

Adipura: Good Environmental Governance Perspective and Fiscal Challenges

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Abstract

The research emphasizes the effectiveness of Adipura as an instrument for monitoring the performance of local governments in waste management from the perspective of good environmental governance. Focus study on public participation and fiscal challenges. This is a qualitative research. The main data source from the National Waste Management Information System (NSWMIS) and in-depth interviews with central and local governments, members of the Adipura Advisory Board, and the communities. Also supported by secondary data relevant to the study. The purpose of research are to determine the extent of the effectiveness of Adipura and to analysis the factors that must be improved to increase its effectiveness. The results indicate that the placement of Adipura as an instrument for monitoring the performance of local waste management is appropriate, but still needs to be improved because the impact of Adipura has not been maximized in encouraging sustainable waste management in the region. It is necessary to recalculate the components and subcomponents of Adipura, by adding Non-Physical Components, increasing the portion of public participation and fiscal support for waste management.

Keywords: *Adipura, Waste Management, Local Government, Public Participation.*

INTRODUCTION

Adipura is an award for green and clean city programme by Ministry of Environment and Forestry (MoEF), since 1986. Currently, Adipura is established as an instrument to monitor the performance of local governments in waste management, as stated in Article 1 of the MoEF Regulation 76/2019 on Adipura.

The new paradigm of sustainable waste management is systematic and integrated waste management from upstream to downstream, including waste reduction and waste handling, and circular economy (Law Number 18/2008 on Solid Waste Management). The performance of local governments in waste management is always associated with Adipura. In 2023, waste reduction efforts only reached 16.18% of the 30% target, waste handling efforts only reached 50,68% of the 70% target, as much as 37,15% of waste has not been managed and 54,44% of Final Processing Sites are still managed by open dumping (NSWIS, 2024). This shows that the effectiveness of Adipura has not been optimal.

There is a lot of research on local government strategies to achieve Adipura. Unfortunately, there has been no research analyzing the effectiveness of Adipura in terms of substance, implementation mechanisms, and fiscal challenges of waste management. For this reason, this research intends aims to evaluate the effectiveness of Adipura as an instrument for monitoring local government performance from the perspective of Good Environmental Governance with a focus on public participation and the fiscal challenges. The research question is whether Adipura has been effective enough to encourage sustainable waste management in the region? If not, then what are the factors that cause it and what are the solutions to overcome these factors?

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LITERATURE REVIEW

Good Environmental Governance Perspective

Governance is a system that involves three major actors: the private sector, government and civil society. Therefore, governance means understanding how to integrate the roles of actors in an order based on mutual consensus (Mandasari, 2023). Epistemologically, GEG is implemented in 5 universal principles, namely: responsibility, accountability, fairness, independence, and transparency (Jefirston, 2022). The conception of good governance is a node for the creation of good state institution construction in all legislative, executive and judicial arguments (Wijoyo & Otoda, 2005). GEG focuses on the goal of understanding and managing the reciprocal relationship between ecosystems and social systems. This relationship must pay attention to the sustainability and preservation of the environment, especially natural resources, through the involvement of all community members (Mustagfiroh, 2020) and make environmental aspects the mainstream of development in Indonesia which equally carries out economic and social aspects (Purniawati et al., 2020). Good governance will influence and determine good environmental management. Without good governance, it is difficult to expect good environmental management (Purniawati et al., 2020). The elaboration of this can be seen in the General Elucidation of Law 32/2009 on Environmental Protection and Management.

Community participation in Adipura is not only limited to the existence of the community itself, but is expanded to the role of the community in terms of education and assistance in waste management through Waste Banks and others. Community participation is not only limited to submitting complaints, information or reporting, but is expanded in the Adipura supervision process through their involvement as Field Teams/Verifiers.

Budget Theory

The Incremental Budget Theory is that the current year's budget becomes the main basis for preparing the following year's budget. This means that the new budget is usually only slightly different from the previous budget, with incremental adjustments and a tendency for the budget to grow gradually.

