

Brazil Water Learning Series

April – June,
2014

Thadeu Abicalil
Sr. Water and Sanitation Specialist
Presentation 1/2

The World Bank
Water



Outline:

2

- ✓ **The Brazil Water Learning Series**
- ✓ Brazil: country context

The Brazil Water Learning Series

3

- ✓ Sharing Brazil's experience in management, treatment, and use of its water resources.
- ✓ Comprises four seminars that will take place from April to June 2014
- ✓ Every seminar is tackling a different aspect of water management and use in Brazil
- ✓ Contextual overview of Brazil's recent history and challenges in relation to water management and use in different sectors



The Brazil Water Learning Series

4

- ✓ Seminar 1: Water Resources Management in Brazil: Challenges and New Perspectives
 - ✓ Date: April 24th, 2014, 12:00-2:30 pm EST – 1:00-3:30pm Brasilia BRT
 - ✓ Location: World Bank, Brasilia Country Office
 - ✓ Guest Speaker: Rosa Maria Formiga-Johnson, Director of Water and Land Management, State of Rio de Janeiro Institute for the Environment – INEA
 - ✓ Bank Speaker: Thadeu Abicalil, Senior Water & Sanitation Specialist
 - ✓ Chair: Ede Jorge Ijjasz-Vasquez, Current LAC Water Director

The Brazil Water Learning Series

5

- ✓ **Seminar 2: Cutting-Edge Approaches to Water Supply and Sanitation in Brazil**
 - ✓ **Date:** Tuesday, May 6, 2014, 12:00-2:30 pm EST – 1:00-3:30pm Brasilia BRT
 - ✓ **Location:** World Bank, Brasilia Country Office
 - ✓ **Guest Speakers:** Gesner José de Oliveira Filho (former CEO of SABESP – São Paulo WSS Utility; and current head of the GO Associados Consulting Firm) and Ricardo Augusto Simões Campo (CEO of COPASA – Minas Gerais Water Utility and Counsel for COPANOR – Minas Gerais Rural Water Management Model).
 - ✓ **Bank Speaker:** Juliana Garrido, Sr. Water & Sanitation Specialist

The Brazil Water Learning Series

6

- ✓ Seminar 3: Dams: importance to Brazil, society and the water sector
 - ✓ Date: Tuesday, May 27th, 2014, 12:00-2:30 pm EST – 1:00-3:30pm Brasilia BRT
 - ✓ Location: World Bank, Brasilia Country Office
 - ✓ Guest Speaker: Gilberto Valente Canali, Water Resources Specialist
 - ✓ Bank Speaker: Paula Freitas, Water Resources Specialist

The Brazil Water Learning Series

7

- ✓ Seminar 4: Towards Greater Water Integration in Brazil
 - ✓ Date: Tuesday, June 3rd, 2014, 12:00-2:30 pm EST – 1:00-3:30 pm Brasilia BRT
 - ✓ Location: World Bank, Brasilia Country Office
 - ✓ Speakers: Professor Monica Porto, State University of São Paulo – USP, and Prof. Francisco de Assis de Souza Filho, Federal University of Ceará
 - ✓ Bank Speakers: Erwin De Nys, Sr. Water Resources Specialist, and Thadeu Abicalil, Sr. Water and Sanitation Specialist

Outline:

8

- ✓ The Brazil Water Learning Series
- ✓ **Brazil: country context**

Country Context

9



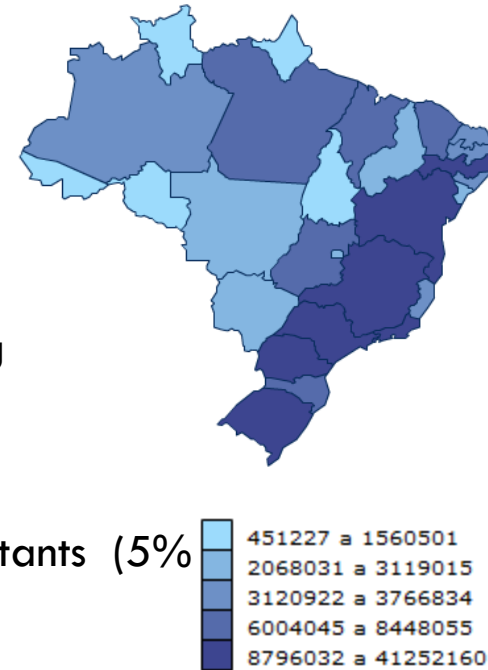
- ✓ Brazil's 26 states and the Federal District (Distrito Federal) are divided conventionally into five regions: North (Norte), Northeast (Nordeste), Southeast (Sudeste), South (Sul), and Center-West (Centro-Oeste)



