



Climate Change and Global Justice

Development at the margins

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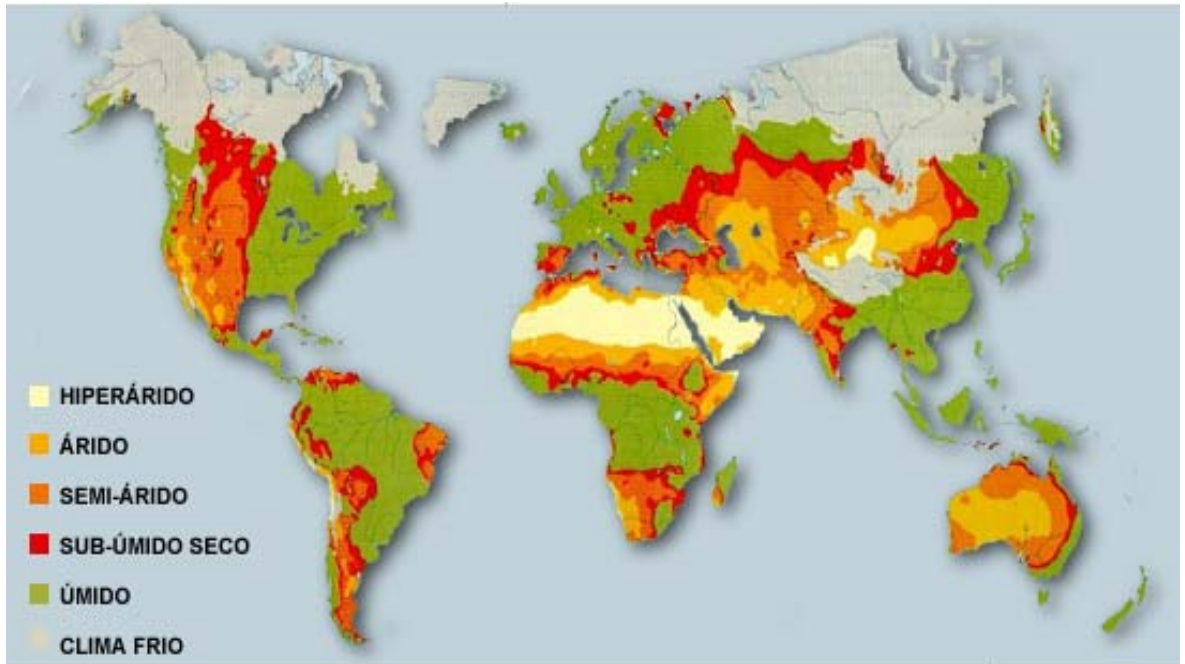
23-25 May, 2008



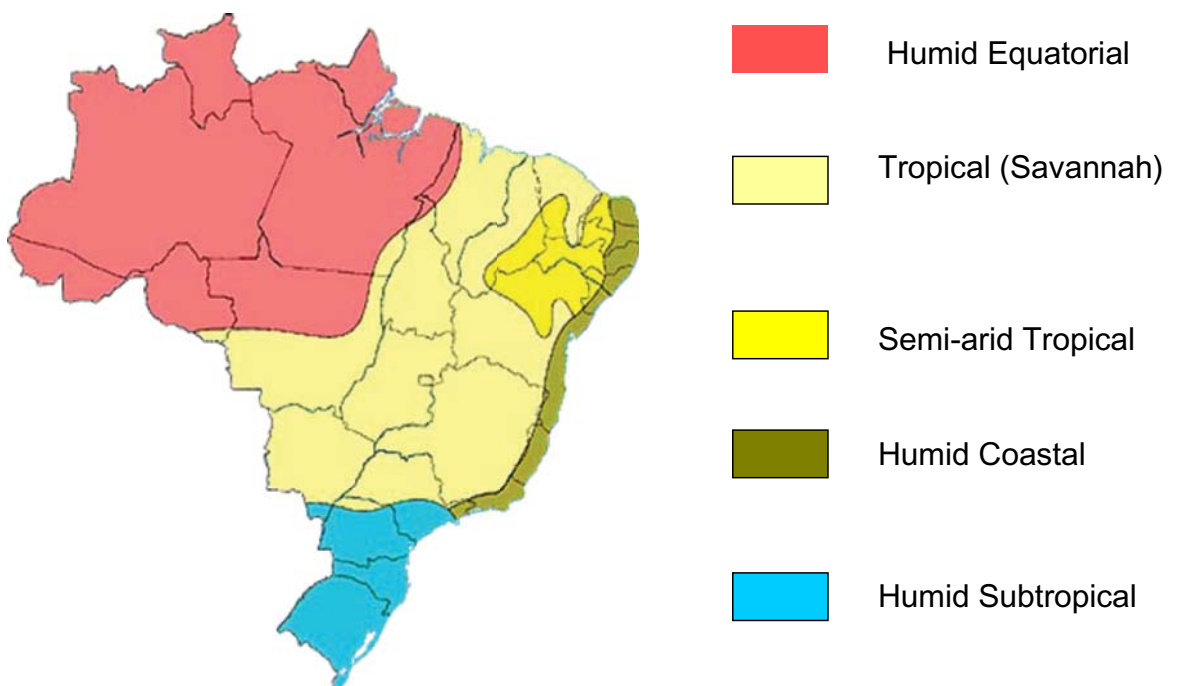
- Brazil is a developing country with 200 million inhabitants. It is the fifth largest country and the ninth economy in the world. It has the biggest tropical forest (Amazon) and 12% of the world fresh water. It is considered that climate in Brazil can affect the entire Latin America region and even the global climate.
- There are five climatic zones (Humid Equatorial, Tropical (Savannah – sub-humid), Semi-arid Tropical, Humid Coastal, Humid Subtropical).