Fiscal Decentralization Theory is closely related to government decentralization in the era of regional autonomy. Regional autonomy leads to the separation of fiscal functions between central and local governments and the division of budgets in accordance with the division of authority. This theory explains how expenditure responsibilities, revenues, and intergovernmental transfers are allocated at different levels of government. The analysis of the effectiveness of Adipura is examined using the Fiscal Decentralization Theory from the perspective of GEG. For this reason, the emphasis of the analysis is limited to: Regional Fiscal Capacity and Independence, Budget Allocation, Funding Innovation. An understanding of the Regional Fiscal Capacity and Independence is carried out to analyze the ability and allocation of regional finances and evaluate the impact of budget availability in waste management. The demand for Funding Innovation is carried out through exploring alternative sources of funding to meet the budget needs for waste management, including retribution and to increase Regional Original Revenue (ROR). And because of budget limitations, efficiency, fiscal transparency is the key to successful waste management and Adipura.

The limited waste management budget from the State Budget is one of the factors inhibiting the implementation of waste management in Indonesia. The waste management budget is still lacking because there are many needs in waste management, starting from the availability of waste management facilities and infrastructure to the availability of budgets for regions in Indonesia in terms of waste management, which cannot be fully met (Fadzoli & Waluyo, 2023). Limited State Budget support must be balanced with the provision of Regional Budget funds. The ability to fund local waste management can also be seen from Regional Fiscal Independence (RFI). RFI is the main

indicator in measuring the ability of local governments to finance their own activities without depending on external assistance, including from the central government (Putra et al., 2024). Regional Fiscal Capacity and Independence is known by calculating the ratio of ROR to total revenue or the ratio of transfer revenue to total revenue. Therefore, RFI reviews need to be carried out to map the condition of regional fiscal independence (Audit Board of Republic of Indonesia, 2020).

RESEARCH METHOD

1. It is a sociolegal research with a qualitative method and in-depth interview to central and local governments, communities, and waste management practitioners, such as: the Director General of Solid Waste Management, Hazardous Waste and Hazardous Substances Management MoEF, the Director of Waste Handling Management MoEF, the Director of Waste Reduction Management MoEF, and members of the Adipura Advisory Board. Also, and the communities. Primary data collection was also carried out by distributing questionnaires to all local governments to obtain local governments perspectives on Adipura.
2. Data Type: primary data on local waste management achievements in NSWIS, in-depth interview and questionnaires results.
3. Data Collection Techniques by accessing and downloading data contained in the NSWIS application, and conducting literature searches (NSWIS, 2024)
4. Data Validity Technique: The data validity technique in this study involves the process of validating the data contained in the NSWIS application. Each data went through a verification process by MoEF's NSWIS team.

FINDINGS AND DISCUSSION

Existing Condition of Indonesia's Waste Management

Waste has been a global problem for a very long time. In Indonesia, waste management has been carried out but has not been able to optimally overcome all existing waste generation. Waste management with the pattern of reuse, reduce and recycle (3R) is one of the best waste management concepts for now. This concept prioritizes handling waste directly from the source (households) with the sorting method (Nasihin, 2022).

The following presents data on Indonesia's waste reduction and waste handling achievements from 2017-2023 (NSWIS, 2024). The graph of waste reduction and handling shows a fairly optimistic trend because the size of the gap tends to decrease, meaning that waste management efforts are appropriate, but still require escalation so that the effectiveness of waste management can keep up with the increase in waste generation.

