

# **Building institutional** capacity: challenges in a continental-sized country

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TIME FOR **SOLUTIONS** 









### **Brazil**



#### **Political System (Federative Republic)**

- 1 Federal District (Capital City Brasília)
- 26 States
- 5,565 Municipalities

#### **Economy**

GDP: US\$ 2.44 trillion (6th largest)

#### **Geography and Demographics**

- Total Area: 8.5 million km<sup>2</sup> (5<sup>th</sup> largest)
- Population: 190 million inhab. (5<sup>th</sup> largest)
- 80% living in urban areas
- HDI: 0,699 in 2010 (High HDI)









# Renewable Water Resources (RWR)

Internal RWR:

5,660 km<sup>3</sup>/year (12.5 % of Global RWR)

Total RWR\*:

8,427 km<sup>3</sup>/year (18% of Global RWR)

(\*) Considering contribution from upstream countries in the Amazon River Basin



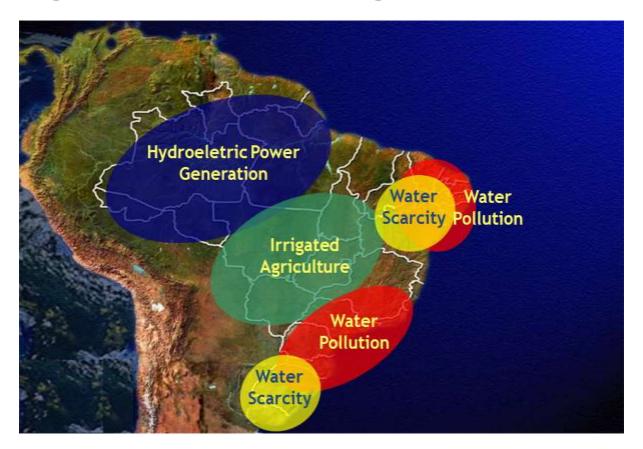








# **Brazil's Regional Water Challenges**







# **Legal Framework**

**Federal Constitution of 1988** 



#### TITLE III - CHAPTERS II and III

**National Jurisdiction** (national water resources), in the case of transboundary rivers and surface waters shared by two or more States;

**State Jurisdiction** (state water resources), in the case of groundwaters and surface water bodies not shared with other States.









# **Legal Framework**

#### **Federal Constitution of 1988**



#### **TITLE III - CHAPTER II**

"Article 21. It is upon the Union the responsability:

*(...)* 

VI – to establish a **national water resources management system** and define criteria for licensing of water uses."

Original Text: "Art. 21. Compete à União: (...) XIX - instituir sistema nacional de gerenciamento de recursos hídricos e definir critérios de outorga de direitos de seu uso"









# **Legal Framework**

**National Water Resources Management Policy of 1997** 

- Water is a public good;
- Water is a limited natural resource, which has economic value;
- During water shortages, priority in the use of water is for drinking water and for supplying livestock;
- The river basin is the appropriate unit for water resources management;
- Water resources management shall guarantee the multiple uses of water;
- Water resources management shall be decentralized and open to the participation of the water users, local communities and the organized civil society.









## GOVERNANCE



Decentralized WRM



Participative WRM



Integrated WRM

Author: Paulo Libanio









# GOVERNANCE



Public Authorities



Water Users



Civil Society

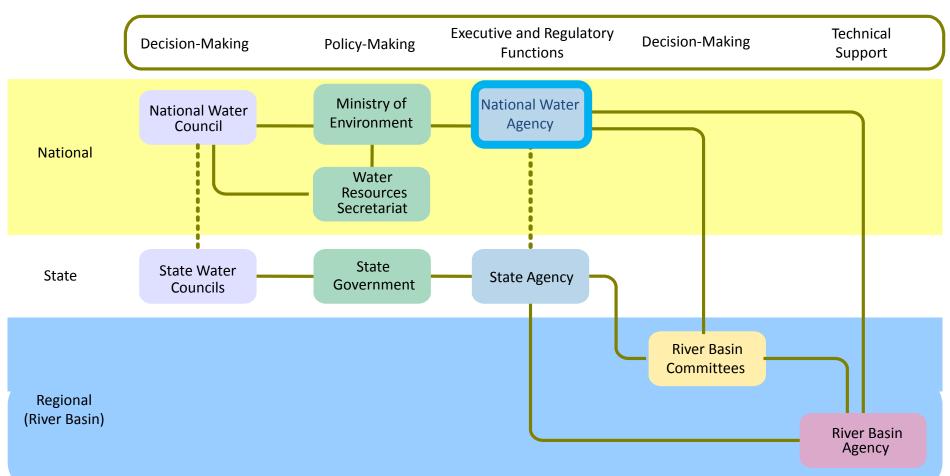
Author: Paulo Libanio (ANA)







#### **National Water Resources Management System**







**National Water Agency** 

Executive Role

Water Policy

**COORDINATION** 

**IMPLEMENTATION** 

**SUPPORT** 

National Water Resources Management System (SINGREH)

Water Resources Management Policy (Planning, Information Systems, etc)