World drylands



Brazilian climates





A quick look on climate: the ITCZ

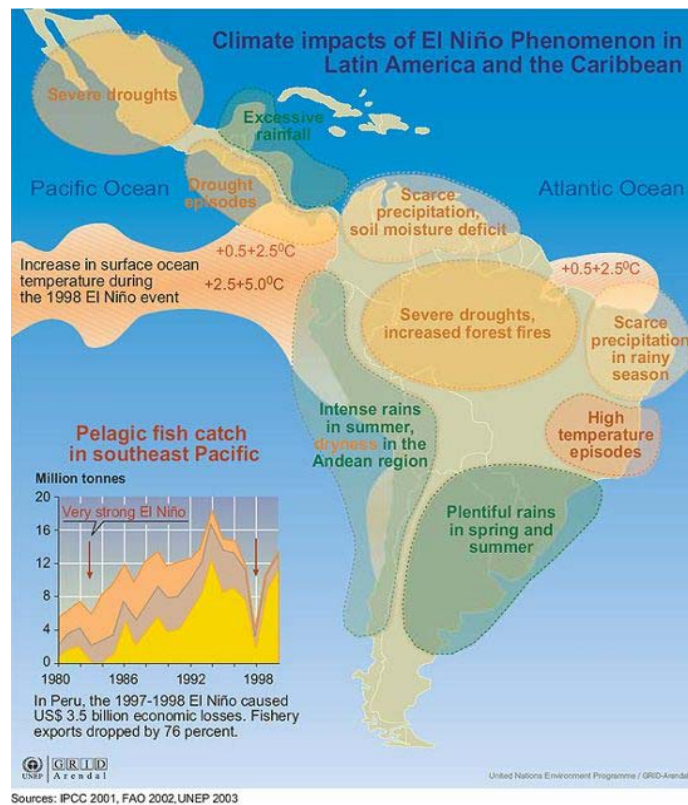
ITCZ



A quick look on climate: the ITCZ



El Niño



Semi-arid region of Northeast Brazil – vulnerabilities

- The Brazilian Northeast comprises ten States covering 1.6 million sq. km (size of Germany, Spain, France and Italy combined)
- 48 million people, 17 million are rural (70% of the country's rural poor)
- Half live in semi-arid zones with poor soils and severe cyclical droughts (25 up to 100 years are dry years)
- Policies aimed to reduce poverty during the 1970's and 1980s have had limited impact
- High vulnerabilities (socio-economic and environmental) and lack of policies have been causing migration





