



## IMPLEMENTATION OF MUNICIPAL TAX FOR URBAN SOLID WASTE

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### ABSTRACT

The management of urban solid waste (MSW) is a growing challenge for Brazilian municipalities, especially in Mato Grosso do Sul, where regional characteristics require integrated and sustainable solutions. This study, developed through an agreement between the State University of Mato Grosso do Sul (UEMS) and the State Public Prosecutor's Office, offers a structured model for the creation and implementation of federal fees within the scope of the Public Service for Urban Solid Waste Management (SMRSU). The methodology involved a survey of operational data, costs associated with waste management and analysis of practical models, such as the co-billing of fees with water bills. In addition, the study included local examples, such as the municipality of Ponta Porã, which had low default rates when adopting this model. Tools and roadmaps from the Ministry of Regional Development (MDR) were used as technical support. The results indicate that the adoption of rates based on parameters such as water consumption and the income level of the population promotes economic and financial sustainability and social inclusion, by involving waste pickers' cooperatives and subsidizing low-income families. The proposed model was effective in reducing delinquencies and increasing the operational efficiency of services. However, implementation requires awareness and transparency campaigns to engage the public and legislators. It is concluded that the adoption of the model strengthens the sustainable management of MSW and promotes advances in the commitments to the Sustainable Development Goals (SDGs), such as reducing inequalities (SDG 10) and responsible production (SDG 12). This study stands out as an essential guide for managers seeking to overcome the challenges of waste management and improve the quality of life in their communities. Therefore, the objective of the study was to present a viable model for the implementation of tax rates for the SMRSU, promoting economic sustainability, social inclusion and legal compliance.

**Keywords:** Urban Solid Waste, Municipal Fees, Waste Management, Public Policies, Sustainable Development Goals.

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## INTRODUCTION

The management of urban solid waste (MSW) represents one of the biggest obstacles that Brazilian municipalities face, particularly in the face of the growing demands for sustainability and effectiveness in the use of public resources. This issue gains greater importance in Mato Grosso do Sul due to regional characteristics and the requirement of compliance with national guidelines, such as the New Sanitation Framework and the National Solid Waste Policy.

In view of these demands, the State University of Mato Grosso do Sul (UEMS) and the Public Prosecutor's Office of Mato Grosso do Sul (MPMS) signed a Technical and Scientific Cooperation Agreement. This agreement aims to unite for the realization of the project "Solid Waste Management with a Focus on Reverse Logistics and Environmental Education Policies and Guidelines". One of the objectives of the project is to offer a guide for municipal managers on the creation and implementation of municipal fees external to the Public Service for Urban Solid Waste Management (SMRSU). This process is essential to promote sustainability in solid waste management, aligning with the Sustainable Development Goals (SDGs), especially SDG 11 (Sustainable Cities and Communities) and SDG 12 (Responsible Consumption and Production).

This research, the result of the aforementioned Agreement, offers a structured and evidence-based methodology to support public managers in the implementation of charging systems for urban solid waste management services. The study proposes a model that combines economic and financial sustainability, social justice and legal compliance, ensuring that the population contributes equitably and that public services achieve operational effectiveness and have a positive impact on the environment.

The proposal is an invitation to reflect on the relevance of innovative public policies, which not only boost the financial policies of cities, but also reinforce commitments to sustainable development, in line with the Sustainable Development Goals (SDGs). This study aims to motivate managers and legislators to implement practical solutions that go beyond mere compliance with rules, converting challenges into chances to improve quality of life and environmental preservation.

## ECONOMIC AND FINANCIAL SUSTAINABILITY AND LEGAL REQUIREMENTS

The study highlights that the financial policy of the Public Service for Urban Solid Waste Management (SMRSU) is essential to ensure the continuity and quality of services. For this, it is necessary to institute a charge that is fair, proportional, and easy to understand. Current legislation, such as Law 14,026/2020 (New Sanitation Framework),



and technical standards, such as Reference Standard No. 1/ANA/2021, guide the definition of fees based on water consumption, the population's income level, and the proper disposal of waste. The approach respects the polluter-pays principle, in accordance with the National Solid Waste Policy (Law 12.305/2010). In addition, financial sustainability is a requirement for municipalities to have access to federal resources for sanitation, consolidating the management system as a public priority.

## **BILLING METHODOLOGY**

The study details the configurations for calculating the Required Revenue, which includes operating costs, investments, taxes and payments of waste pickers' cooperatives. Services considered divisible (such as waste collection and disposal) are the only ones subject to charge. The study presents practical models, such as co-billing with water metering, demonstrating low delinquency in this system, as evidenced by the municipality of Ponta Porã, where the index is less than 3%.

The adoption of appropriate methodologies promotes equity and efficiency without cost fees. Auxiliary tools, such as the Ministry of Regional Development (MDR) roadmaps, complement the process to facilitate the planning and execution of sustainable public policies.

## **LEGISLATIVE APPROVAL AND REGULATION**

The success of the implementation of the fee depends on the approval of municipal laws and political articulation with the city councils. The study emphasizes the importance of public awareness campaigns on the social and environmental benefits of tax collection. Transparency in the process is essential to gain the trust of the population and avoid conflicts. In addition, regulation must be conducted based on clear rules and well-defined contracts, ensuring low tariffs and social justice.

## **IMPACT ON SUSTAINABILITY AND REGIONAL DEVELOPMENT**

The implementation of municipal taxes in the context of Mato Grosso do Sul represents a significant advance towards achieving an integrated and sustainable management of urban solid waste. The state faces specific challenges, such as the lack of financial resources in many municipalities and the need to structure regional consortia to expand management capacity. The study suggests that the revenues obtained from the fees should be allocated not only to collection and final disposal, but also to environmental education programs and promotion of the circular economy, reinforcing commitments to the



SDGs.

An approach based on this study promotes social inclusion, highlighting the role of waste pickers' cooperatives and the guarantee of fare subsidies for low-income families. This strategy contributes to the sustainable management of solid waste, aligning with the global goals of reducing inequalities (SDG 10) and mitigating the environmental impacts caused by human activities (SDG 13).

## **CONCLUSION**

The present study is an indispensable tool for municipal managers, providing clear and practical guidelines to overcome the challenges in the implementation of solid waste rates. By integrating economic, environmental and social sustainability, the proposal ensures the continuity of essential services and reinforces the commitment to sustainable development. For Mato Grosso do Sul, a broad adoption of this policy can represent a milestone in the responsible management of urban solid waste, with long-term benefits for public health, the environment and the quality of life of the population.



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