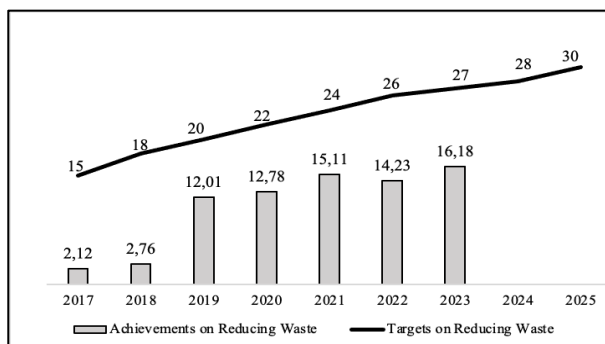


Figure 1. Waste Reduction Efforts

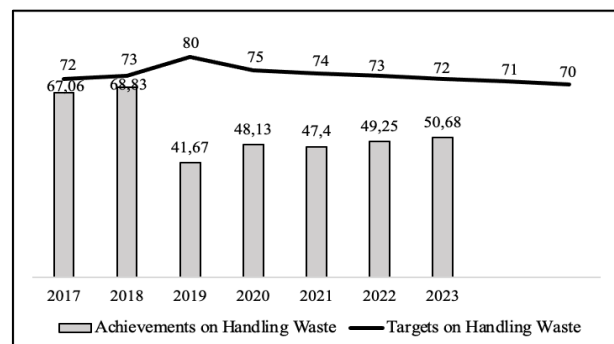


Figure 2. Waste Management Efforts

Adipura Program and Solid Waste Management Performance Index (SWMPI)

Adipura is an instrument to monitor local waste management performance. The achievements of Adipura 2017-2023 show that this program has only been able to encourage waste handling efforts, but has not been effective enough to encourage waste reduction efforts. This is most likely influenced by the Adipura assessment mechanism which apparently "only" emphasizes the Physical Component of waste management facilities (MoEF Regulation on Adipura). Meanwhile, the non-physical component of waste management is not a point of assessment or consideration. Non-physical components include: policies, programs/activities and budgeting for waste management, the quality of human resources responsible for the environment and waste management, infrastructure and public participation. This component is used to compile city/district profiles but is not part of the assessment calculation. As a result, regions are more busy beautifying their areas during the Adipura monitoring period. This has resulted in a skeptical view of Adipura by the public ([Akromy, 2022](#)).

MoEF calculates the Solid Waste Management Performance Index (SWMPI), incorporating governance and effectiveness & efficiency indices. The parameters measured include: Input (policy, human resources, infrastructure, budget), Process (socialization & understanding, acceptability & implementation), Output (achievement of targets & capacity, budget efficiency) and Outcome (clean city and impact of Water Quality Index). If associated with the Adipura Non-Physical Component, then SWMPI can be elaborated into an initial screening of Adipura assessment. The following figure shows the gap between SWMPI targets and achievements in 2020-2023 ([NSWIS, 2024](#)).

However, despite its shortcomings, it must be recognized that currently Adipura is the only instrument used to see the performance of local waste management. In order for waste management to achieve optimal results and to change this skewed view, it is necessary to reformulate Adipura so that its position as an instrument for monitoring the performance of local waste management becomes effective and recognized.

