



## MANAGEMENT OF PUBLIC RESOURCES: REGULATION PRACTICES FOR BASIC SANITATION IN THE MUNICIPALITY OF PORTO VELHO-RO

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### SUMMARY

This article analyzes the management and regulatory practices of basic sanitation in the municipality of Porto Velho, Rondônia, focusing on the application of public resources and the monitoring of the Municipal Basic Sanitation Plan (PMSB). The research seeks to identify the main failures and challenges in the administration and application of resources allocated to basic sanitation, in addition to understanding how regulatory practices are being implemented in the municipality. Through research and document analysis, it was observed that deficiencies in the monitoring of works and in monitoring compromise the effectiveness of the project. The objective is to verify whether the water supply, sewage collection and treatment, and solid waste management services are being conducted efficiently and sustainably, as provided for in the Municipal Basic Sanitation Plan (PMSB). The research also intends to describe the monitoring measures adopted, assessing whether they are ensuring the quality and universalization of these services for the population. Furthermore, the investigation seeks to reveal the obstacles faced in the implementation of these public policies, such as the lack of infrastructure and low sanitation coverage in urban and rural areas, to improve planning, monitoring and transparency in the management of public resources.

**Keywords:** Public management. Basic sanitation. Inspection. Porto Velho. Public policies.

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## ABSTRACT

This article analyzes the management and regulation practices of basic sanitation in the municipality of Porto Velho, Rondônia, focusing on the application of public resources and the inspection of the Municipal Basic Sanitation Plan (PMSB). The research seeks to identify the main flaws and challenges in the administration and application of resources allocated to basic sanitation, in addition to understanding how regulatory practices are being implemented in the municipality. Through research and documentary analysis, it was observed that deficiencies in monitoring works and inspection compromised the effectiveness of the project. The objective is to verify whether water supply, sewage collection and treatment and solid waste management services are being carried out in an efficient and sustainable manner, as provided for by the Municipal Basic Sanitation Plan (PMSB). The research also intends to describe the inspection measures adopted, evaluating whether they are guaranteeing the quality and universalization of these services for the population. Furthermore, the investigation seeks to reveal the obstacles faced in the implementation of these public policies, such as the lack of infrastructure, low sanitation coverage in urban and rural areas, to improve planning, monitoring and transparency in the management of public resources.

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## INTRODUCTION

Porto Velho, capital of the state of Rondônia, is a city with over 460 thousand inhabitants and only 41.8% have access to drinking water, 9.9% to sewage collection and only 1.7% of the sewage generated is treated (Trata Brasil, 2024). Marked by accelerated urbanization in recent years and significant challenges in the field of basic sanitation. Like many Brazilian municipalities, Porto Velho faces historical problems of precarious infrastructure. This directly affects the quality of life of the population, especially in peripheral and rural areas, since they have indicators that reveal the urgent need for improvements. Data from the National Sanitation Information System ([SNIS](#), 2022) point out that the municipality has not yet managed to universalize water and sewage services for the entire population, a common reality in the North and Northeast regions of Brazil.

Complementary Law No. 909, of July 7, 2022, establishes the Municipal Basic Sanitation System in Porto Velho, which coordinates sanitation policies and actions in the municipality, through institutional agents that act cooperatively. The law also creates the Municipal Basic Sanitation Council, with a consultative, deliberative and normative nature, guaranteeing the equal participation of representatives of civil society and the government in the planning and evaluation of public policies. In addition, the law establishes the Municipal Basic Sanitation Fund to enable actions in the sector, in accordance with the principles of Federal Law No. 11,445/2007.

The Work Plan for the Municipal Plan for Basic Sanitation and Integrated Solid Waste Management of Porto Velho is a strategic document, prepared with technical support from the Brazilian Institute of Municipal Administration (IBAM), which guides the planning and execution of sanitation actions in the municipality, in accordance with legal guidelines. The plan is structured in three phases: planning, with the formation of technical groups and social mobilization; execution, with a detailed diagnosis of sanitation and solid waste services and the preparation of a prognosis with alternatives for improvements; and approval, where the proposals will be consolidated in a draft bill, discussed in public hearings.

Therefore, its main objectives are the universalization of sanitation services, the improvement of the population's quality of life and the creation of continuous evaluation mechanisms to ensure the effectiveness of the actions. It adopts a participatory approach, integrating civil society and related public policies. In addition, the

The document highlights the importance of governance, transparency and social control, ensuring that the community actively participates in the formulation, execution and monitoring of proposals.

