

# MUNICIPAL SANITATION PLANS IN BRAZIL: ANALYSIS OF PLANS AND RECOMMENDATIONS TO IMPROVE PLANNING SANITATION IN BRAZIL

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# AGENDA

- Introduction
- Goals
- Methodology
- Results
- Conclusions & Recommendations
- References

# 1. INTRODUCTION: SANITATION IN BRAZIL

- Inequality and deficit on services
- Punctual actions: usually investments are not linked or planned
- Basic Sanitation in Brazil



# 1. INTRODUCTION: SANITATION ACT

- Nacional guideline for sanitation in Brazil
- It require all cities to develop and implement a **Municipal Sanitation Plan (MSP)** and Municipal Sanitation Policy
- MSP must include the four sectors, follow a set of requirements, and follow some principles
- It is an important and useful document to manage and develop the sanitation services
- Opportunity to join technical decisions and economical and social viability on sanitation services

# 1. INTRODUCTION: MSP CHALLENGES

- Most Brazilian cities are inexperienced in planning sanitation
- The City Administration does not have enough human resources to work on
- The cities tend to hire a consulting company or a service provider to write the MSP
- Results: weak plans

How to help the cities?

## 2. GOALS

- Objective is to analyze selected plans in order to:
  - to identify best practices, and
  - To do recommendations about how to prepare sanitation plans.



# 3. METHODOLOGY

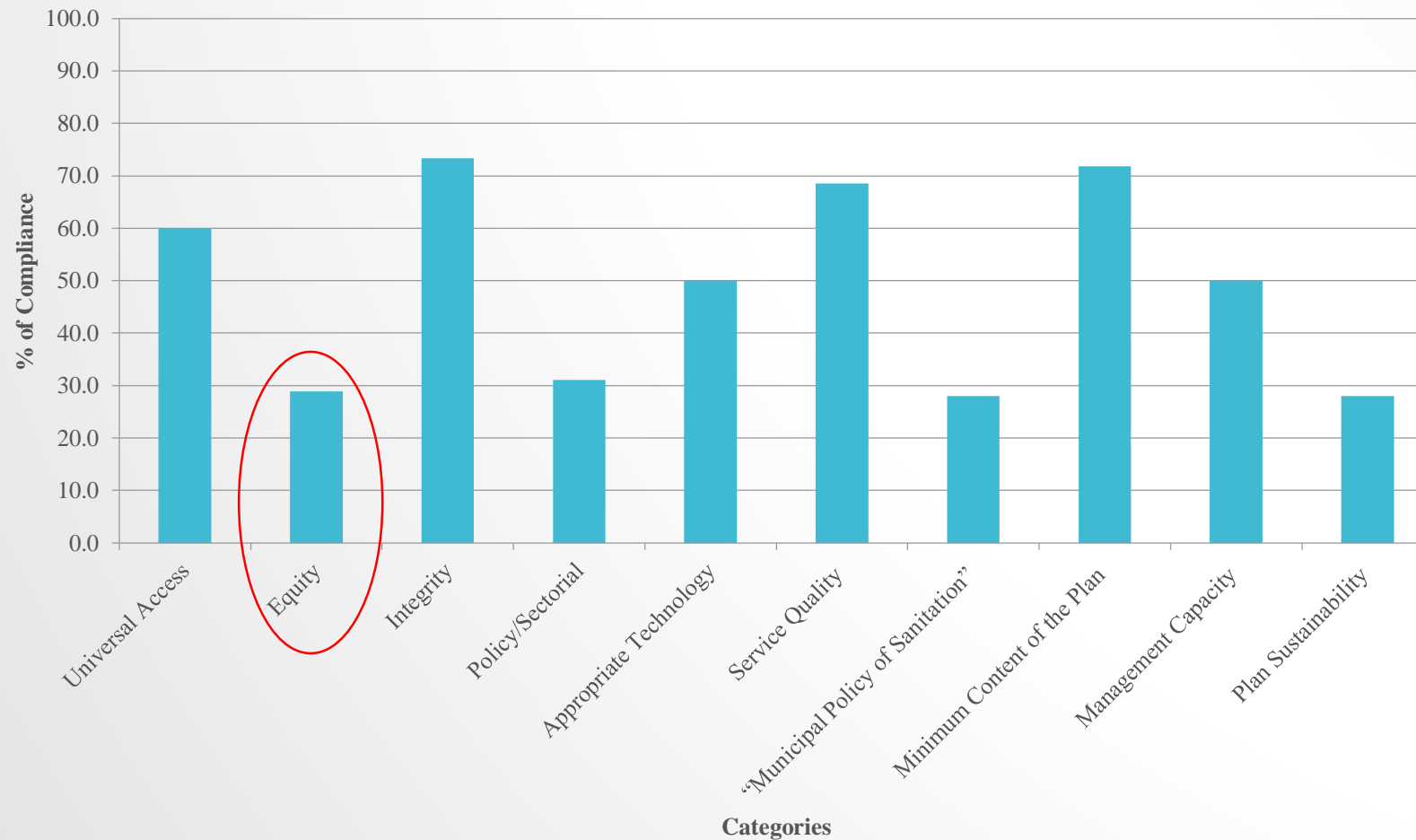
- Check list based on Pereira(2012) and Law requirements:
  - **Properties Categories:** Universal Access, Equity, Policy/Sectorial/Service Quality, Appropriate Technology, Service Quality, Document “Municipal Policy of Sanitation”, Minimum Content of the Plan, Management Capacity, Plan Sustainability;
  - **Sector Categories:** Drinking Water, Sewage, Urban Drainage, and Urban Waste Management.