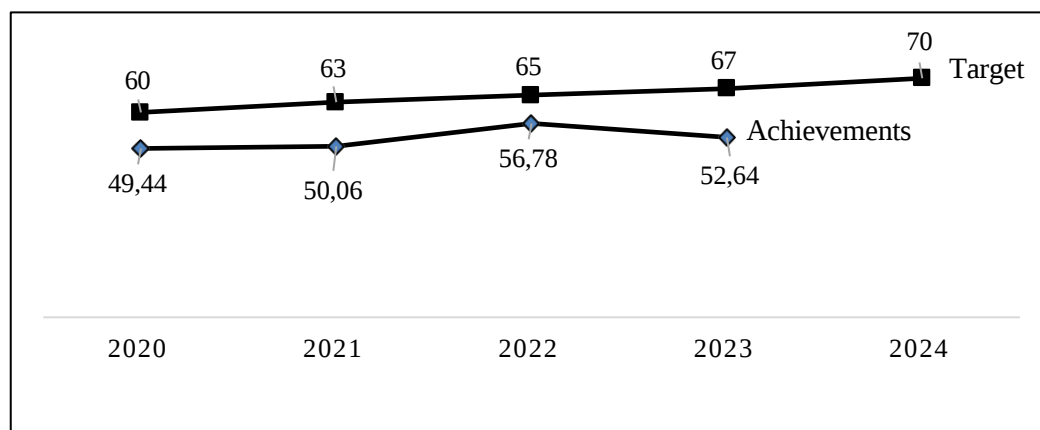


Figure 3. NSWMS Targets and Achievements

First Stage: review of Adipura components and indicators, by including non-physical components as part of the assessment. Based on the MoEF Regulation on Adipura, there are 2 (two) assessment components, namely waste management and Green Open Space management, which are detailed into 20 sub-components. The identification of non-physical sub-components emphasizes on local alignments towards waste management, which can be seen from the direction of local policies, the availability and percentage of the waste management (or environmental) budget, human resources and infrastructure and public participation. At the same time, a review of the Final Processing Site is carried out, which currently has the greatest poin. This is certainly not

in line with the waste management hierarchy, which sets waste management in landfills as the final step. The large portion of landfills is also not in line with the Zero Waste Zero Emission action plan for the Solid Domestic Waste Management Sector (waste), which requires that there will be no more new landfill construction by 2030.

This inconsistency in the positioning of landfill can lead to misunderstanding by local governments. With the greatest portion of landfill in the Adipura assessment, local governments will focus on waste management efforts at the landfill. This is certainly contrary to the spirit of sustainable waste management which encourages increased waste reduction efforts, to reduce the pressure of local governments on waste handling efforts. Another consideration is the very high operational costs of landfills.

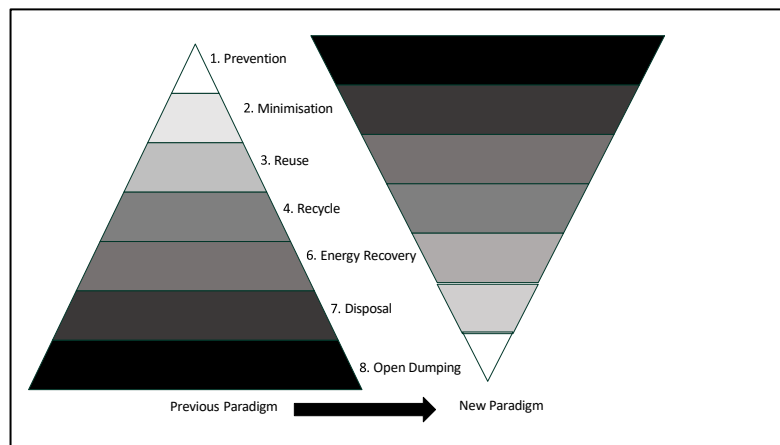


Figure 4. Waste Management Pyramid

Law No. 18/2008 outlines waste management through waste reduction efforts and waste handling efforts. Figure 4 shows the hierarchy of waste management from upstream to downstream, which consists of prevention, minimization, reuse, recycle, energy recovery, disposal and open dumping. Waste reduction efforts consist of prevention, minimization, reuse, recycle. Waste handling efforts energy recovery, disposal and open dumping. The previous pyramid gives a very small portion to prevention and gets bigger at the next level until the largest portion is in open dumping.

The new paradigm is described as an inverted pyramid, giving a very large portion to prevention and getting smaller at the next level until the smallest portion is in open dumping. In this principle, waste management in landfills is returned to its position, which occupies the lowest hierarchy (MoEF Directorate of Waste Management, 2020).

Second Stage is the establishment of the monitoring mechanism. It is necessary to separate the Field Team / Verifier, Database Team and Evaluator Team, to ensure the objectivity of the assessment. Team members may come from elements outside MoEF. The determination of team members is carried out through certification or Adipura technical guidance, with considerations: to maintain the quality of the team's human resources; to respond to the limited human resources and time efficiency of Adipura monitoring implementers at MoEF to maintain integrity and objectivity, views and assessments outside the government are needed.