It is a fact that the development of sanitation is essential to maintain an ecologically balanced environment and to ensure human dignity. The sustainable management of non-renewable natural resources, however, demands the active participation of various social actors in all stages of decision-making. To this end, effective public regulatory and monitoring policies are needed, which are not limited to the implementation of projects, but which ensure continuous monitoring until the problems are fully resolved. Barbosa (2010) emphasizes that, in areas of poverty, sanitation management must include institutional arrangements that aim to universalize services in irregular locations.

Furthermore, monitoring and evaluation are crucial to verify whether sanitation services are being provided efficiently and sustainably. This involves not only analyzing the coverage and quality of services, but also considering environmental and social aspects, ensuring that the solutions adopted are viable in the long term and do not cause harm to the environment. Sustainable sanitation management is a collective responsibility that requires the participation of various stakeholders, including civil society and the private sector.

Monitoring is another vital component of this process. Describing the monitoring measures adopted allows us to assess whether they are ensuring the quality and universalization of sanitation services for the population. The lack of adequate monitoring can result in misuse of resources, poor quality services and lack of access to essential services, especially in the most vulnerable areas of the city. Thus, a robust monitoring system, which includes the participation of civil society, can act as a mechanism for social control, promoting greater transparency and accountability in the management of resources.

This survey is crucial to verify which inspection measures are being carried out for the completion and delivery of the basic sanitation project in Porto Velho/Rondônia with the aim of ratifying the importance of this service in light of all the problems that its absence brings. Regarding the relevance of the research on basic sanitation in the municipality, it is important in several spheres. In the field academic, it contributes to the advancement of knowledge about public management and

sanitation. On a personal level, it offers researchers the opportunity to develop valuable skills and contribute to an important social cause. On a social level, research can have a direct impact on improving the population's quality of life, preserving the environment and reducing inequalities, in addition to strengthening public policies aimed at basic sanitation.

## **1 Process of Formulating the Municipal Basic Sanitation Plan (PMSB)**

Basic sanitation comprises a set of essential services for the promotion of public health and quality of life, including the supply of drinking water, sewage, solid waste management and rainwater management. According to Heller (2007), sanitation is one of the fundamental pillars for sustainable development, since its absence contributes to the proliferation of diseases, environmental degradation and the perpetuation of social inequalities. The universalization of these services is highlighted as one of the main goals for the promotion of social justice and human well-being, as outlined in the guidelines of Federal Law 11.445/2007, which establishes the principles for the organization and provision of these services in Brazil.

However, the Municipal Basic Sanitation Plan (PMSB) is an essential tool for organizing the provision of sanitation services in municipalities, ensuring that everyone has access to drinking water, sewage, solid waste management and rainwater management in an efficient manner. Created by Law 11.445/2007, the PMSB aims to diagnose local needs and establish goals to improve these services, promoting social inclusion and environmental sustainability. The plan must be prepared with the participation of the population and reviewed periodically, ensuring that actions and investments are aligned with urban growth and community demands, helping to reduce inequalities and improve living conditions.

Basic sanitation in Porto Velho, Rondônia, is regulated mainly by Federal Law No. 11,445/2007, which establishes national guidelines for basic sanitation, and by the Legal Framework for Sanitation, Law No. 14,026/2020, which aims to expand access to water and sewage services, ensuring universalization by 2033. The municipality also relies on Complementary Law No. 622/2016, which approves the Municipal Basic Sanitation Plan (PMSB), an instrument that organizes the provision of water supply, sewage, solid waste management and urban drainage services. The PMSB of

Porto Velho was developed

based on technical diagnosis and popular participation, setting goals for universalization of services, improvement of quality and environmental sustainability. In addition, the plan is periodically reviewed, in accordance with the requirements of the legislation, to ensure that sanitation actions are aligned with urban growth and the demands of the population, promoting social inclusion and the reduction of regional inequalities.

According to the review of the Municipal Basic Sanitation Plan (PMSB) of Porto Velho, the reasons for its update took into account several relevant aspects. In 2020, the Multi-Year Plan (PPA) in force made it difficult to apply resources earmarked for sanitation, making it necessary to reschedule goals and deadlines. The COVID-19 pandemic resulted in budget contingency for health actions, hampering sanitation initiatives. In addition, remote work affected the workforce available for maintenance of storm drainage services. The PMSB provided for the creation of a municipal department or public company to manage sanitation services, but this measure was postponed due to efforts to combat the pandemic. Other actions, such as the publication of the Municipal Sanitation Policy and the creation of a regulatory entity, were also compromised. There were no new studies for the Diagnosis and Prognosis of sanitation, since there were no significant changes in the socioeconomic framework, population base or urban infrastructure.