Migration during
1920 – 1980's

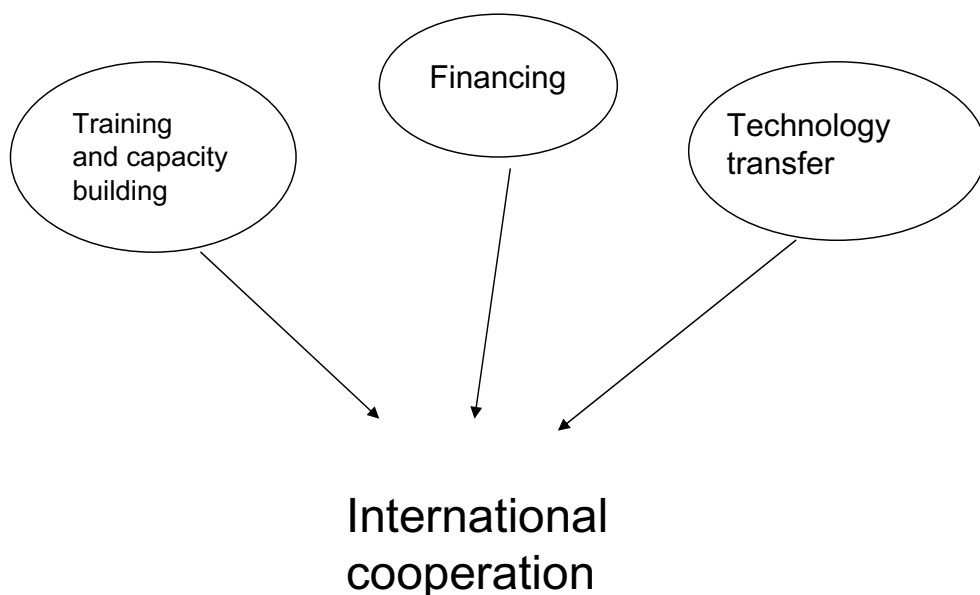
Migration after
de 80's

Driving-forces of climate change in Brazil

- In Semi-arid region – large-scale small farm agriculture and cattle breeding based on rudimentary technology. Slash-and-burn practices; itinerant agriculture and cattle. It is estimated that around 182,000 km² of the semi-arid region is affected by desertification, causing migration.
- Amazon region – large-scale deforestation for timber production, agriculture, cattle breeding and mining. Slash-and-burn practices. Expansion of economic frontier. Between May 2000 and August 2006, Brazil lost nearly 150,000 Km² - an area larger than Greece- and since 1970, over 600,000 Km² of Amazon rainforest have been destroyed. Migration is an important element in the process.

In general terms there is a lack of:

- Technology transfer and the adoption of a large scale environmental sound technologies;
- Capacity building and strengthening/creation of an environmental monitoring system at national level with a well trained group of public servers for planning and implement these activities
- Long term financing
- A comprehensive programme for combating poverty





Climate Justice as strategy for overcoming global problems

North-South dialogue for climate justice should start by recognizing the right for Sustainable Development to those who haven't had the same opportunities and also the right for technological and financial assistance.

The only real possibility for a Common Future for all countries, cultures and people shall be based on sharing responsibilities and opportunities.



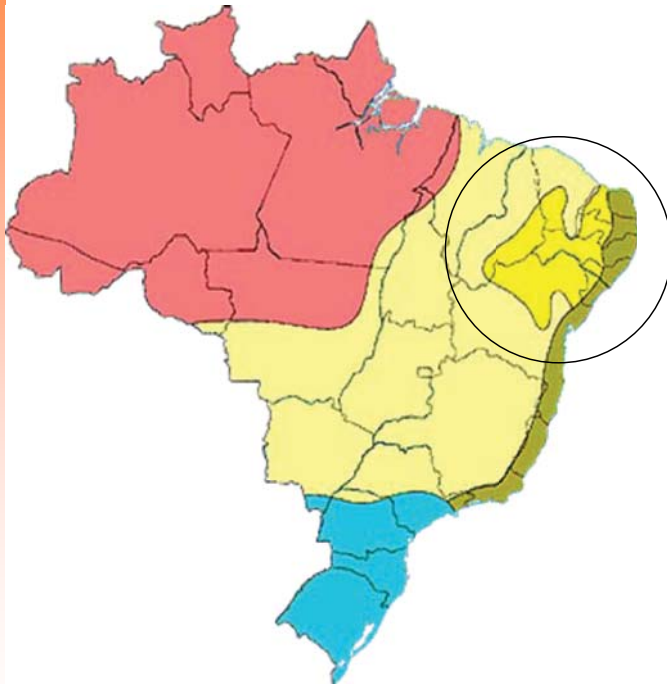
Thank you!



Slash-and-burn agriculture

Slash-and-burn agriculture is the most important system of crop production and from a historical perspective it was efficient and sustainable when the number of people and livestock was low. People understood that it was necessary to leave the land fallow for sufficient time to allow enough tree re-growth to provide sufficient ash and heating of the soil. During colonial times and the emergence of modern states with increased numbers of people and livestock, adequate fallow periods became unachievable. Consequently, the farming communities began to build up complex economic systems and agricultural production systems. With the intensification of land use, land degradation became the contentious issue, particularly in drylands.

Droughts in Northeast Brazil



Droughts have been Reported since 1583 in the northeast region.

XVIII Century - 26 years out 100

XIX Century - 20 years out 100

1877 / 1879

XX Century - 27 years out 100

1956 / 1960



- 1877/1879 – A serious drought affected the Brazilian semi-arid region. Almost 1 million people affected by starvation were forced to migrate to Amazon and other states.
- The emperor Pedro II promised to give his crown and all his jewels to solve the problem!!



1956-1960

500.000 people displaced



Retirantes

Candido Portinari