

Water in the Green Economy

The Challenges Ahead for Latin America and the Caribbean

Economic Commission for Latin America and the Caribbean
Division of Natural Resources and Infrastructure



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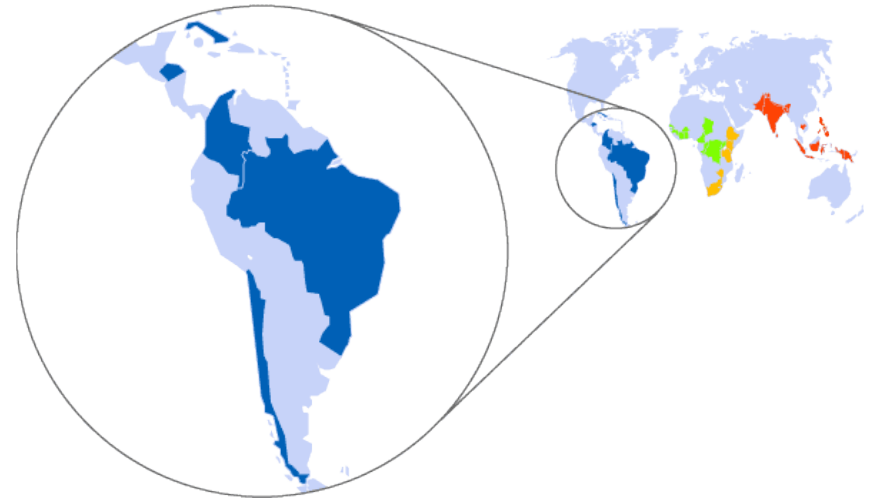


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WATER IN THE GREEN ECONOMY IN PRACTICE: TOWARDS RIO+20
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Overview of the Region

- The region possesses a **third** of the world's water resources but its **availability** varies greatly and is managed **inefficiently**
- **Safe drinking coverage** in the region is ~ 90%, however, there are differences between and within countries and almost **40 million** still lack access to safe water
- Water **governance** is still a challenge in the region



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Water Availability and Withdrawals

	LAC Region	Rest of the world
Water Availability	34%	66%
Water availability per habitant	4.9	1.0
Water extractions	7%	93%
Water extractions per habitant	0.8	1.0
Water uses:		
•Agriculture	71%	70%
•Industry	10%	20%
•Domestic	19%	10%



