



# Region with richest Natural Capital in the world?

- Latin America includes six of the most biologically diverse countries in the world, as well as the richest area of the planet - the Amazon
- 50% of plant life in the Caribbean is endemic to the region
- The Meso-American Barrier Reef is the largest coral reef in the Western Hemisphere
- South America has more than 40 % of the world's biodiversity and more than 25 % of its forests.



## Latin America and Caribbean: Economies at a Crossroads

Biodiversity and Ecosystem Services –  
Key assets in sustaining our economies

Water provisioning  
Soil nutrient recycling  
Pollination  
Storm mitigation  
Micro-climate regulation  
Carbon sequestration  
Pest and disease control

# Potential as an economic leader in new directions



## Bio-mimicry, Bio-prospecting

Processes that can incubate medical solutions for current and future generations. Phytotherapeutic medicines have a global market of over U.S. \$ 60 billion. The region can be positioned as a leader through research and technological development



## Bio-Commerce

The multinational cosmetic firm Natura promotes equitable distribution of benefits of bio-commerce. This company currently has 56 agreements for supplying natural products from small agricultural enterprises and communities. Natura's gross income increased by 130% and reached more than 3.24 billion Reais in 2005



## Ecotourism

Approximately 94% of tourism companies in the Caribbean depend on the local environmental setting.

Between 2/3 and 3/4 of international tourists visit at least at least one protected area.



## Issue: Biodiversity and Ecosystem Services are economically invisible

Market fails to include “invisible” services

Costs of Ecosystem Services degradation are difficult to measure in economic terms

Gap exists between the economic data on the role of ecosystem services and the economic information used by policy makers

# Innovation and success in management of biodiversity and ecosystem services



## Colombia

Colombia has built up a national park system with 33 Regional Autonomous Corporations, the National Park Service and five research institutes to promote research on marine and terrestrial biodiversity. Including the forest reserves and other conservation categories, approximately 43% of Colombian territory is under a conservation scheme.



## Brasil

Brazil has established a national policy for ten price-guaranteed "products of socio-biodiversity (biodiversity products from indigenous or traditional communities). This policy promotes access by consumers at affordable prices for products based on sustainable use of biodiversity. Another national program of the Food Acquisition Program links small farmers with consumers, through direct purchase of government



## Caribbean

Coral reefs provide goods and services with net economic value of US\$3.1B and US\$4.6B.-including fisheries, dive tourism, and shoreline protection. In 1992, through the implementation of a \$10 user-fee via scuba diving tag, Bonaire National Marine Park became the first fully self-funded marine protected area in the Caribbean. These reefs seen as healthiest in the region and receive approximately 38,000 visitors annually

## Two key questions



1. Is the competitiveness of LAC countries at risk from missed market opportunities and rising hidden costs and because current approaches to economic growth ignore ecosystem services?
2. Can maintenance of ecosystem services and hard data on their economic value strengthen LAC competitiveness and sustain growth?



## Answer # 1:

Strong contribution of Ecosystem Services to sectoral and overall economic growth in LAC.

- Timber and NTFP production
- Productivity in agriculture - Agriculture uses 73% of all water abstracted in LAC.
- Tourism
- Fisheries
- Protected Areas (Caribbean has 973 protected areas)





## Ecosystems are valued

- Bats in Mexico control pests - reduced need for pesticides by 25-50% and reduce production losses by 55%. This service is valued at US\$6.5 to US\$61.6 million pa
- Brazil's has reduced deforestation by 70% in the Amazon, and committed to reduce deforestation by 80% by 2020.
- Brazilian Association of Meat Exporters pledged to stop buying cattle from newly deforested areas of the Brazilian Amazon, and the soy industry has stopped buying soybeans produced on rainforest lands deforested after 2006

## Answer # 2

### Costs of “Business as Usual”

Reduced productivity if ES decline

Off-site or downstream costs

Perverse subsidies and incentives

Lost public sector revenues

Future increase in costs

### Sustainable Ecosystem Management Benefits

Direct financial returns from increased productivity and lower costs

PES and carbon storage revenues

Diversified revenue streams

Expanded employment

Equity benefits

Reduced risk and avoided damage costs from natural disasters

New green market opportunities





## Successful Examples of SEM

- 20 women started Jamba Kiwa in 1998 to protect livelihood, and sell medicinal at local and national market. With access to credit,. It now involves over 600 families with 80% women with high levels of illiteracy- 75% indigenous Puruhá
- Peruvian anchoveta fishery is the largest single-species fishery in the world - 10% of global marine landings (6- 8 million tonnes). In 2008, the Peruvian Government introduced individual fishing rights over the anchoveta biomass by setting a maximum catch limit per vessel based on a percentage of the TAC. Improved livelihoods, income and more stable fish population resulted.



## Some of the costs of BAU

- 1981 – 1990 conversion of 75 million ha of forests, most for cattle lands.
- In Brazil, 1971 - 1986, malaria cases up 76% after deforestation
- In Costa Rica, erosion from farmed land removes nutrients worth 17% of crop value and 14% of value of livestock products
  - 37% of fisheries are overexploited or depleted, while 10% are recovering
- 65% of mangrove forests have been lost in Mexico over the last 20 years
- Protected Areas often lack government institutions to prevent predation and protect services



## Transition from BAU to SEM:

- The economic value of ES is relative
- Costs and benefits from specific production practices change
- Increase in benefits from SEM but an increase in costs from BAU
- The economic rationale for maintaining ES has been changing
- The cost of environmental protection, is being replaced by economic benefits from ES maintenance and the greater cost of ES degradation.
- This change needs to be recognized in economic policy analysis.



## Recommendations

- Sectoral plans should undertake trade-off analysis between maximization of short term production and ES maintenance.
- Level the playing field for development and incentivize SEM. Reduce subsidies.
- Economic instruments and planning set up to reduce off-site degradation of ES.
- Increase the asset value of biodiversity and ES.
- Increase public sector revenues from use of ES.
- Generate and capture hard economic data on ES.

# The Way Forward

Elaborate and continue economic valuation analysis at the country level, and include analyses in all development planning and policy dialogue within countries