**Table 1 – Category Universal Access (Pereira, 2012, p. 72, adapted)**

ANALYSIS CATEGORY	DESCRIPTION	COMPLIANCE CATEGORY
Universal Access		Compliance = C Non-Compliance = NC Partial Compliance = PC
Principle or objective	Did the universalization described as essential to the city planning? Either as an objective or a principle in the Plan?	
Solution	Did the Plan taken into account the alternative forms of dealing with sanitation issues, as the ones already used by the population that currently did not have access to the sanitary services?	

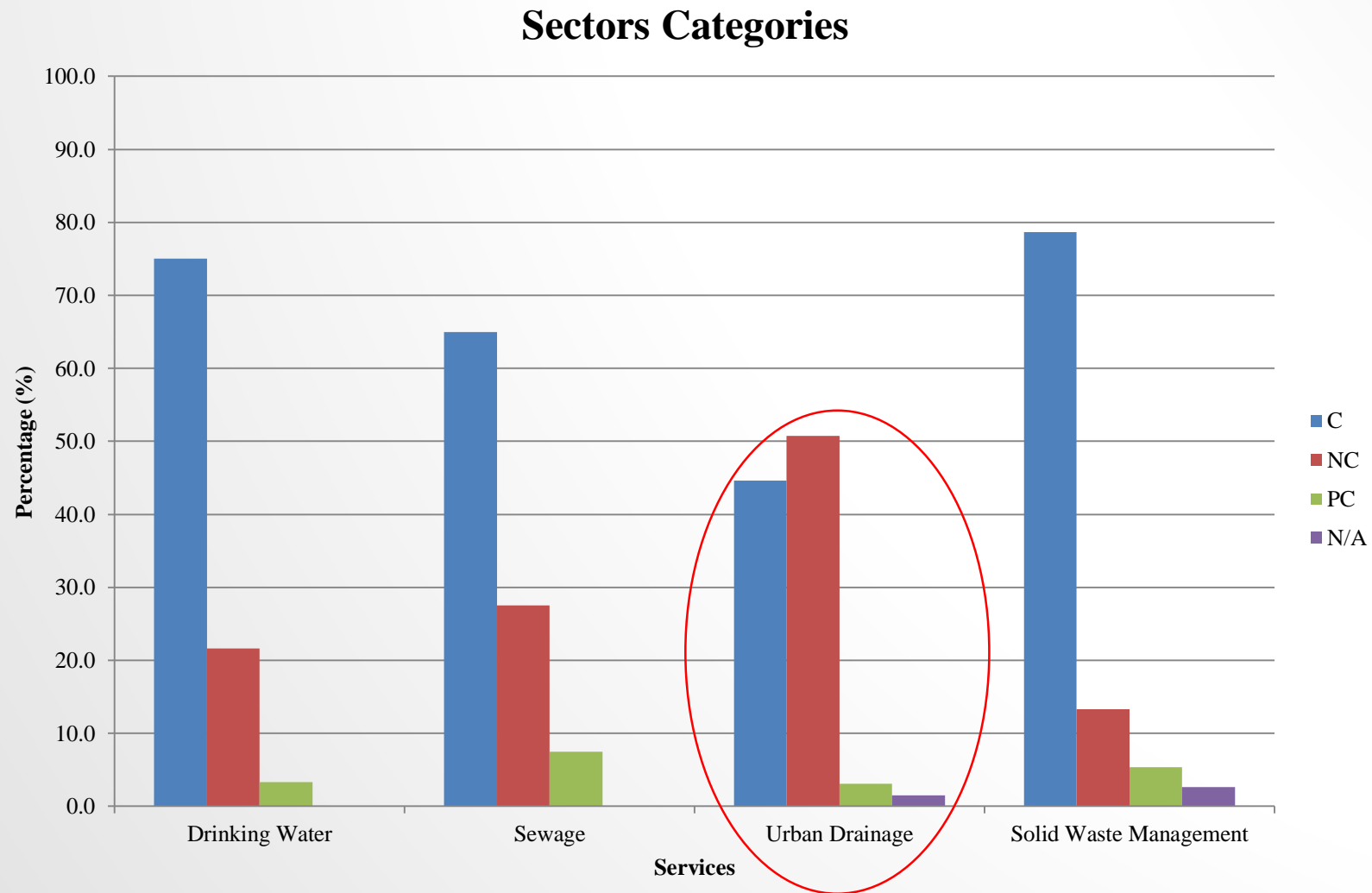
# 4. RESULTS

## Compliance for Properties Categories





# 4. RESULTS



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- Main problems identified:
  - Concepts as Universal Access and Equity just stated, but no incorporated throughout the plan;
  - Information about participation not provided;
  - MSP not linked with other sectorial plans or actions;
  - No data about possible causes of disability;
  - Little information about the system, and sometimes basic data (production, composition of solid waste, data about the system) is not provided.

# 5. CONCLUSIONS & RECOMMENDATIONS

Properties Categories	Recommendations
Universal Access	Provide detailed information to identify who still does not have access to the services and how to achieve universal access.
Minimum Content	Establish Instance Collegiate, Participation and Indicators and provide the information on the MSP.
“Municipal Policy of Sanitation”	Establish and create Information System, Municipal Sanitation Fund and Democratic Control during the Plan, and show it in the MSP.
Equity	Present social characteristics of the population without access to services to priory investments.