Country Context: Brazil in numbers

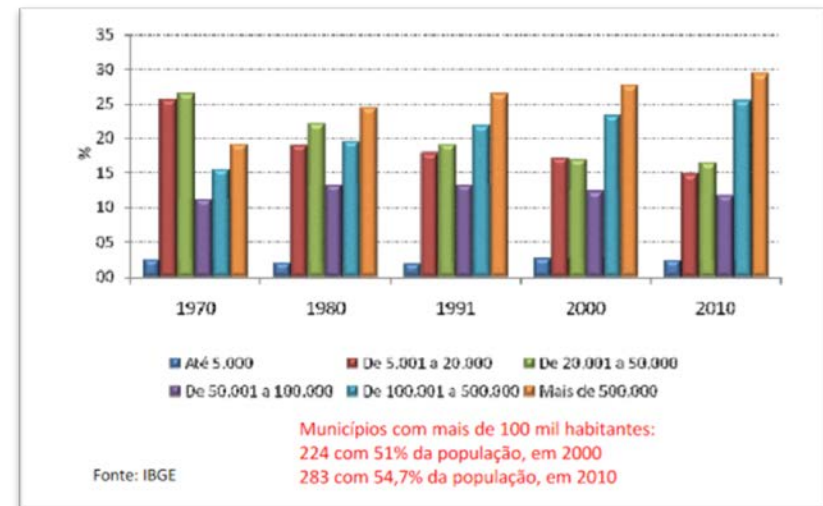
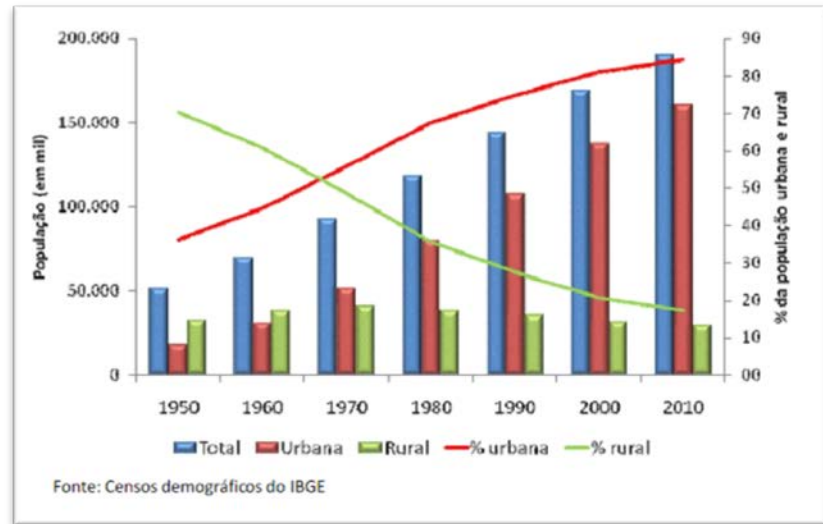
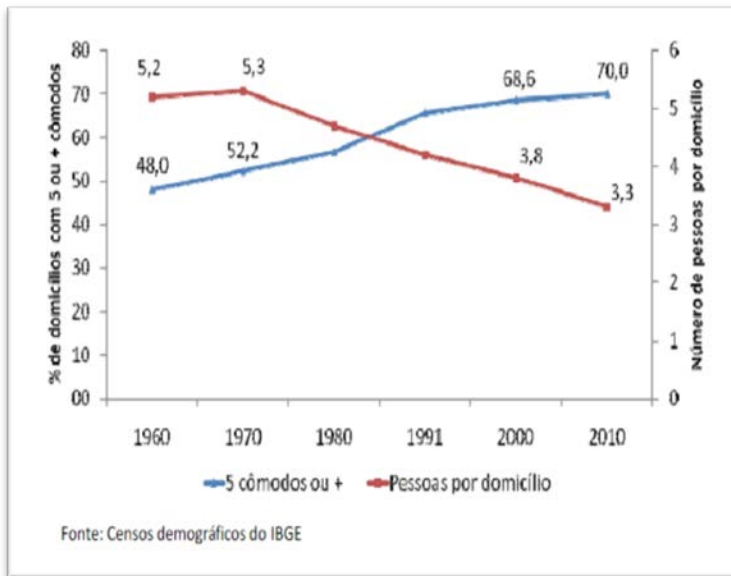
10

