United Nations Environment Programme

International Association of Drilling Contractors, Environment Conference and Exhibition

Artie Dubrie, Programme Officer
UNEP - ROLAC

May 12-13, 2011, Trinidad and Tobago
Format of Presentation

- Global Environmental Outlook for Latin American and the Caribbean (LAC)
- Priorities for sustainable environment management in the LAC
- Small note on World Environment Day, June 5th 2011
United Nations Environment Programme,

- **Mission:**
  To provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations

- **Web site:** [http://www.unep.org](http://www.unep.org)
UNEP, Regional Office for Latin America and the Caribbean
Latin America & The Caribbean

State of the Environment: brief facts

2010

Graciela Metternicht, Regional Coordinator, Early Warning & Assessments UNEP - ROLAC
Latin America and the Caribbean (LAC)

- 33 Countries – 14 are island states.
- Poverty still affects more than 35% of the population, or 189 million people, higher than beginning of the 1980s.
- 581 million inhhab. (79% in urban areas)
- Largest variety of eco-regions globally
- The world’s largest reserves of arable land - 576 million ha.
- 31% of the planet 35 million km³ freshwater resources.
- 23% of the world forest,
- 7 mega-bio-diverse countries.
Land Use Changes, LAC

- Soybean production area increased by 22.3 mill. ha. (1990-2005), almost Ecuador’ size.
Between 2000 and 2004 approximately 3.3 million ha were lost to forest fires (FAO, 2007c). (Belize, Grenada and Jamaica together)

Between 2000 and 2005 the region lost approximately 24 million ha of forest (total); greatest average loss occurring in Mesoamerica (size of Guatemala and Nicaragua)
Figure 6.31 Average annual forest change

Source: GEO Data Portal, compiled from FAO 2005
Our consumption patterns....

- Electricity consumption was **tripled** between 1970 and 2006;
- Water demand has increased (76%) due to **population growth**;
- The production of solid waste per inhabitant **has doubled** in the past 30 years;
Latin America and the Caribbean: Evolution of Electric Energy Consumption by Sub-regions 1980-2005
(Energy consumption in PJ)

Source: Prepared by L. Molina with data from ECLAC, 2007c.
Public Spending on our Environment, LAC

Public spending on the environment, as a percentage of GDP, for 2005, was 0.3% in Mexico and 0.06% in Brazil.

It was between 0.01% and 0.05% of GDP in Argentina, Belize, Chile, Colombia and Uruguay.

Many countries of the LAC, this data is not available in the OECD countries, is between 1% and 2% of GDP.

(United Nations, 2010).
UNEPP’S Global Environment Outlook:

Key environmental priorities for LAC

- Extensive, unplanned urbanization
- Threats to terrestrial biodiversity and ecosystems
- Coastal degradation and marine pollution
- Vulnerability to climate change
Regional Environment Outlooks (GEO): Key Concerns

- **Climate change impacts**
- Fresh water resources availability
- Coastal and marine zone degradation
- Mangrove depletion
- Uncontrolled fisheries
- Lack of solid waste treatment
- Lack of land use planning: deforestation, fragmentation, soil erosion, habitat loss.
Climate change: A driving force for environmental change in the LAC

- The region’s vulnerability is not only due to the number of climate events but to exposure of human activities and human well-being.
- LAC accounts only 11.78% of GHG emissions
Vulnerability and impact of climate change

LAC environmental priorities
In the Wider Caribbean alone, more than **26 million people** were affected by natural disasters between 1950 and 2007, with approximately **22,000 deaths** (UNEP, 2008).
Daño económico de los eventos hidrometeorológicos por subregión, periodo 1970-2007

Millones de dólares

Climate change could cause the region’s ecosystems to suffer **losses of between 20% and 30% of researched endangered species** (IPCC).

Of the 20 countries (globally) that have the largest number of endangered fauna species, 5 are in Latin America and the Caribbean,

For endangered plant species of the 20 countries that have the highest number, 7 are of the LAC (IUCN, 2008a).
As a result of climate change, by 2020 between 12 million and 81 million people will be affected by an increase in the water deficit (Arnell, 2004).

About 50% of the population lives less than 100 km from the coast (GEO Data Portal), which means nearly 290 million people are vulnerable to rising sea levels due to climate change.

One-fifth the diseases reported in Latin America and the Caribbean can be attributed to environmental changes (Periago et al, 2007).
Climate change: Challenges

- Adaptation entails opportunities to pursue sustainable development:
  - Better infrastructure
  - Research and Development in the development of crop varieties
  - Development of Payment for Environmental Services
  - Better management of watersheds
Climate Change: Challenges

- Recognize the inclusion of forests in climate change negotiation processes in order to make progress in governance for forest resources
- Design and implement efficient strategies for the sustainable use of water
REGIONAL PRIORITY ISSUES/CHALLENGES, RELATED ISSUES AND SELECTED GOALS FOR LAC (to be published in 2012)
Environmental Governance, LAC (selected)

- Use of scientific information, for sustainable development,
- institutional development,
- green economy related to tourism,
- transport and agriculture,
- strategic environmental assessment,
- environmental policies as a crosscutting issue,
The Scientific Approach

“Shouldn’t we make the hole in the ozone bigger to let out all the greenhouse gasses?”
Seas and Oceans

- Fisheries, seas and coastal areas
  - protection,
- sustainable management of forest and seas,
- sustainable use of ocean resources,
- over exploitation, biodiversity
Freshwater

- Pollution prevention,
- conflicts due to water use, access,
- wastewater, urban growth,
- pollution from industrial sources,
- safe water for human consumption,
Soil, land use, land degradation and desertification

- Land degradation and desertification,
- land management and water use plans,
- land use planning, soil pollution (and it’s management),
- access to land tenure for minority groups (Indigenous people, women etc.)
LATIN AMERICA AND THE CARIBBEAN

ENVIRONMENT OUTLOOK

KEY MESSAGES
The growing tendency toward urbanization in the region is a generalized phenomenon with major environmental, social, economic, and political consequences.
Strong and decisive changes in environmental management are urgent, particularly in each country’s development programs.
Despite the region’s advances in environmental matters, important challenges still persist to achieve a model of sustainable development.
One of the main challenges to environmental policy in the region is the need for profound modification of patterns of production and consumption.

Petroleum continues to be the most important energy source for the region (41.7%), followed by natural gas (26%) and energy from renewable sources (23%).
In the region, it is necessary to design and implement **environmental policies** that strengthen the investment toward **sustainable development and a sustainable society**.
It is crucial to highlight the dependent, inter-dependent relationship that human populations have with ecosystems and the goods and services that these provide.
Latin America and the Caribbean is a region rich in environments, in ecosystems, in species and in cultures; today this richness finds itself under threat due to the norms of the dominant models of economic development in the region.
World Environment Day, June 5th

- 2011: UN International year of Forest
- 2011: UN, World Environment Day, June 5th,
- http://www.unep.org
Thank you for your attention

United Nations Environment Programme
Regional Office for Latin America and the Caribbean

www.pnuma.org
www.unep.org