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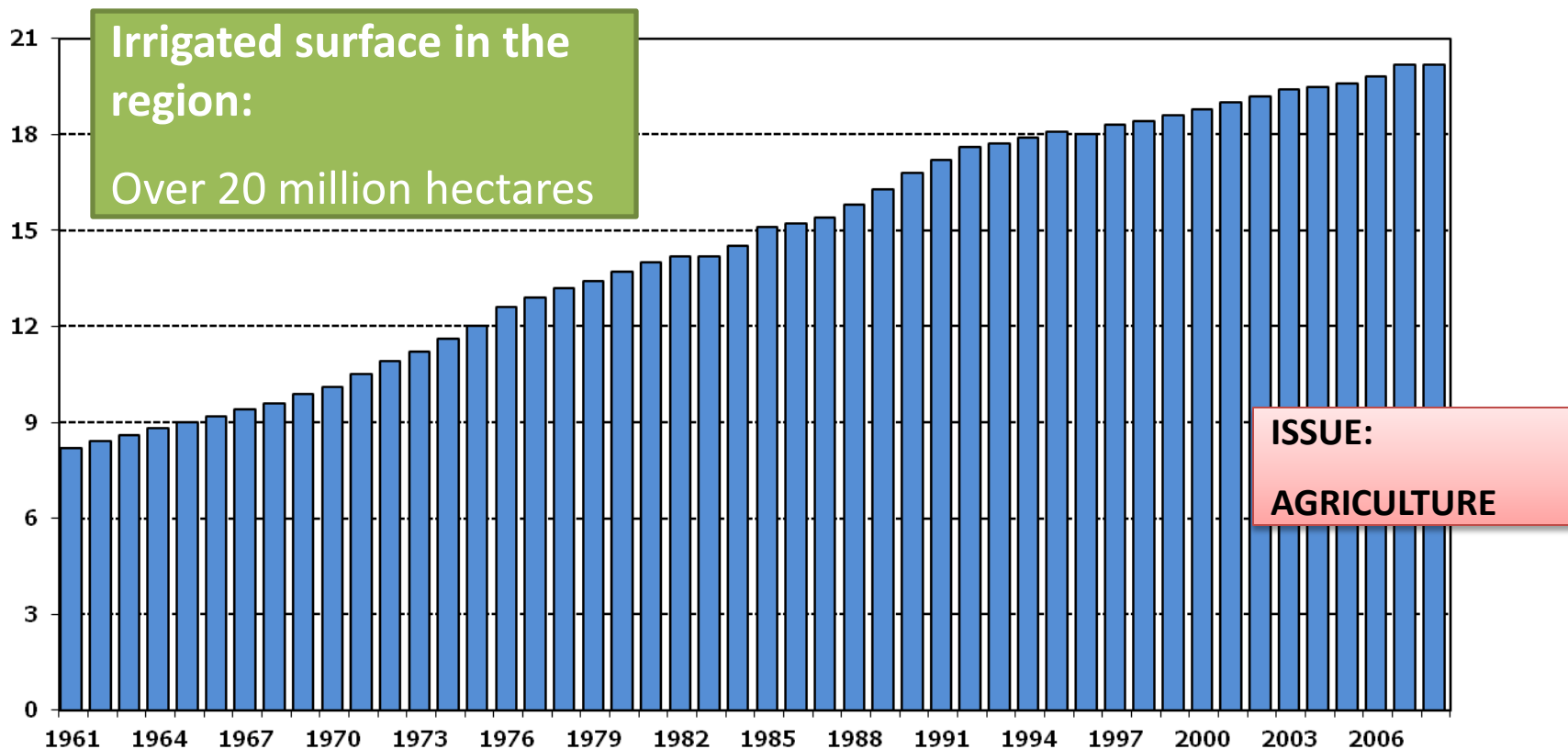
Water is abundant but...



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Irrigation in Latin America and the Caribbean