- ✓ Area: 8,514,876,599 km²
- ✓ Population: 202 million (2014)
 - ✓ 84% urban (169 million inhabitants), and rising
 - ✓ Rural population is decreasing, but rural production increasing
 - ✓ Concentration in few large cities:
 - ✓ 39% (79 million) in 20 metropolitan areas
 - ✓ 55 % in 283 municipalities with more than 100,000 inhabitants (5% of the municipalities)
 - ✓ 21% in the 15 biggest municipalities
- ✓ Disperse population in small towns/municipalities
 - ✓ 65 million in municipalities with less than 50,000
 - ✓ **89% of the municipalities** have less than 50,000 inhabitants
 - ✓ Smaller municipalities are losing relative population
 - ✓ Average number of households 3.3 (down from 5.2 in 1960)



Country Context

- ✓ The Urban Transition
- ✓ Urban and Rural Population 1940-2010



- ✓ Size of dwellings and number of residents

Country Context: Brazil in numbers

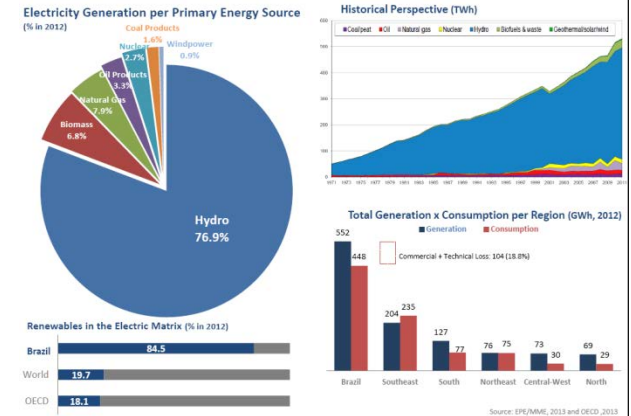
12

✓ Strong and stable economy

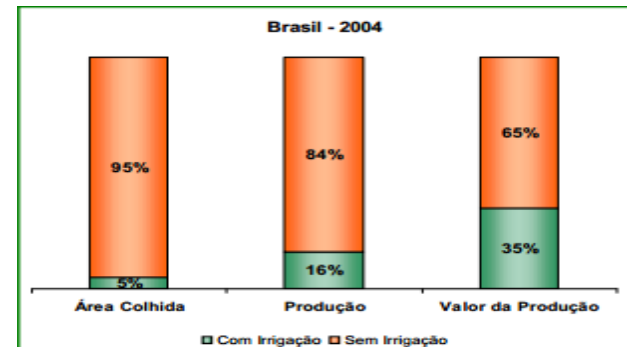
- ✓ GDP 2.5 trillion
 - ✓ Agriculture – 5.3%
 - ✓ Industry – 26.3%
 - ✓ Services – 68.5%
- ✓ GDP per capita US\$12,800

✓ Development indicators

- ✓ HDI 0.727 (varying from 0.862-0.418) → 70th HDI
- ✓ Gini of 0.5
- ✓ Poverty 21% → Extreme poverty (US\$2 per day) – 5.4%
- ✓ Average life expectancy 74 years
 - ✓ Women 77 years, Men 70 years
- ✓ Infant mortality 13/1000 (under 1 year)
- ✓ 12th most unequal



