

The Yasuni-ITT Proposal to Keep the Oil Underground: A Transcendental Challenge



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The Yasuni - ITT Initiative

- Large reserves of heavy oil have recently been confirmed in the Yasuní National Park, one of the most important hot points of biodiversity in the world, and home of two still isolated indigenous cultures.
- The Ecuadorian government decided, as a first option, to keep the oil under ground, asking for an international compensation, equivalent to at least 50 % of the potential revenues of oil extraction. The state is willing to assume the remaining share of the cost.
- The proposal was presented to the United Nations by President Correa on September 2007.

Natural endowment in Ecuador

- Biological diversity in Ecuador
 - Ecuador has the largest amount of vertebrates per square Km in the world.
 - When taking into account endemic species, Ecuador is the second most diverse country in the world.
 - Ecuador ranks in the first ten most abundant countries in absolute number of amphibians, birds and butterflies.
 - The equator, the Andean mountains and the Galapagos islands contribute to a rich and diverse environment.

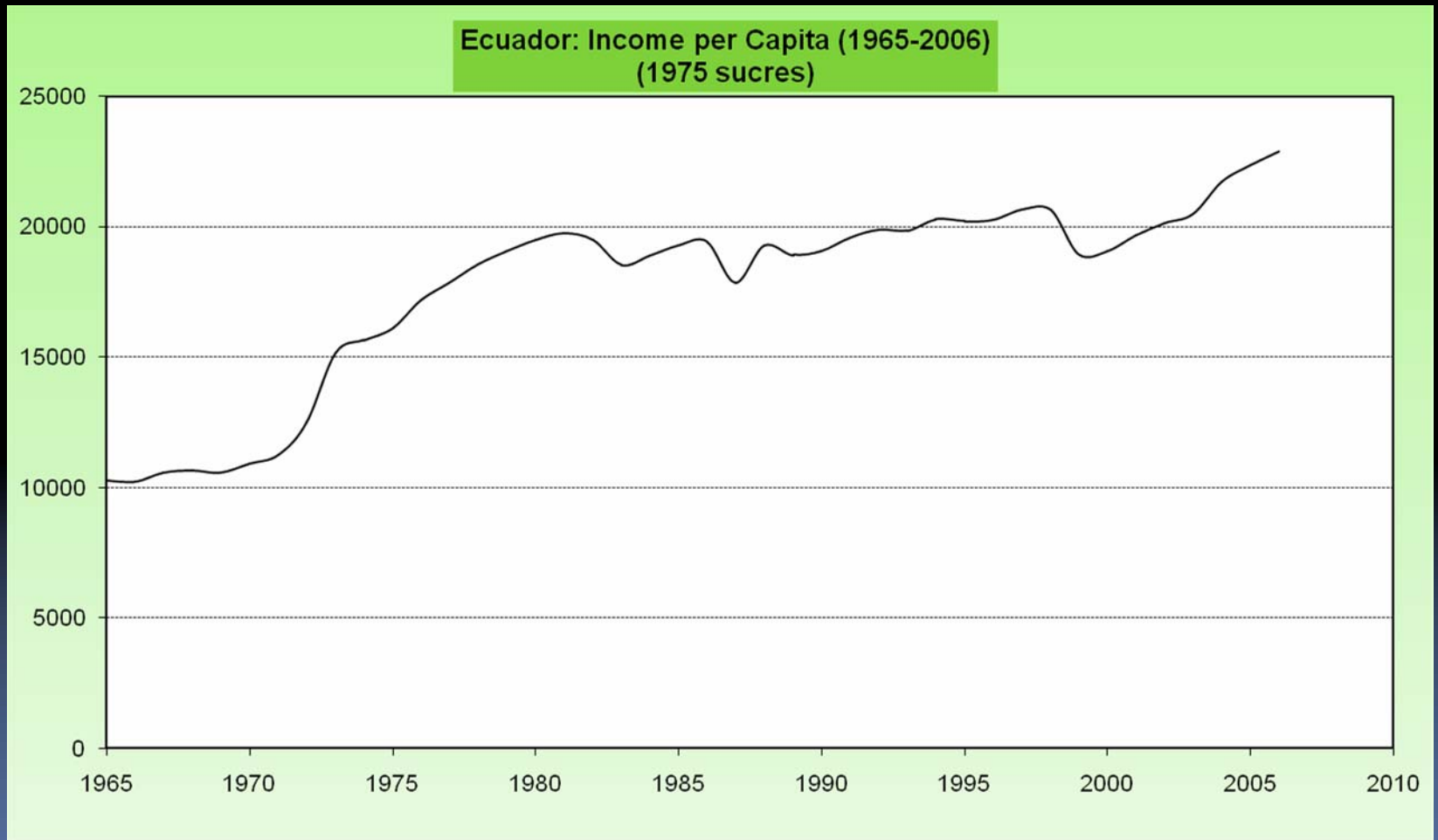
Culture and history in Ecuador

- Cultural diversity:
 - 12 indigenous cultures: Tsachila, Chachi, Awa, Épera (Coast), Quichua (Highlands), Shuar, Achuar, Quichua, Huaorani, Siona, Cofán, Shiwiar, Zápara (Amazon).
 - Afro-descendent cultures.
 - “Mestizo” culture.
- Pre-incasic, incasic and colonial heritage.
- Rich natural endowment: water, soils and minerals.