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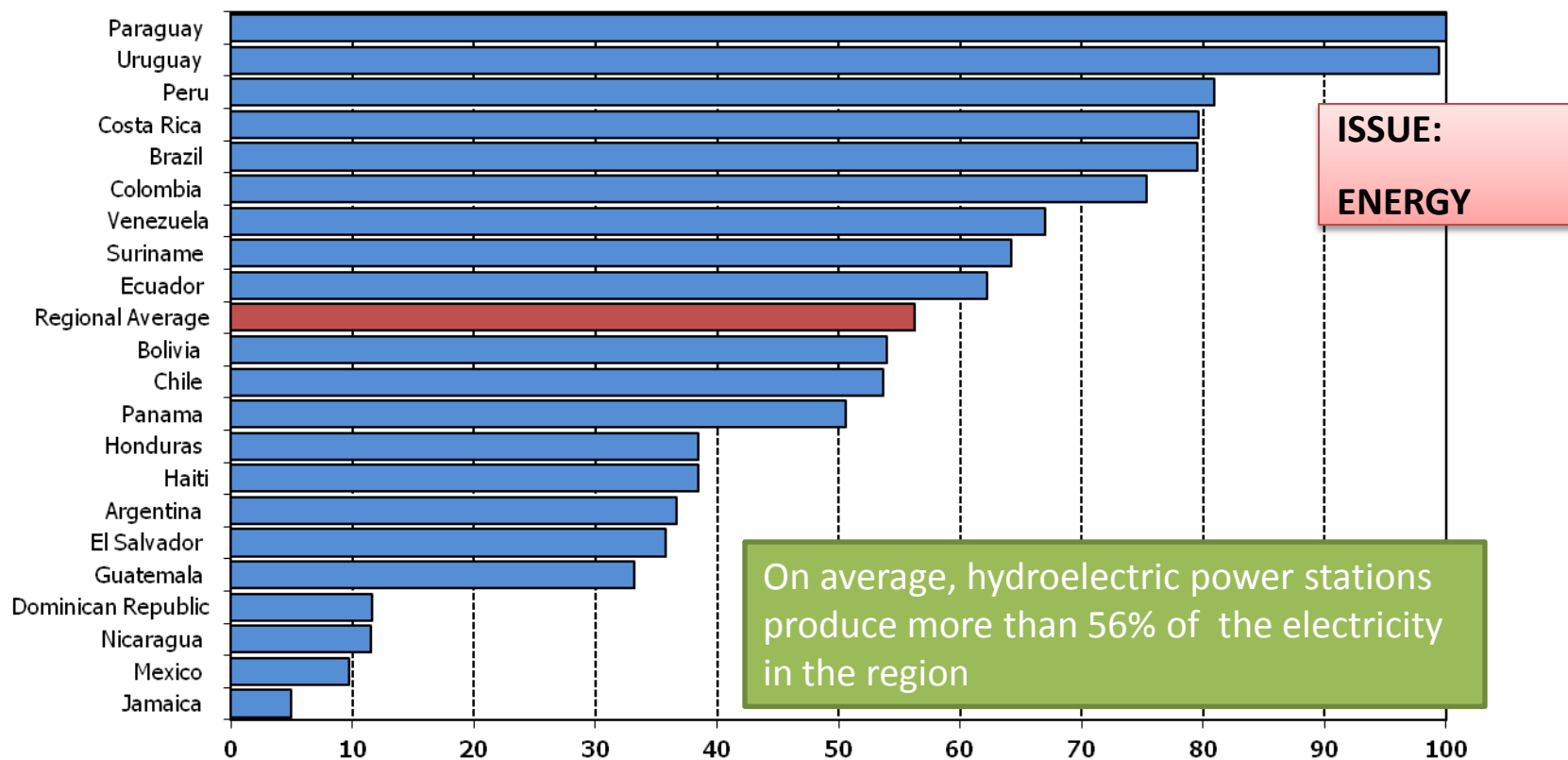
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Hydroelectric Production (%)



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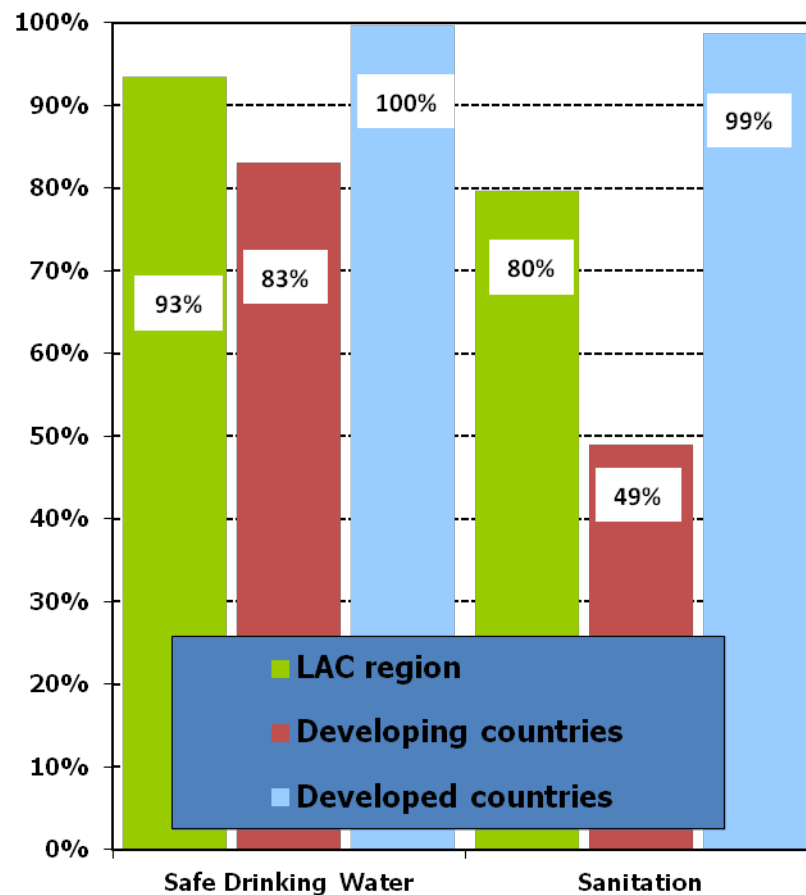
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Water and Sanitation in the Region (2008)