Third Stage is the Evaluation and Reporting Process. Conducted regularly and systematically, through the NSWIS application. Periodically, the verification results are uploaded and can be monitored by all parties. By doing this, the region will be able to conduct a *self-assessment* of its waste management performance, make improvements and evaluate the existing conditions of waste management. If this stage goes accordingly, the next stage, namely monitoring

in the field, is more of a check and recheck.

Fiscal Challenges of Waste Management

Budget issues are closely related to the government's perspective on waste management. Article 12, Article 18, and Article 24 paragraph 5 of Law Number 23/2014 on Regional Government have placed environmental affairs, including waste management, into Mandatory Government Affairs that are not related to Basic Services. With this perspective, it is not surprising that the Local Budget for waste management is low, averaging 0.51% in 2022 and 0.91% in 2023 (NSWIS, 2024), from the ideal value of 3-4% (Henry, 2023). This value is not much different from the State Budget allocation for the environment function, which only hovers around 1% and is even decreasing over time (Ministry of Finance Team, 2019-2024), as shown in Figure 5.

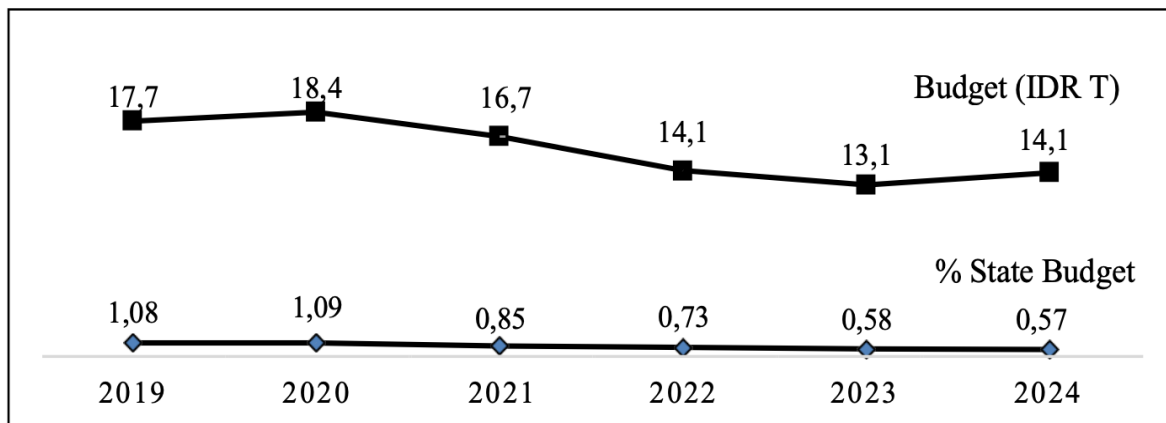


Figure 5. State Budget Allocation for Environment Function 2019-2024

On the other hand, the escalation of waste problems is increasing. Waste problems include: institutional arrangements, finance, technical operations, and community participation and law enforcement (Chaerul & Artika, 2021). With the condition of the State Budget, it is necessary to conduct an in-depth analysis of the region's ability to provide a waste management budget. Apart from the APBN posture, which does not even provide mandatory spending for waste management, local governments can actually provide a budget through their own capabilities.

Local governments must also improve their ability to increase the Regional Fiscal Independence (RFI). Mandatory spending reduces flexibility in the management of the State Budget (Ardiansyah, 2024). Not only the Health and Education Sectors, others sector include the Environment Sector also hope to become mandatory spending, although the percentage is not large. The budget authorization mechanism should be permissive (open) and not binding (mandatory) (Ardiansyah, 2024). The following graph presents Central Government Expenditure by Function (Ministry of Finance Team, 2019-2024).