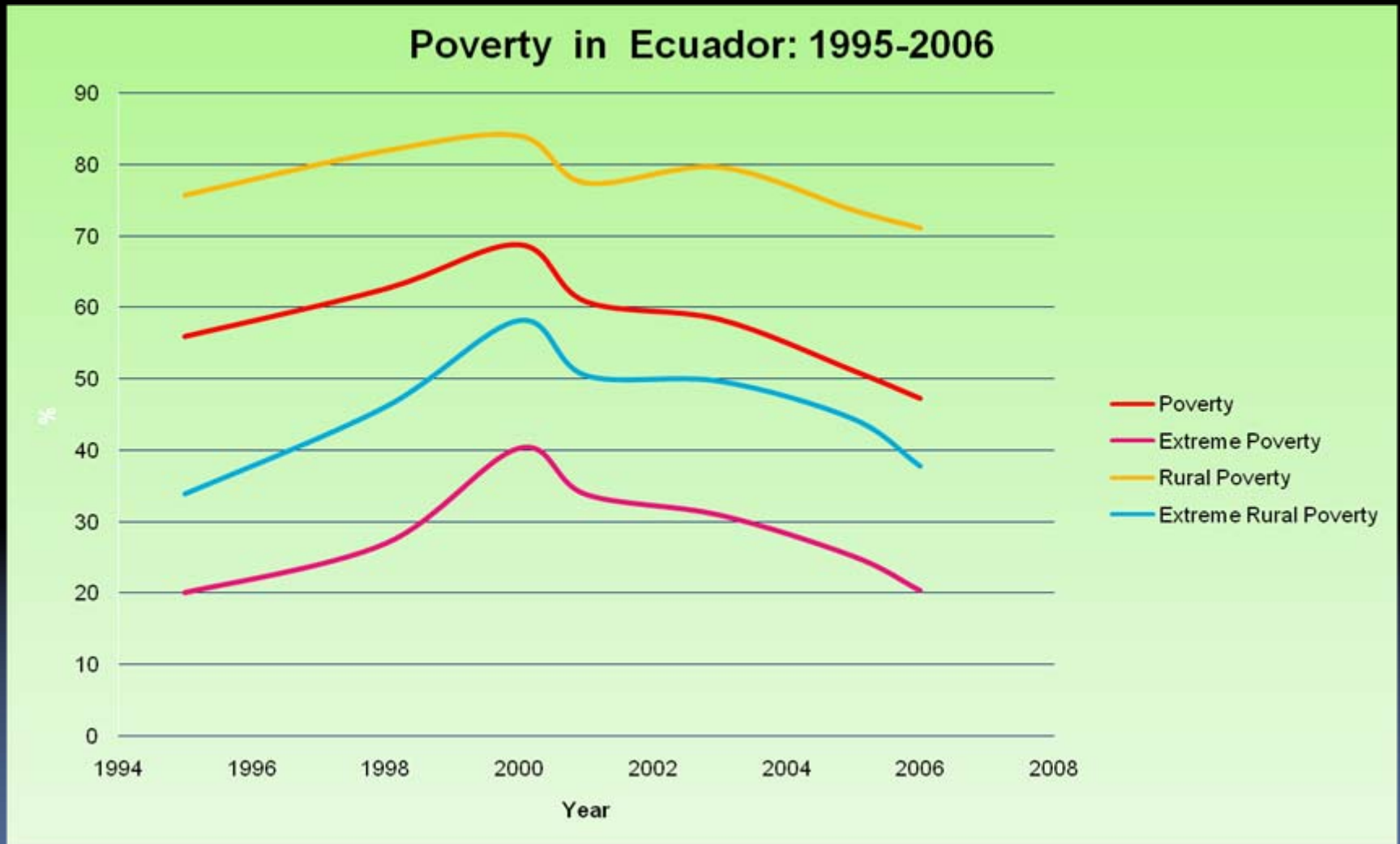
Oil, economy and society

- Current situation:
 - Record oil production: 529.000 b/d.
 - High oil prices: \$ 65/barrel (WTI)
 - Poverty: 47 %, Urban unemployment: 7 %.
Difficulties to reach MDGs.
 - At least a million Ecuadorians have emigrated abroad since 1998.
 - ¿Did we sow oil?
- Contrast with the oil “boom” (1972-82)