- Without improved services:
 - Safe drinking water: 38 million
 - Sanitation: 117 million
- Coverage in rural areas is much lower:
 - Without water: 20%
 - Without sanitation: 45%
- Deficits especially affect low income groups:
 - 70% of people without safe drinking water, and
 - 84% of people without sanitation, belong to the two lowest income quintiles



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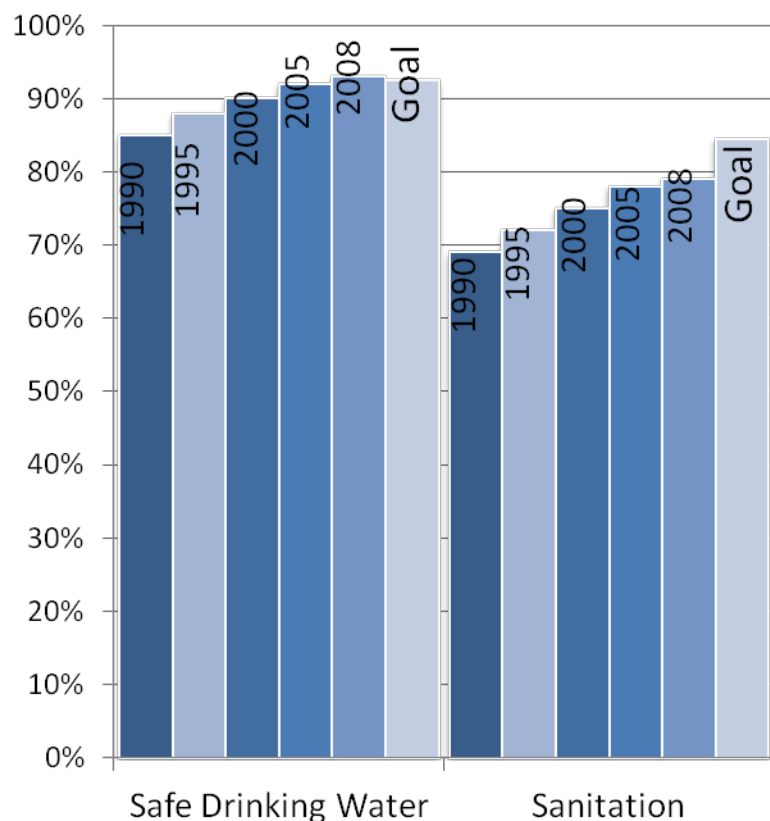
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Millennium Development Goals



By 2015, reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation



Safe Drinking Water (exceeded):

- Goal achieved at the regional level
- Mayor challenges: Haiti, Dominican Republic, Peru and Jamaica.

Sanitation (< 6%):

- Mayor challenges: Haiti, Bolivia, Nicaragua, Colombia, Panamá, Peru, Jamaica y Argentina.