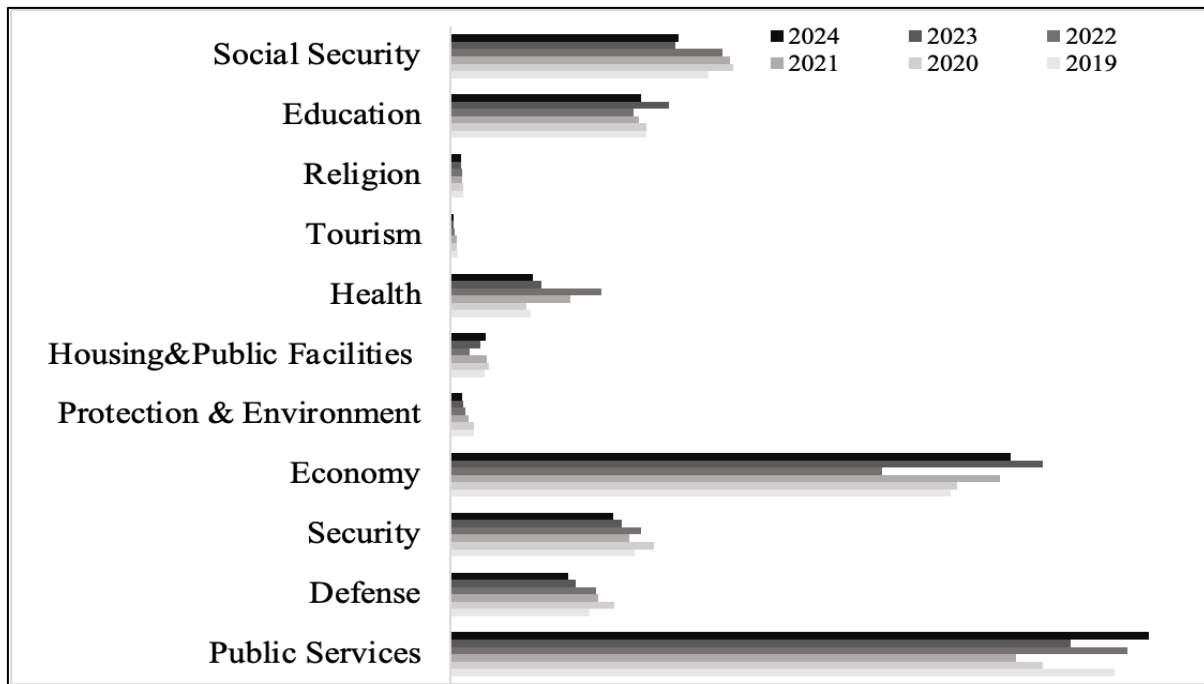


Figure 6. Central Government Expenditure by Function

The fiscal limitations of waste management clearly have implications for the effectiveness of waste management supervision and performance. Financing innovation, encouragement of budget allocation, and optimization of fund sources are needed. One alternative is waste retribution, which is determined based on the amount of waste generated by each citizen.

CONCLUSIONS

The effectiveness of Adipura as an instrument for monitoring local government waste management performance is not optimal. For this reason, policy recommendations are needed to review the components and sub-components of Adipura including final disposal site and add Non-Physical Components. From the perspective of GEG, to strengthen the role of Adipura as an instrument for monitoring the performance of local waste management, Adipura must be elaborated with SWMPI. This change will have an impact on the review of the Minister of Environment and Forestry Regulation Number 76 of 2019 concerning Adipura. The transparency of Adipura supervision also needs to be improved through the addition of a portion of public participation in the monitoring stage as part of the Field Team.

Facing the fiscal challenges of waste management, regions need to be encouraged to foster innovation and other sources of funding. Critical reflection is needed by looking at the balance between supervisory instruments and the fiscal reality of local capabilities.

Thus, the function of Adipura as an instrument for monitoring the performance of local waste management is expected to run effectively and efficiently. Adipura is expected to have a significant impact on the performance of local waste management through support in terms of policies, programs, budgets, human resources and infrastructure.

LIMITATION & FURTHER RESEARCH

This research is limited to analyzing and evaluating the effectiveness of Adipura from the perspective of GEG principles with a focus on fiscal challenges for waste management. It is still necessary to analyze other factors that affect the effectiveness of Adipura, including: the mechanism

of the Adipura Program from planning, team preparation, monitoring implementation, setting criteria and indicators, and monitoring and evaluation.

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