However, Porto Velho is the worst city in Brazil in terms of basic sanitation, according to a study by the Trata Brasil Institute. Only 9.89% of the population has access to sewage treatment, and more than half of the residents live without treated water. The city fell two positions compared to the previous year, ranking 100th. Sewage treatment is alarmingly low, with only 1.71% of sewage treated, and water distribution shows losses of 77.32%. The average annual investment in sanitation is R\$37.47 per inhabitant, well below what is needed for universalization of services, which should be achieved by 2033. The city has faced persistent challenges in sanitation for almost a decade, with sewage collection increasing only 4.73% in one year. The Water and Sewage Company of Rondônia (CAERD) recognizes the situation and reports that it is investing in improvements, including a R\$200 million project to expand the water supply.

## 2 Monitoring and Evaluation

The importance of monitoring and evaluation in the management of basic sanitation is unquestionable, especially in contexts where public resources are limited and the population's demands are growing. In Porto Velho, the effectiveness of these tools becomes essential to identify flaws and challenges in the administration and application of resources allocated to this vital sector. Through rigorous monitoring, it is possible to map inefficiencies in the allocation of funds, allowing managers to recognize where investments are being misdirected or where infrastructure is inadequate.

One of the main objectives of monitoring is to understand how sanitation regulatory practices are being implemented in the municipality. This includes assessing the effectiveness of the standards and procedures that govern the provision of water supply, sewage collection and treatment, and solid waste management services. Inadequate regulation can lead to poor provision of these services, compromising public health and the quality of life of the population. Therefore, ongoing analysis of regulatory practices is essential to ensure that services meet established standards and the needs of the community.

Furthermore, monitoring and evaluation are crucial to verify whether sanitation services are being provided efficiently and sustainably. This involves not only analyzing the coverage and quality of services, but also considering environmental and social aspects, ensuring that the solutions adopted are viable in the long term and do not cause harm to the environment. Sustainable sanitation management is a collective responsibility that requires the participation of various stakeholders, including government, civil society and the private sector.

Monitoring is another vital component of this process. Describing the monitoring measures adopted allows us to assess whether they are ensuring the quality and universalization of sanitation services for the population. The lack of adequate monitoring can result in misuse of resources, poor quality services and lack of access to essential services, especially in the most vulnerable areas of the city. Thus, a robust monitoring system, which includes the participation of civil society, can act as a mechanism for social control, promoting greater transparency and accountability in the management of resources.

In short, monitoring and evaluation in the basic sanitation sector in the municipality are fundamental tools for identifying failures and challenges in the management of public resources. Through understanding regulatory practices and verifying the

By ensuring the efficiency of the services provided, it is possible to ensure that the population has access to quality services. The implementation of effective monitoring measures not only ensures compliance with standards, but also strengthens the community's trust in the institutions responsible for sanitation. Therefore, investing in monitoring and evaluation is essential to promote sustainable improvements and guarantee the dignity and health of the population of Porto Velho.

### 3 Elements of Monitoring and Evaluation

Monitoring and evaluation elements play a central role in the success of any project or plan, especially in the context of the Municipal Basic Sanitation Plan (PMSB). These tools allow for close monitoring of the implementation of planned actions, evaluation of results and ensuring that the established goals are achieved in an efficient and sustainable manner.

The first essential element is performance indicators, which provide clear metrics to measure the progress of actions. These indicators can range from the coverage of sanitation services to the quality and sustainability of the processes involved. For example, one performance indicator may measure the percentage of the population served with treated water, while another may assess the quality of the water provided. These indicators are crucial to verifying whether the PMSB goals are being met and whether the services are promoting improvements in the health and quality of life of the population.

The second important element is data collection, which feeds the indicators and allows for continuous monitoring. Accurate and up-to-date data are the basis for analyzing the effectiveness of the actions implemented. Without reliable data, the assessment of progress becomes inaccurate, making it difficult to make decisions and correct possible failures. This data can be collected through field surveys, automated monitoring systems, and surveys of the population.

In addition, information systems also play a role fundamental in integrating and organizing this data. They facilitate analysis and provide detailed reports on the status of plan implementation. Tools such as the National Sanitation Information System (SNIS, 1996) are widely used in Brazil to monitor sanitation services and provide a comprehensive view of the progress achieved.