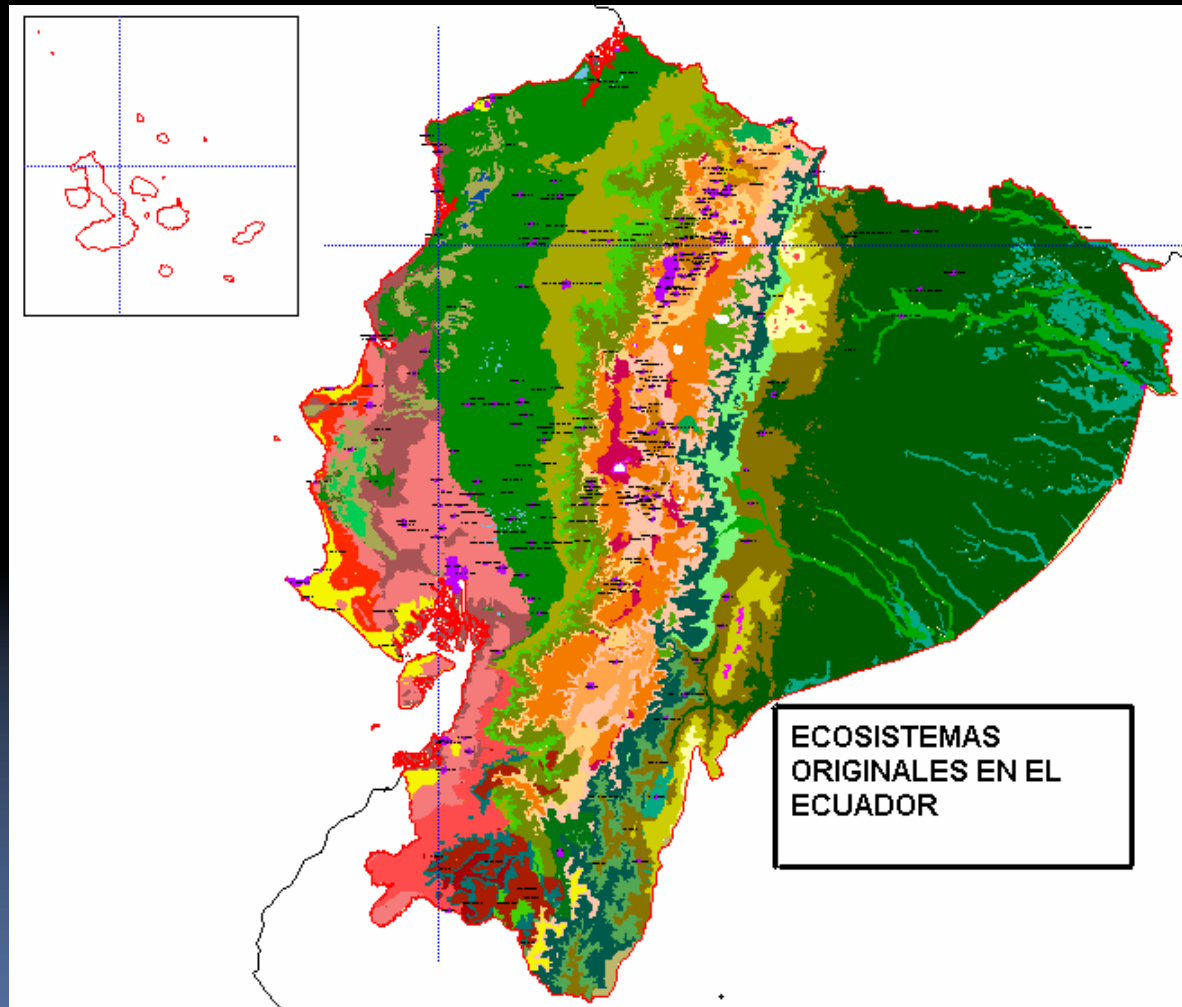
Per Capita Income in Ecuador: 1965-2006



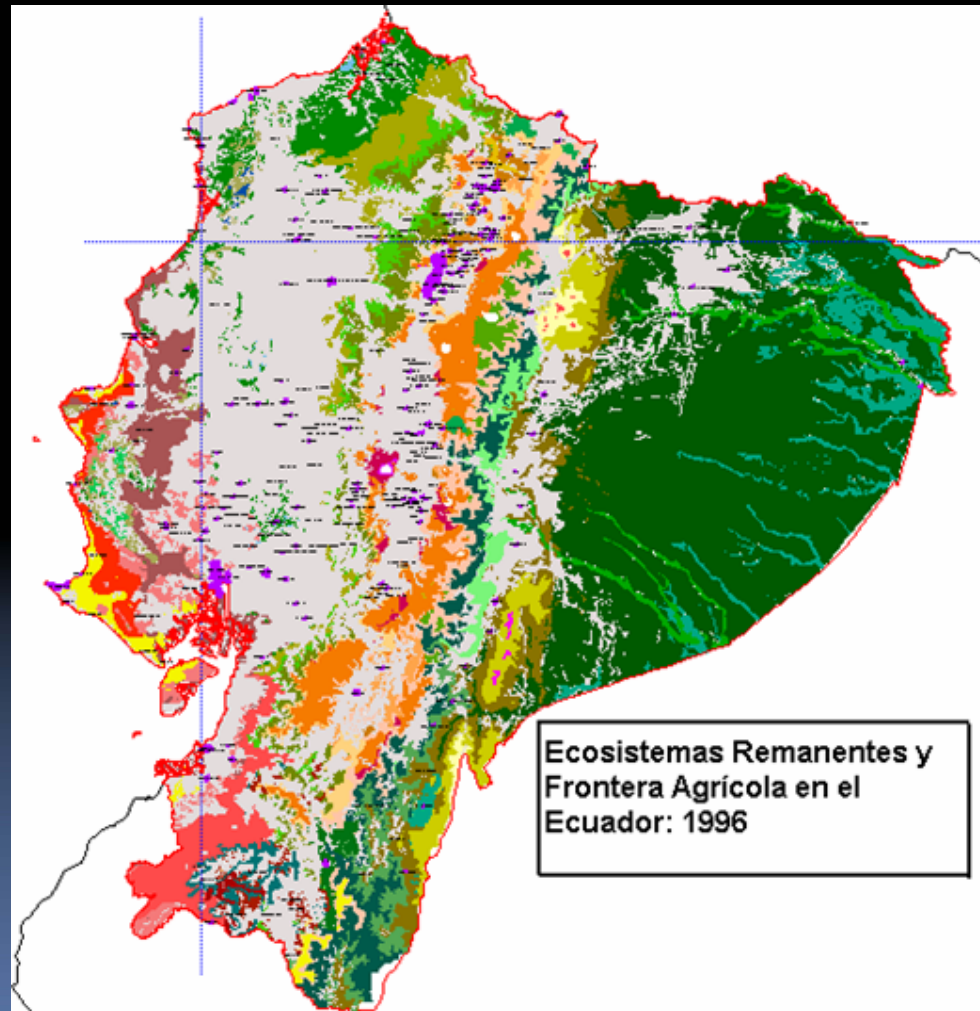
Poverty: 1995-2006



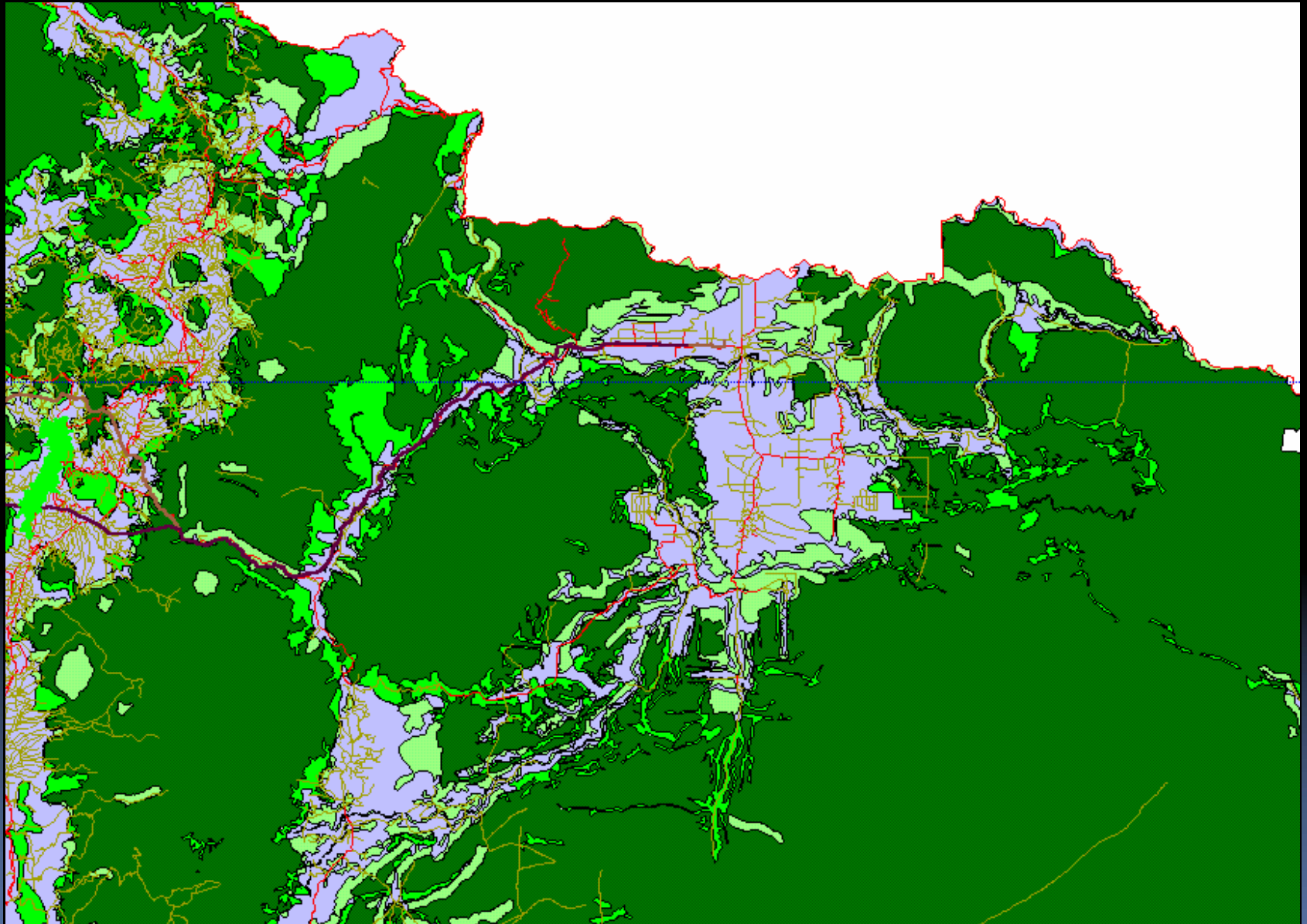
Original Ecosystems in Ecuador