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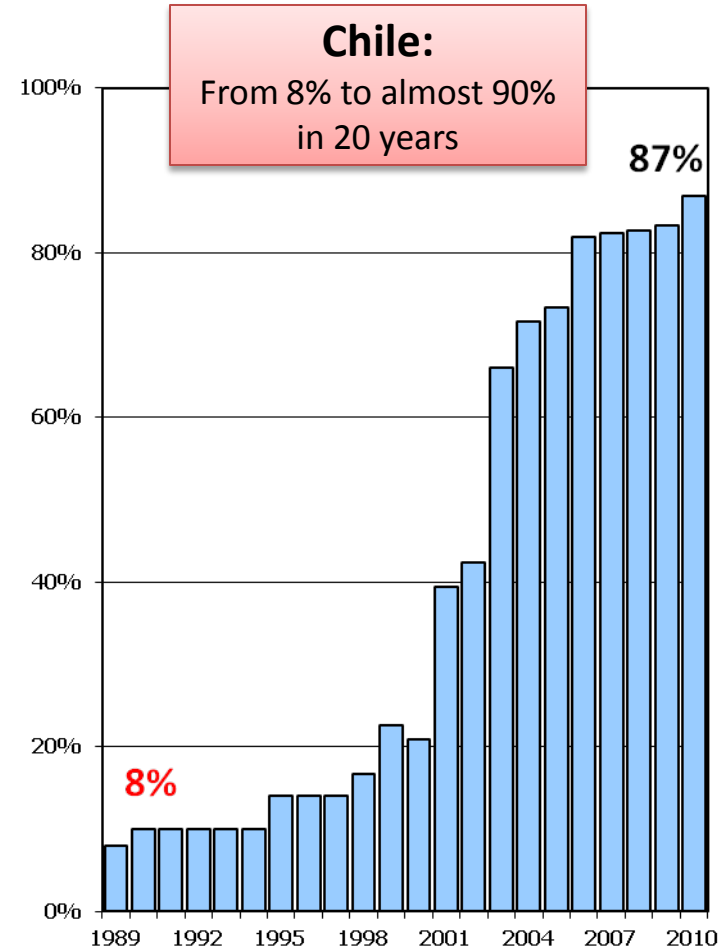
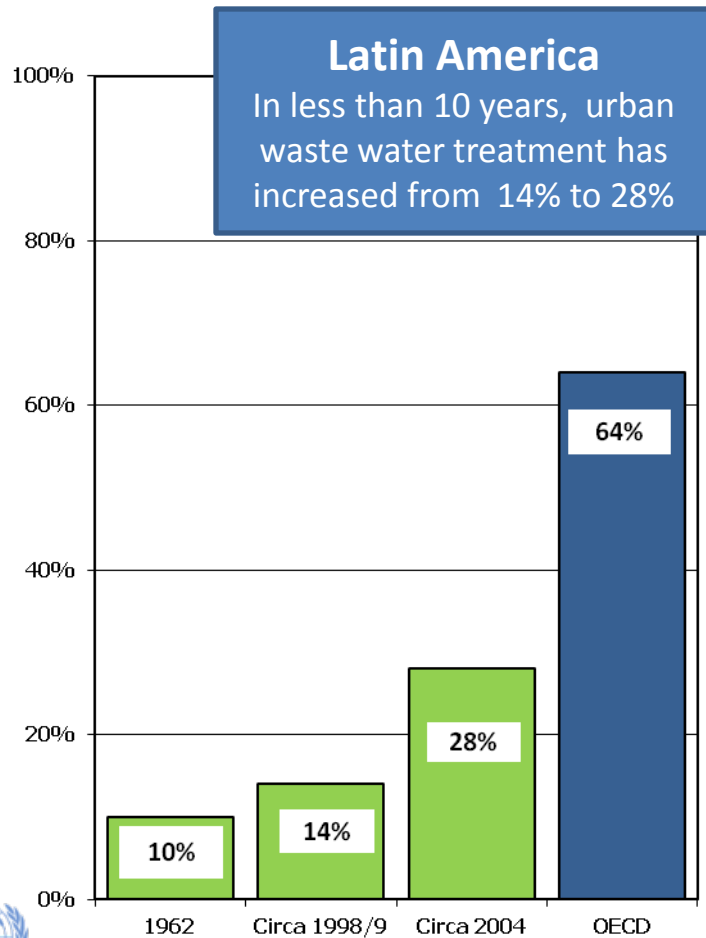
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Urban Waste Water Treatment



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Regional Trends

• Urbanization

- Latin America is already the world's **most urbanized** developing region, with more than **80%** of the population living in **towns and cities**
- **Informal settlements** (slums) are a challenge to urban planning and management - 100 million people living in slums -

• Increased standards of living

- Average rates of **poverty** have **fallen** steadily over the past 20 years
- However one-third of the population is estimated to still be living **in poverty** – some **180 million people** –
- LAC has the most **inequitable income distribution** in the world



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Regional Trends

- **Population growth**

- **World population** projected to surpass 9 billion by 2050
- **8%** of the population will be in the LAC region
- Water availability **per habitant is high**