Therefore, setting clear goals and deadlines is essential to ensure that monitoring and evaluation occur in an orderly manner. Goals provide a measurable objective to be achieved, while deadlines establish a timeline for completing actions. Based on this planning, managers can assess whether resources are being allocated efficiently and whether activities are being carried out within the expected time.

Another key aspect of the monitoring and evaluation process is social participation, which ensures social control over the implementation of the plan. By actively participating through sanitation councils and public hearings, society contributes to monitoring actions and demands improvements and adjustments, ensuring that the population's demands are met.

In other words, impact assessment is another relevant element, as it focuses on the long-term results of the actions implemented. It allows us to analyze not only whether the goals were achieved, but also whether the plan generated the expected effects on public health and the population's quality of life. For example, it is possible to evaluate the reduction in the incidence of diseases related to the lack of sanitation, such as diarrhea and waterborne diseases.

Furthermore, a well-structured PMSB should include a corrective action plan to be activated if the results are not satisfactory. Based on the information collected during monitoring, managers can identify flaws or areas that need adjustments, proposing actions to realign the plan and ensure that the goals are met. In addition, periodic review of the plan, based on the assessments made, allows it to be updated according to the needs of the municipality. Likewise, the monitoring and evaluation elements are essential to guarantee the effectiveness and sustainability of a plan. By implementing indicators, information systems, clear goals, social participation and impact assessments, administrators can ensure that sanitation actions are successful, promoting the improvement of public health and environmental preservation.

#### **4 Transparency and Accountability**

Transparency and accountability in public management are fundamental pillars to ensure good governance and society's trust in institutions. In Brazil, the Access to Information Law (LAI), established by Law No. 12,527/2011, ensures that any

citizens have the right to access information about public administration, promoting transparency in government actions, including the management of resources allocated to basic sanitation.

The Transparency Portal, created by the federal government, provides data on budget execution, allowing the population to monitor how public resources are used. At the state and municipal levels, the Fiscal Responsibility Laws (LRF), established by Complementary Law No. 101/2000, require public managers to submit fiscal management reports, ensuring responsibility in the application of resources.

Furthermore, the supervision of basic sanitation services in Porto Velho is not the direct responsibility of the Municipal Basic Sanitation Plan (PMSB), but rather of competent agencies. Among the main ones are the Rondônia Public Services Regulatory Agency (AGERO), which regulates the quality and efficiency of services; environmental agencies, such as Sedam, which monitor environmental impacts; the Court of Auditors (TCE-RO), which oversees the use of public resources; and the Public Prosecutor's Office (MP-RO), which ensures compliance with the laws. In addition, the population also plays an important role in social control, monitoring and demanding the execution of services.

The main challenge for public management of basic sanitation in Porto Velho is to reconcile the need for large investments with the reality of an often limited public budget. Seeking resources from federal programs, such as the National Basic Sanitation Fund (FNSB), and participating in international cooperation initiatives are important ways to overcome these financial barriers. In addition, local public management needs to improve coordination between the different levels of government (municipal, state and federal) to effectively implement sanitation policies. The lack of continuity between municipal administrations is also an obstacle, as projects are often interrupted or abandoned before they are completed.

## 5 METHODOLOGY

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The qualitative methodology was chosen to provide an in-depth understanding of topics related to basic sanitation in Porto Velho, with the aim of identifying the current situation and failures in public management, in addition to the precariousness of the infrastructure.

local. To this end, data was collected on sanitation conditions in the State of Rondônia. According to Maximiano (2000, p. 115), “efficiency performs tasks intelligently, with minimum effort and with the best possible use of resources”, highlighting that the research seeks to understand the quality of life and the economic and social development of the State through an exploratory model. The technical procedures included data collection, analysis and interpretation, in addition to writing and presenting the results (CRESWELL, 2010). The research is considered descriptive, as it reveals characteristics of basic sanitation in Porto Velho and establishes correlations between variables related to the management of public policies (VERGARA, 2000, p. 47).

The primary data were collected through bibliographic research, which consists of surveying and documenting the literature already published on the subject, providing the researcher with direct contact with relevant materials (LAKATOS; MARCONI, 1996, p. 57). With this data, it was possible to conduct a study on the current and future scenario of basic sanitation in the city, identifying public policy actions aimed at the sustainable development of the community, including shared values, decentralization and sectoral planning.