Remaining Natural Formations: Ecological Footprint



Oil and Deforestation in the Amazon

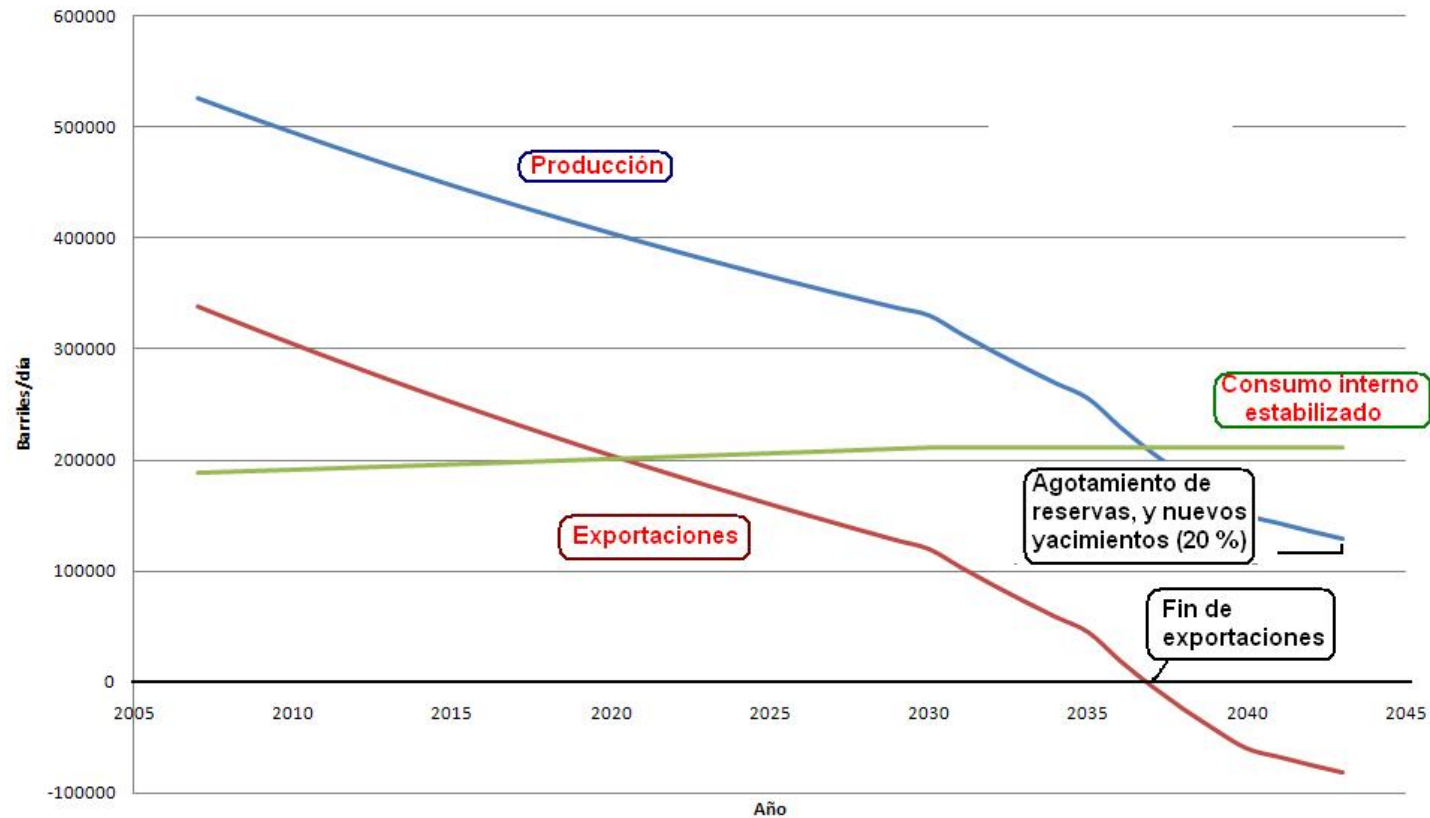


The Yasuní dilemma in the current context

- Current oil reserves will allow for no more than 30 years of production, even assuming new discoveries.
- Ecuador's future must be based on a sustainable use of resources.
- Ecuador can lead alternative proposals to mitigate global warming, given the limited effects of current mechanisms based on the Kyoto Protocol.