Energy production based on water

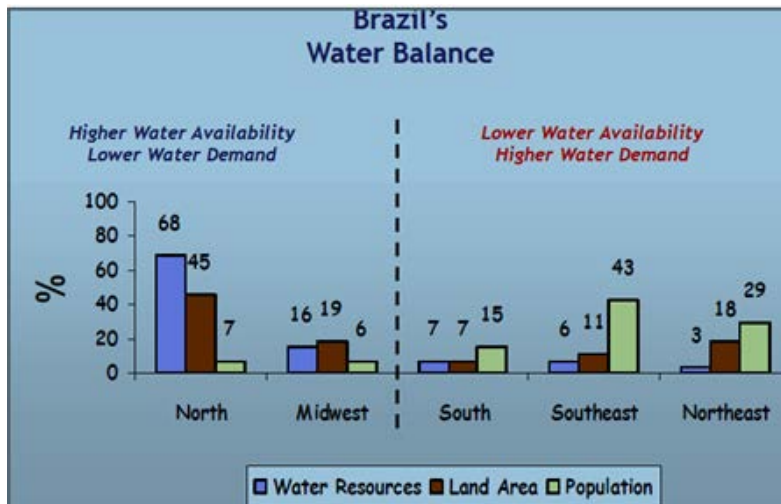
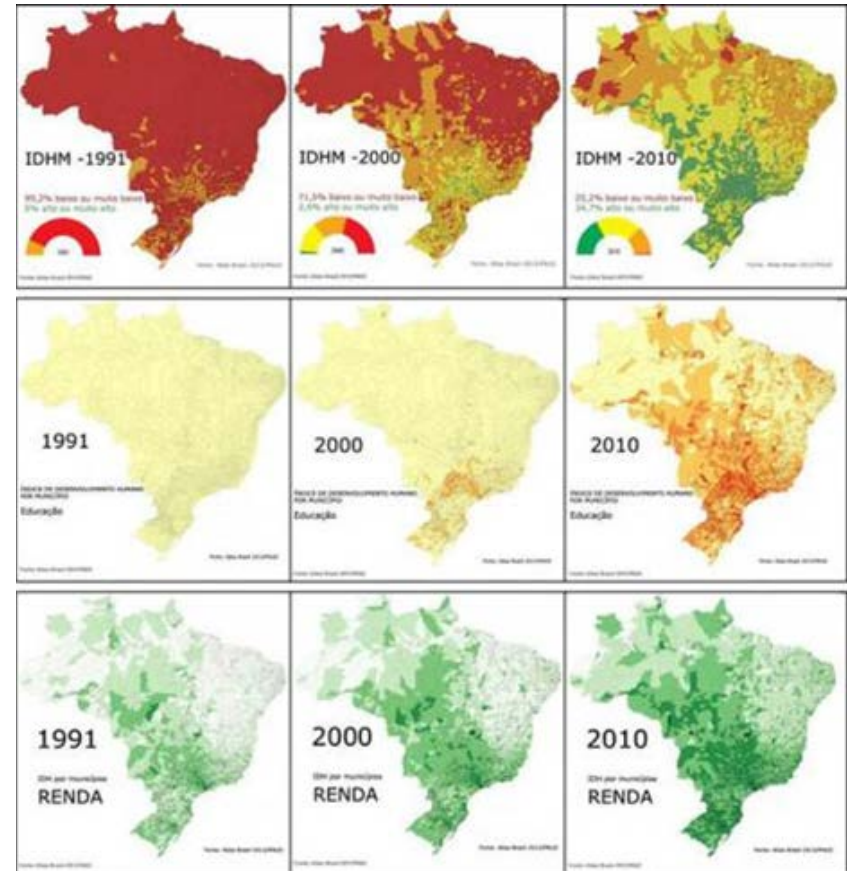


Irrigated agriculture in Brazil – 5% of the cropland, 16% of the production, 35% of the output. Great potential for expansion.

Country Context: Different realities

13

- ✓ Widely different realities at the national, regional and local levels
 - ✓ Disparities in Development indicators are being reduced, but remains very high
- ✓ Disparities also regards water balance



Country Context

14

- ✓ **Federative Republic**
 - ✓ Since republican proclamation of 1889 and constitution of 1891
 - ✓ Many constitutions since 1891 (d), 1934 (d), 1937(a), 1946(d), 1967(a) and
 - ✓ Constitution of 1988 (d)
- ✓ **Highly decentralized country**
 - ✓ Continued process → Centrifuge federation
 - ✓ Unitarian State from Imperial to first Republican periods
 - ✓ Devolution of powers from early 20th century, consolidated in the 1988 constitution (democratization)
 - ✓ 26 states, 1 Federal District and 5,570 municipalities
 - ✓ Municipalities and states share the same administrative autonomy, with no subordination
 - ✓ Complex distribution of jurisdictional responsibility