- **Climate change**

- The **hydrological cycle** will be intensified
 - Increased rainfall – Ecuador and Northern Peru
 - Droughts – northern Brazil
- Between 1970 and 2008 **natural phenomena** cost the region approximately US\$80 billion



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Regional Trends

- **The region depends on its natural resources:**
 - **Water intensive industries**
 - Food production, agro-forestry, textiles, chemical industry, etc.
 - **Tourism**
 - Accounts for more than 10% of the exports in the region
 - **Mining**
 - The cost of water reaches 10% of the investments required in the mining sector in Chile

ISSUE:

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Water and the Green Economy

- Relevant issues for the region:
 - **Water use efficiency**, loss reduction, metering, efficient water use.
 - **Energy efficiency** in the provision of drinking water supply and sanitation services.
 - Generation and management of **new and unconventional water sources** (such as seawater and brackish water desalination, wastewater reuse, market reallocation, watershed management and payments for environmental services, rain water management) **for human supply and other competing uses** (especially mining).



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Water and the Green Economy

- Relevant issues for the region:
 - **Drinking water supply and sanitation in the fight against poverty**, for social cohesion and integration, green employment and their role in countercyclical policies.
 - Domestic **wastewater treatment and recycling**, full water cycle management.
 - **Climate change adaptation and mitigation** in drinking water supply and sanitation; methane recovery in wastewater treatment.



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The Challenges

Governance Issues

- Political interference
- Ineffective regulatory frameworks
- General absence of self-financing
- Weak formal institutions
- Lack of effective prioritization in budgetary allocations
- Insufficient operational capacity



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Trends (regional and external)

- Urban waste water /pollution control
- Increasing food demands
- Climate change
- Increasing competition amongst sectors (energy – food – water nexus)
- Underinvestment
- Inefficiency
- Environmental degradation



Approaches in the Region

Significant reforms

- Water legislation and management policies
 - Brazil, Honduras, Nicaragua, Peru, Venezuela, Chile, Mexico and some provinces in Buenos Aires (Argentina)
- Reforms in the water supply and sanitation sector
 - Almost all the countries in the region

Results are not clear yet...

Mixed results



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Mix of Instruments and Policies

- Institutional separation
 - (New)Water authorities
 - Regulators
- Decentralization
 - At the municipal and basin level→consolidation...
- Privatization → Nationalization
- Economic Instruments
 - Cost recovery tariffs + Subsidies
- Water planning



Approaches: Case Studies

Guatemala (water planning)	Colombia (economic instruments)	Barbados (water planning + EI)
<ul style="list-style-type: none"> • Water planning • Political commitment (at the highest level) • Policy coherence and coordination • Consensus building • Governance issues • Long term perspective - sustainability (?) 	<ul style="list-style-type: none"> • Political commitment: Law of Utilities Services (1994) • A long term strategy: <ul style="list-style-type: none"> • Water prices have to reflect economic cost, including cost of capital • New Institutional Framework: <ul style="list-style-type: none"> • Public Utilities acting as private enterprises • Water Regulatory Commission 	<ul style="list-style-type: none"> • Political commitment to Green Economy • Plans for significant investment in the Water Sector • Commitment to Environmental Stewardship • Implementation of Financial & Regulatory Incentives to promote water use efficiency



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Lessons Learnt

- Institutional capacity + political will
- Regulation of services
- Centralization or decentralization?
- Cost recovery tariffs + clear and transparent subsidies
- Water needs to be a political priority
- Influence of institutions and organizations outside of the water sector

IMPROVE
GOVERNANCE



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Key Messages

NO ONE SIZE FITS FOR
ALL SOLUTIONS

- Reforms need consensus (at every level)
- Tools need a realistic and pragmatic approach
- Theory needs to be adapted to the context
- A long term perspective is needed
- Economic growth can enable -financial and environmental -sustainability
- It is vital to encourage and facilitate the participation of interested parties



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Key Messages

In Latin America and the Caribbean,

...Is it a scarcity crisis *or* governance crisis...



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Thank you very much!

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