Trade in Environmental Services”

The assumption is that this will stimulate trade in environmental services and bring social and environmental benefits, however:

- Trade agreements will undermine or even prohibit social safeguards in the environmental services’ market
- The liberalization of trade in “ecosystem services” under the General Agreement on Trade in Services (GATS) and similar clauses in bilateral and regional trade agreements implies that special safeguards for Indigenous peoples’ and/or local communities will be challenged as “discriminatory” by large corporations and foreign conservation organizations
- It might be really risky to use this term.....

And please remember, long time ago, in 1992, we agreed that....

- ALL governments would conserve forests (FCCC Article 4.1 (d) and CBD)
- Developed countries would contribute new and additional financial resources (0.1% GNP) to reward developing countries for the incremental costs of providing global environmental benefits.
- We even established a financial mechanism for these funds....it is called GEF
- ...maybe it is time to implement this agreement?

Support sustainable, democratic and well-enforced public governance of biodiversity, including through redirecting perverse incentives, banning deforestation and safeguarding Indigenous rights.

“The majority of areas where we stopped deforestation in Brazil are Indigenous lands” (Adriana Ramos, 30/10/07)