Country Context

15

- ✓ Fiscal/taxation distribution and transfers shows consolidation of the federation
- ✓ However, still high level of tax/revenues concentration at central level
 - ✓ Central government responds for 69% of the total taxation, while municipalities for 6%
 - ✓ Central governments responds for 58% of the revenues, while municipalities for 18%
 - ✓ States share 25% and 24% respectively
- ✓ Since Constitution of 1988:
 - ✓ States are the main loser on taxation
 - ✓ Municipalities are the main winners on revenues, to cope with decentralization of public services

EVOLUÇÃO DA DIVISÃO FEDERATIVA DA RECEITA TRIBUTÁRIA POR NÍVEL DE GOVERNO (conceito contas nacionais)									
Conceito	Central	Estadual	Local	Total	Central	Estadual	Local	Total	
	Carga - % do PIB				Composição - % do Total				
ARRECADAÇÃO DIRETA									
1960	11,14	5,45	0,82	17,41	64,0	31,3	4,7	100,0	
1970	17,33	7,95	0,70	25,98	66,7	30,6	2,7	100,0	
1980	18,31	5,31	0,90	24,52	74,7	21,6	3,7	100,0	
1988	16,08	5,74	0,61	22,43	71,7	25,6	2,7	100,0	
2000	20,77	8,61	1,77	31,15	66,7	27,6	5,7	100,0	
2012	25,03	9,27	2,08	36,39	68,8	25,5	5,7	100,0	
RECEITA DISPONÍVEL									
1960	10,37	5,94	1,11	17,41	59,5	34,1	6,4	100,0	
1970	15,79	7,59	2,60	25,98	60,8	29,2	10,0	100,0	
1980	16,71	5,70	2,10	24,52	68,2	23,3	8,6	100,0	
1988	13,48	5,97	2,98	22,43	60,1	26,6	13,3	100,0	
2000	17,38	8,19	5,58	31,15	55,8	26,3	17,9	100,0	
2012	20,97	8,86	6,56	36,39	57,6	24,4	18,0	100,0	

Fonte: Elaboração própria, a partir de STN, SRF, IBGE, Ministério da Previdência, CEF, Confaz e Balanços Municipais.
Metodologia das contas nacionais inclui impostos, taxas e contribuições, inclusive CPMF, FGTS e royalties, bem assim dívida ativa.
Receita Disponível = arrecadação própria mais e/ou menos repartição constitucional de receitas tributárias e outros repasses compulsórios.

Evolution of tax collection and revenues among tiers of government in Brazil.

Country Context –

Key federative jurisdiction on water

16

- ✓ Water rights
 - ✓ Union – federal (interstate) and trans-boundary rivers
 - ✓ States – inner state rivers, groundwater
- ✓ Water legislation
 - ✓ Union has exclusive right to legislate on Water → National WRM Policy of 1997
 - ✓ Basic Principles → Integrated WRM at river basin level
 - ✓ Decentralized, Participative and Integrated model
 - ✓ States can set laws following federal legislation

Summary of main responsibilities in WRM and WSS in Brazil

JURISDICTION	WRM				
	POLICY	PLANNING	REGULATION	FINANCING	SERVICES PROVISION
FEDERAL	main			main	
STATES					
MUNICIPAL					
JURISDICTION	WSS				
	POLICY	PLANNING	REGULATION	FINANCING	SERVICES PROVISION
FEDERAL				main	
STATES					main
MUNICIPAL	main	main	main		

Country Context – Jurisdiction on Water Supply and Sanitation

17

✓ Union

- ✓ Set National Guidelines → 2007
- ✓ Set National Health and Environmental Standards
- ✓ Support Services Development → Financing
 - ✓ Federal funds are the main source to finance expansion,
 - ✓ Mainly through loans from development banks
 - ✓ But also subventions from federal budget

✓ Municipal

- ✓ Has primary jurisdiction on service provision (granting/conceding power) of local services
- ✓ Issues legislation, detailing national rules at local level
- ✓ Defines service provision model
- ✓ Regulates local service provision → sets tariffs and subsidies

Country Context – Jurisdiction on Water Supply and Sanitation

18

✓ States

- ✓ Legislate on metropolitan regions and on common (shared) services
- ✓ Have secondary jurisdiction on service provision of regional (common interest services, such as metro regions) → can define service provision model in agreement with municipalities
- ✓ Set state legislation, detailing national rules at state level
- ✓ Regulate service provision of state's services and of municipal services by voluntary delegation from municipalities → set tariffs and subsidies

Thank You!

19