Oil Prospects in Ecuador

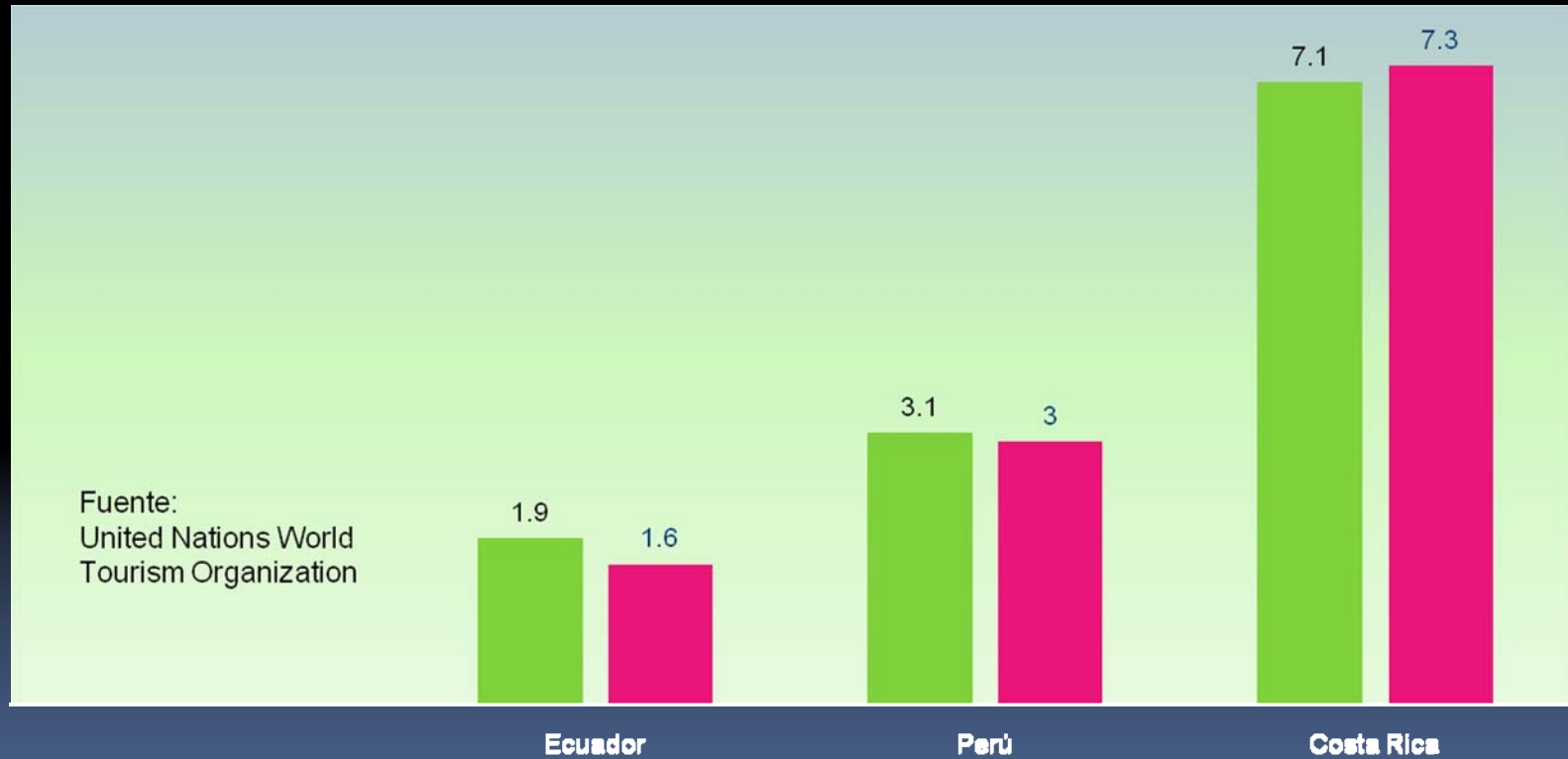
Proyección de Petróleo en el Ecuador: 2007-2042



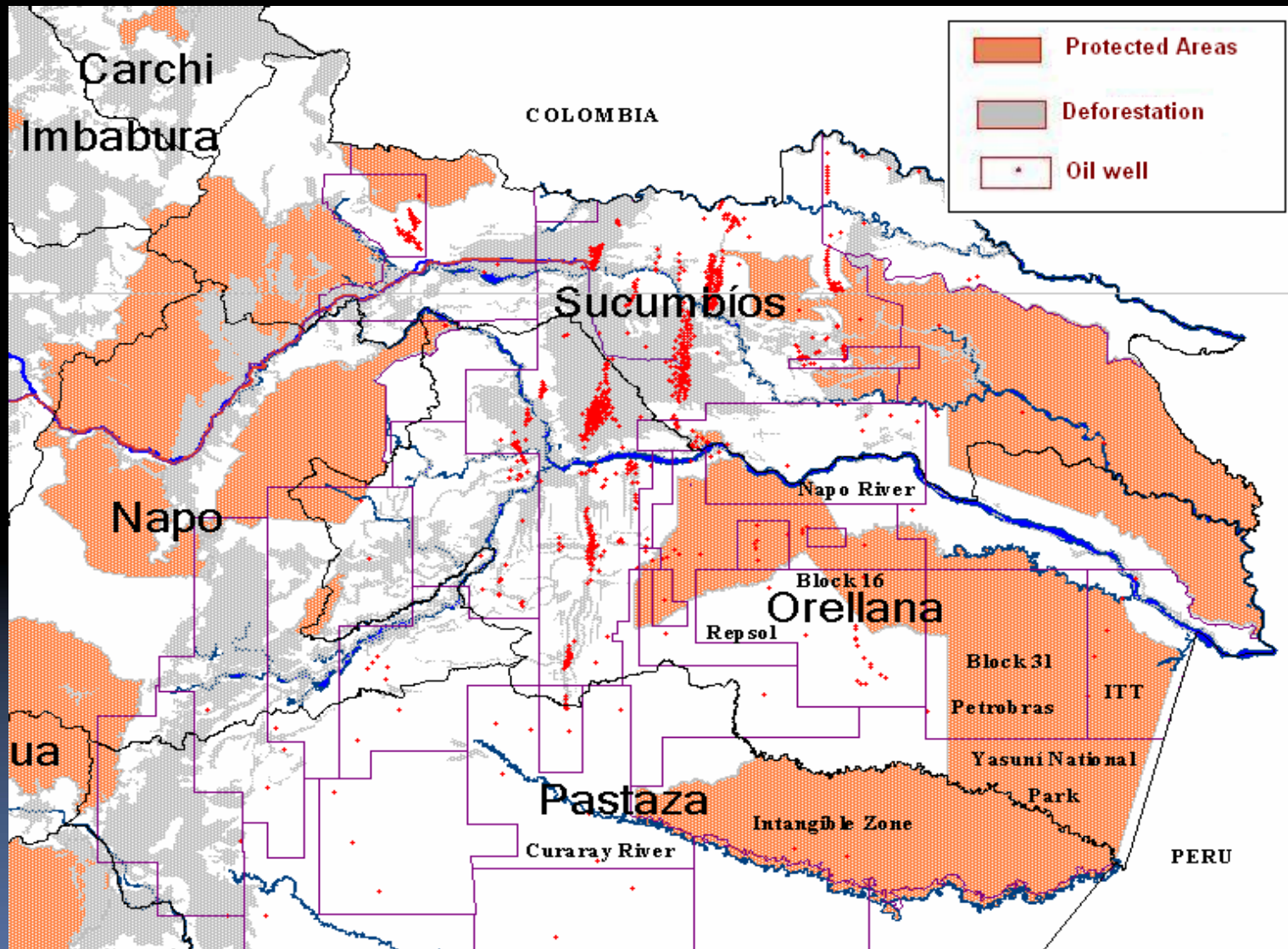
Alternatives towards sustainability: eco-tourism