Technical and finanacial support for River Basin Committees

Regulatory Role Water Policy

**CONTROL** 

**ENFORCEMENT** 

Rulemaking and issuing permits for use of national water resources

Overseeing water users, monitoring the compliance with regulations

Water Services **CONTROL** 

**ENFORCEMENT** 

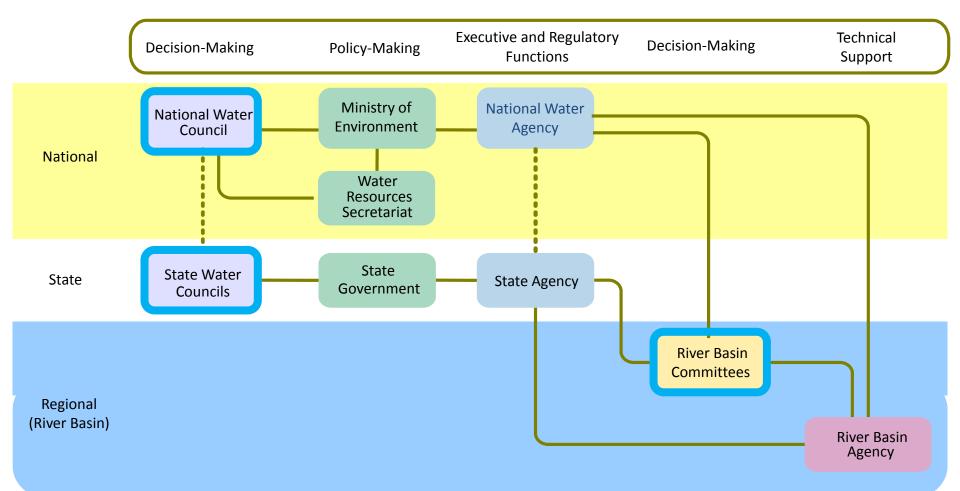
Setting of tariffs, technical standards, guidelines for raw water services

Overseeing service provision and compliance with contractual conditions





#### **Water Councils and River Basin Committees**



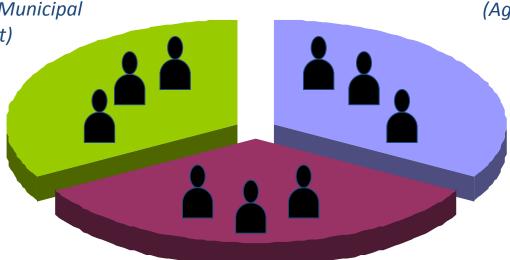




#### **Water Councils and River Basin Committees**

#### **Public Administration**

(Federal, State and Municipal Government)



## **Civil Society**

(NGOs, education and research institutions, Professional Associations)



(Agriculture, Industry, Water Services)