Appropriate Technology	Include technologies that help the system to be more efficient.
Plan Sustainability	Establish Civil Society participation and Collegiate Body during the Plan building/updating and show it clearly in the MSP.
Policy/Sectorial	Consider gender, race, and poverty on MSP (this can be linked with Universal Access and Equity topics). Also, always link and includes watershed plans in sanitation planning process.
Integrity	Reference, include, and link PMGIRS and MSP. If PMGIRS are not finished, explicit this situation.
Service Quality	Establish during the plan development watershed plan and Drainage Manual, if they do not exist. Provide detailed information about operational and maintenance conditions of all parts of the sanitation system.
	Establish a method to calculate effectiveness and efficiency calculate

# 5. CONCLUSIONS & RECOMMENDATIONS

Sector Categories	Recommendations
Drinking Water	Investigate where problems (e.g., losses, interruption on services) starts and why this happen. Make available on MSP.
Sewage	Make available data collected after treatment (parameters stated on CONAMA 357, e.g.). Investigate and show where problems occur (e.g., parameters that not meet law requirements).
Solid Waste Management	Provide data about description of solid waste generated (daily production, composition, treatment), destination of SWC and HSW. Link PMGIRS and MSP.
Urban Drainage	Infrastructure description, flooding information and control actions, macrodrainage and microdrainage description, maintenance and cleaning description. Elaborate Drainage Manual.

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**THANK YOU!**

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