El Turismo en la Economía: 2006

■ % PIB ■ % Empleo



The ITT-Yasuní Dilemma



The Yasuní National Park Endowment

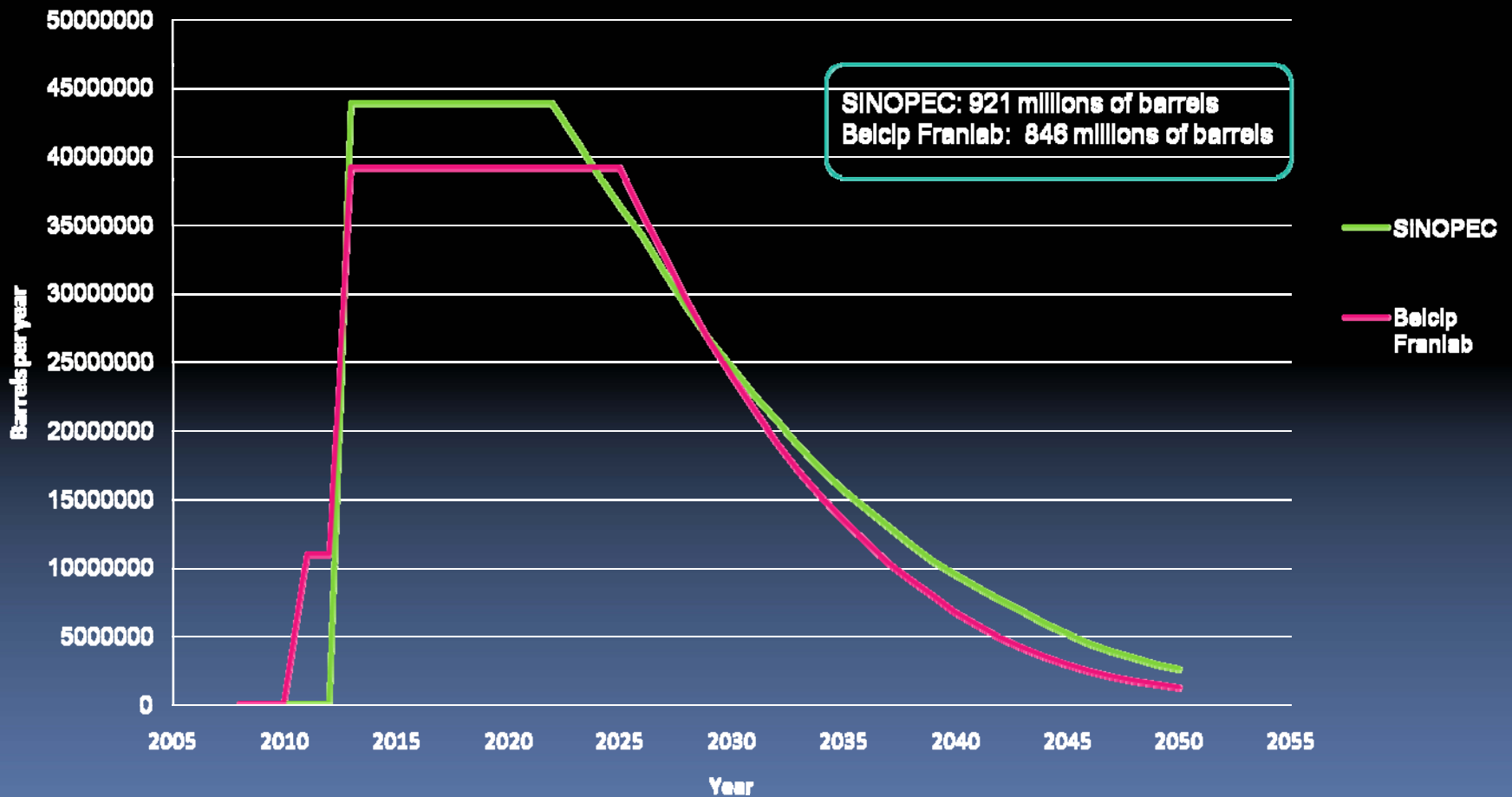
- One of the most diverse areas in the world.
- One hectare in the park contains as many tree species as the United States and Canada together.
- It was a biodiversity refuge during the Pleistocene period, when most of the Amazon rainforest became grasslands due to glaciations.
- Home of two voluntarily isolated and not contacted indigenous nations: the Tagaeri and the Taromenane; who belong to the Waorani ethnic group.

The ITT Oilfields

- The unexploited ITT block is currently administrated by Petroecuador. The State may exploit this block in alliance with other state corporations such as: SINOPEC (China), Petrobras, Enap or PDVSA.
- It contains **412** million barrels of **heavy crude** reserves (14.7° API), that can reach **920** million, including probable reserves.
- Oil exploration in ITT can only start in **5 years** and will last approximately **13 years** producing **107.000 barrels a day**. From that point on, extraction will decline for 12 more years (Beicip Franlab, 2004).