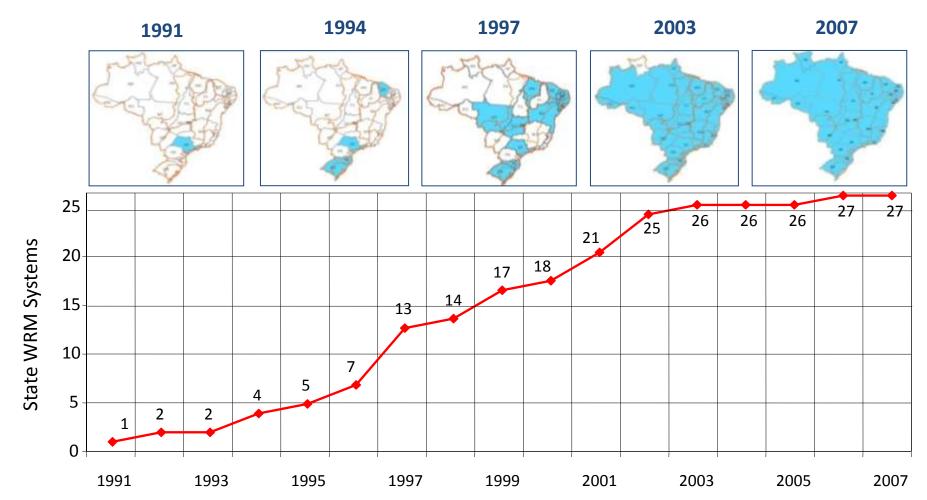






# **Progress in Water Governance**

#### **State WRM Systems**

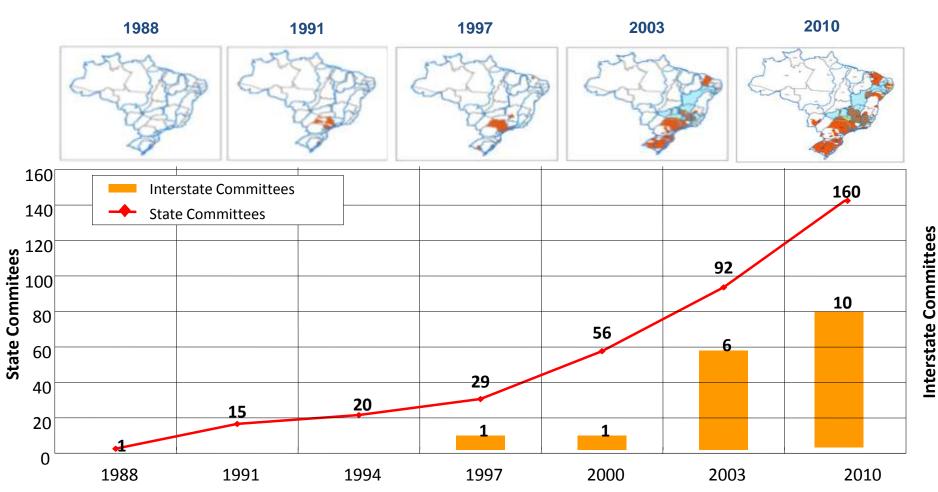






## **Progress in Water Governance**

#### Interstate and state river basin committees

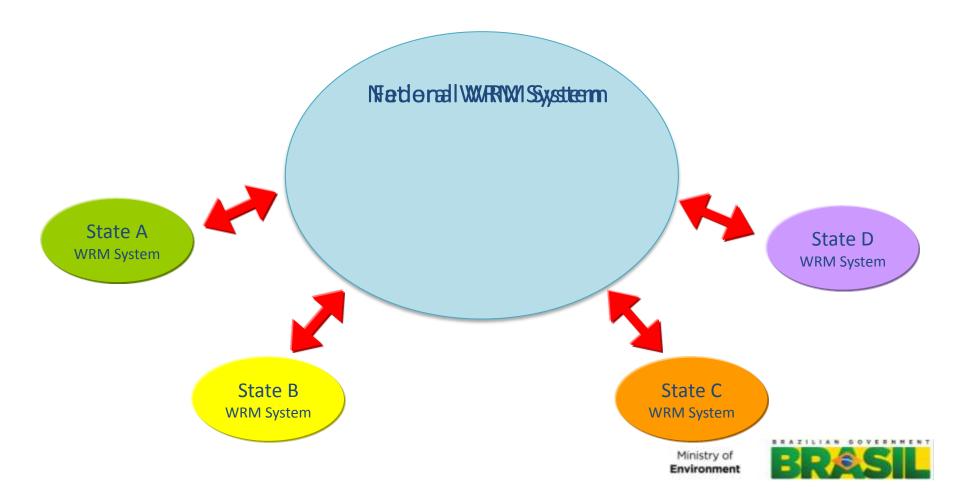






# **Great Challenge**

**Integrating National and State WRM Systems** 







# **IWRM Agenda**

Legal
<b>Framework</b>

#### 1991 - 2011

- Issuing of the National Water
   Resources Management Policy
- Issuing of WRM Policies in all 27
  States

#### 2011...

- Increase the integration with the Environmental Policy
- Increase the integration with local policies
- Increase the integration with sectorial policies

# Institutional Framework

- Creation of the National WRM
   System
- Creation of 27 State WRM
   Systems

- Strengthen the State WRM Systems
- Bring the National and State WRM Systems together.





# **IWRM Agenda**

# Decision-Making

#### 1991 - 2011

- Creation of Interstate and State Water Councils
- Creation of the first Water Agencies

#### 2011...

- Strengthen the Water Councils and River Basin Committees
- Strengthen the Water Agencies
- Increase the participation of local public authorities

# Management Tools

- Approval of the National WRM Plan and various state and watershed plans
- Establishment of water permits systems
- First experiences with charging for water use

- Implement existing water resources plans
- Improve the regulatory procedures for water use
- Expand and diversify funding for water resources management





#### The Case of PCJ River Basins







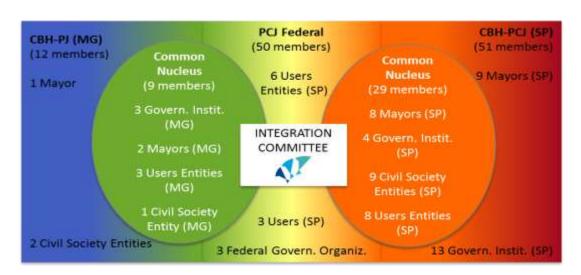




#### The Case of PCJ River Basins

#### **Green Growth**















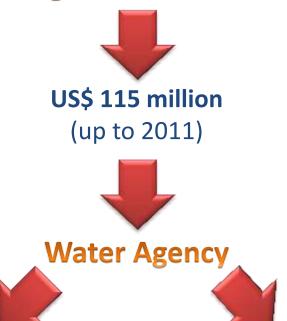
#### The Case of PCJ River Basins

### **Green Growth**



**IWRM** 

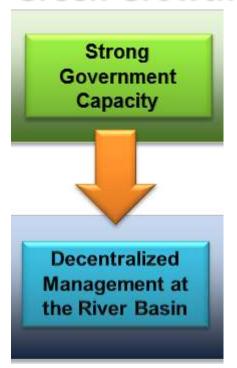
### **Charge for water users**



>100 projects (mostly sanitation)

# **PES** (Water Producer)

#### **Green Growth**













# Thank you!

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