The data will be tabulated using Excel software, and the analysis will be performed using content analysis techniques, which provide a comprehensive understanding of the basic sanitation infrastructure in the municipality. This process of analysis and interpretation will allow the manager to develop appropriate planning, both in the short and long term, aiming at the continuous expansion of sanitation services. Content analysis involves a set of techniques that systematically describe the content of the messages, generating indicators that make it possible to infer knowledge about the conditions of production and reception of this information (BARDIN, 2004).

## 6 RESULTS AND DISCUSSIONS OR DATA ANALYSIS

The analysis of the results on the management of public resources and the regulatory practices of basic sanitation in Porto Velho, Rondônia, reveals a challenging panorama, characterized by historical and structural problems that directly affect the quality of life of the population. The lack of universalization of water, sewage and solid waste treatment services is one of the main obstacles faced by the city, and these challenges are aggravated by the deficiency in the allocation and monitoring of public resources destined for the sector.

The data collected indicate that, despite the existence of the Municipal Basic Sanitation Plan (PMSB) and federal legislation that ensures the right to sanitation, there is a clear gap between the normative provisions and practice. One of the problems identified is the ineffectiveness in implementing public policies, often due to a lack of long-term planning, inadequate investments and difficulties in coordination between different spheres of government. This reality is reflected in the precariousness of the infrastructure in peripheral and rural areas, where the coverage of sanitation services is extremely limited.

The analysis of regulatory practices in the municipality also revealed that, although there are legal mechanisms to control and monitor sanitation services, these mechanisms are not sufficiently effective to ensure the provision of quality services. Public management failures, especially in the monitoring and evaluation of sanitation projects, compromise the achievement of the goals established in the PMSB and the efficient use of public resources. Poor monitoring makes it difficult to identify and correct failures during project implementation, resulting in incomplete or low-quality services.

Another aspect observed was the low social participation in the regulatory process. Although there are councils and mechanisms for social control, the population's participation in discussions on sanitation is still limited. This prevents the community's demands from being adequately represented and met, and weakens social control over the allocation and management of public resources.

On the other hand, the analysis also identified opportunities for improvement. The implementation of more robust and efficient information systems that integrate data on the provision of services and the use of resources could contribute to more effective management. In addition, strengthening instances of social participation and promoting greater transparency in the actions of public authorities are essential to increase public confidence and ensure that resources are directed efficiently.

The results of the analysis indicate that basic sanitation in Porto Velho faces significant challenges related to the management of public resources and regulation. However, there is room for improvement through more integrated, transparent and participatory management, which can guarantee the sustainable and quality expansion of sanitation services, ensuring compliance with constitutional rights and the dignity of the population.

The Access to Information Law (LAI) and the Transparency Portal are instruments that can be used to ensure that the population has access to information on budget execution and the quality of services provided, guaranteeing transparency in the management of resources.

## 7 FINAL CONSIDERATIONS

The analysis of the situation of basic sanitation in Porto Velho reveals an alarming scenario that requires urgent and effective action. Current legislation and strategic planning offer a path, but the successful implementation of these policies depends on the effectiveness of oversight and monitoring. Furthermore, the participation of civil society, combined with adequate investments, is crucial to overcome historical challenges and guarantee the right to water and sanitation for all. Research on basic sanitation, therefore, not only contributes to the advancement of academic knowledge, but also

It also has a direct social impact, promoting improvements in the population's quality of life and strengthening public policies.

There is much debate about the precariousness or lack of basic sanitation, which has serious impacts on both public health and the environment. However, this problem has political and social roots, demonstrating that it is not just a technical issue, but rather a structural inequalities that affect, above all, the most vulnerable populations. The lack of access to treated water, sewage and garbage collection affects millions of Brazilians, highlighting the challenge of guaranteeing fundamental rights such as health and quality of life.

It is a fact that sanitation infrastructure should be seen as a matter of social justice and economic development, since its adequate planning contributes to disease prevention and environmental preservation. However, despite advances in the concept of environmental sanitation, the implementation of these services still faces obstacles, especially related to universalization and the effective implementation of legislation, such as Law 11,445/2007, which seeks to guarantee broad access to sanitation services.

Finally, basic sanitation policies must be continuous and treated as a priority of the State, not just as initiatives of temporary governments. The lack of continuity in public policies causes stagnation and perpetuation of social and environmental inequalities, widening the gap between the richest and poorest populations. Therefore, ensuring universal sanitation promotes equity, social justice and respect for the environment.

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