Projected Oil Production

Projection of heavy oil extraction in ITT block



Loss of Yasuní's ecosystem services due to deforestation :
Estimations taken from Earth Economics
(Present Value)

- Lowest estimate: 5.077 millions de dollars
- **Mean estimate: 9.886 millions de dollars**
- Highest estimate: 14.696 millions de dollars

- Methodology: extrapolation of ecosystem services valuation from studies relevant to the Amazon.

Global CO₂ Emission Costs

- The ITT reserves (846 million barrels), when burnt, will emit 407 million tons of carbon dioxide.
- The abatement cost for CO₂ is \$ 28.85 per metric ton in the European ETS market.
- The avoided CO₂ emissions reach 11.742 million dollars .
- Their net present value is 8.547 million dollars, taking a 12 year period, and a 6 % discount rate.
- Adding avoided deforestation, the ITT contribution is at least 10 % higher.
- The present value of avoided CO₂ emissions is similar to that of oil earnings (8.074 at \$ 70/barrel).

Capital Sources for the Compensation Fund

- Donations from governments, and debt-for-conservation swaps.
- Projects towards conservation, reduced deforestation and sustainable social development.
- Donations from citizens around the world who will symbolically buy barrels of oil underground.
- Emissions of Yasuni Warranty Certificates (YWC) as equivalent to carbon credits in the ETS market, **based on a decision of supporting countries to accept them as carbon bonds.**

The warranty for keeping the oil underground

- The State will emit Yasuni Warranty Certificates (YWC) in exchange for contributions.
- The physical warranty will be the oil reserves.
- In the hypothetical case of oil exploitation in the future, the YWC will be executed, indexed for the future oil price.
- The total value of YWC will remain close to the present value of oil.

Compensation Fund for ITT Conservation

- The State will assume a binding international agreement to keep ITT's oil indefinitely underground, in order to protect biodiversity, the indigenous cultures, and world climate.
- An international compensation fund will be created to pay the Ecuadorian government for the non-received revenues from oil production. **The fund will be administered by an international trust.**
- The fund should reach at least 50% of the net profits the State would have received had it chosen to extract oil from ITT.
- The revenues from the fund will be exclusively spent on social development, alternative energy sources and conservation projects with social accountability.

THE RESOURCES WILL BE INVESTED IN

1. The effective protection of **40 Natural Areas (4.8 million hectares)** that hold the largest biological diversity in the world, and 5 million hectares that belong to Indian and Afro-Ecuadorian communities (38% of Ecuadorian territory).



THE RESOURCES WILL BE INVESTED IN

2.

Reforestation, natural vegetation regrowth and management of 2.3 million hectares incorporating small landowners to the program, respecting their land and avoiding large monoculture.

THE RESOURCES WILL BE INVESTED IN

3.

Building a sustainable energy supply for Ecuador:

reduction of fossil fuels for electric generation, replacing them with renewable energy sources: hydraulic, geothermal, wind and solar.

THE RESOURCES WILL BE INVESTED IN

4.

Increasing energy efficiency of demand, by promoting energy-saving appliances and new technologies, such as hybrid cars.

THE RESOURCES WILL BE INVESTED IN

5.

Promoting sustainable social development, changing rural sources of income from exploitation of renewable resources to sustainable production of goods and services.



ADVANTAGES OF THE YASUNI INITIATIVE

- 1.** This is a proposal for the world to follow, that will allow developing countries to leave behind exploitation of non-renewable natural resources towards protection of invaluable biological assets.
- 2.** 9.8 million hectares of natural areas containing the largest biodiversity in the world will be preserved.

ADVANTAGES OF THE YASUNI INITIATIVE

3.

The revenues of the trust fund will be invested in **education and sustainable development projects.**

4.

It allows countries that don't have the economic conditions to reduce their emissions, to actively participate in the common efforts to avoid global warming.

ADVANTAGES OF THE YASUNI INITIATIVE

5.

It prevents, in the long term, an emission of 407 million metric tons of carbon dioxide.

6.

It protects the will of two communities to live in voluntary isolation in the Yasuní National Park: the Tagaeri and the Taromenane.

ADVANTAGES OF THE YASUNI INITIATIVE

7.

It guarantees access to clean technology and financial resources to a developing country, setting an example for other countries not yet subject to Annex I.

8.

It enhances the scope of Post-Kyoto alternatives, allowing developing countries to actively contribute to climate change mitigation.

ADVANTAGES OF THE YASUNI INITIATIVE

9.

The carbon market is nourished with a supply of new financial instruments. This provides for future demand, particularly if large producers of CO₂ are incorporated (USA, China, India and Brazil) .

Ecuador's Yasuní project, an innovative proposal to mitigate global climate change

- The project would avoid 547 million metric tons of CO₂ emissions (Oil: 375 million, deforestation: 172 million).
- Current mechanisms of CO₂ emission control (carbon trading under the Kyoto Protocol) are insufficient.
- CO₂ emissions are still growing at 2 % per year, while a 50 % reduction is needed (Stern Report).
- Ecuador proposes an innovative alternative to cut CO₂ emissions, avoiding fossil fuel extraction in sensitive areas.
- The proposal will help the world to preserve biodiversity.
- Indigenous cultures will be preserved as well.

