
THE PUBLIC PARTICIPATION AND SUSTAINABLE DEVELOPMENT PERSPECTIVE ON ZERO WASTE POLICY IN MATARAM CITY, NTB PROVINCE

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ABSTRACT

This research aims to confirm that public participation has been accommodated and actualised in implementing the zero-waste policy in Mataram City from a sustainable development perspective. This research intends to identify the community's involvement, viewed through public participation and sustainable development indicators, in the policy and its implementation of the Zero Waste policy, which can be used as correction and evaluation for related stakeholders. The method used in this research is the normative-empirical research method, which incorporates normative legal elements supported by additional data or empirical elements. The approaches adopted were conceptual, statutory, and observation of facts in the field. The data types employed include primary data (in the form of observation of data or facts in the field) and secondary data, consisting of primary legal materials, that is, a regional regulation related to the Zero Waste Policy. Data collection techniques were literature studies and field studies, and then the data were analysed using qualitative methods and presented descriptively.

Keywords: *Public Participation, Sustainable Development, Zero Waste Policy*

INTRODUCTION

Public participation, or, in other words, community participation, is an essential thing in formulating the public policy process. Community participation is a significant indicator of making public policy that meets state governance goals, particularly in Indonesia as a democratic country. The accommodation of community participation in formulating the policy and/or law and regulations is stipulated in Law Number 12 of 2011 on the Formation of Laws and Regulations, which states that people have the right to be involved in formulating public policy. Participation is intended to ensure that each policy is stipulated to reflect community aspirations, the applicable supervision function and the community's desires can be accommodated. The public participation in formulating the draft regulation is defined in Chapter XI Law Number 12 of 2011, as amended by Law Number 13 of 2022 on the Formation of Legislation, which further elaborates on the guarantee for the public to participate in the formation of legislation as stated in Article 96, which stipulates that:¹

¹Law Number 12 of 2011 on the Formation of Laws and Regulations.

1. The public can provide input orally and/or in writing to form laws and regulations.
2. Oral and/or written input, as referred to in Section (1), may be conducted through:
 - public hearing meeting;
 - working visit;
 - socialisation; and/or
 - seminars, workshops, and/or discussions.
3. as referred to in Section (1), the public is an individual or group of people interested in the draft legislation's substance.
4. To facilitate the public providing oral and/or written input, as Section (1) referred, each draft legislation must be easily accessible to the public.

Decision-making and/or government enactment of a policy is usually a response to an issue. As we know, policy is an instrument for regulating, controlling, and solving a problem. As Emma Blomkamp et al. (2018) said in their research article, "Public policymaking is widely understood as a structured and logical process of problem-solving led by the government," roughly means that public policymaking is a structured and logical problem-solving process carried out by the government. Among the many issues today, one of the most critical is the environment. Ecosystem damage stemming from economic growth activities is getting worse day by day. Economic and development activities nowadays tend to produce unavoidable waste production, water-damaging waste, plastic waste, and the smoke of destroying nature, which should be preserved for the sustainability of the lives of future generations.

Sustainable growth is a concept of development carried out in a sustainable and environmentally friendly way while also considering social interests. This concept covers economic, environmental, and social aspects. Sustainable economic growth addresses three critical economic, environmental, and social factors. The economic element refers to sustainable economic growth that does not harm environmental and social interests. The environmental element concerns preserving natural resources and the environment to remain sustainable. Meanwhile, social aspects refer to justice, equality, and community welfare.

To prevent the damage caused, there is a movement to reduce the amount of waste, currently known as the Zero Waste movement. This has been realised by the NTB provincial government, especially during the late governance, which has made the Zero Waste movement the government's top program and made West Lombok Regency and Mataram City pilot areas for running this zero-waste program. Due to its principles, NTB Zero Waste is seen as one of the solutions to supporting sustainable development. That is development in line with efforts to protect the environment for the future.

With the considerable authority that the government has, the program (zero waste) can be utilised as a policy expected to have a significant impact on the region. But it can also go badly if the execution is performed inappropriately. The Zero Waste Program is an environmental quality improvement program carried out by the provincial government based on the community. The target of this program is 70% waste management and 30% waste reduction by 2023.² The determination of this program is based on the reality of NTB's increasing waste production from day to day. Syamsudin, the Secretary of the NTB Environment and Forestry Agency (LHK), stated that the volume of waste in 10 NTB districts and cities reached 3,388 tons. In contrast, the volume of waste disposed of daily reached 76 tons. On the island of Lombok, abundant and poorly handled debris has resulted in many piles of trash, including in tourist spots such as Gili Trawangan, tourist beaches, and other tourist destinations. The condition of the island of Lombok, specifically in the city of Mataram, which has a lot of

²SuaraNTB.com. (2023). "NTB Libatkan Semua Kekuatan Sukseskan Zero waste" Available from: <https://www.suarantb.com/gaya.hidup/lingkungan/2019/276573/NTB.Libatkan.Semua.Kekuatan.Sukseskan.ZeroWaste/>.

garbage, is undoubtedly contrary to the declaration of Lombok Island as one of the best tourist destinations in Indonesia.³

Based on that reality and to support sustainable development considering economic, environmental, and social aspects, the NTB government has adopted the Zero Waste policy as a priority program. To ensure success in the execution of the policy or program, the involvement of all related actors is needed. Moreover, the Zero Waste program is a multifaceted program that requires changing the mindset and building a new culture in waste management, as well as cultivating new values from the level of knowledge, understanding, and awareness-raising to the change in people's life behaviour, which is not an easy thing to do.

Thus, one of the essential elements of the government's success in achieving the objectives of the formulation, stipulation, and implementation of the Zero Waste policy is the involvement of the community in the process and its impact on them from the perspective of sustainable development. This is strengthened by the precedent of previous research that identifies the Zero-Waste perspective applied to environmental planning in the city of Mataram as closely related to the community. The research findings revealed that the concept of environment is under the management theme and is related to the idea of community. Based on the planning documents studied, the perception of the Mataram city government in implementing Zero Waste is related to environmental management, which has a tight relationship with the community.⁴ Therefore, based on what has been outlined previously, it is interesting to research public participation in implementing the Zero Waste policy in Mataram City within the sustainable development framework. Based on that point, the problems highlighted in this article are: How is community involvement and the perspective of sustainable development in the Zero Waste policy in Mataram City, NTB Province?

METHODE

This research is normative-empirical, a combination of normative law elements supported by additional data or empirical elements. The study was carried out by conceptual and statutory approaches and observing facts in the field. The data types used are primary data in the form of observation of data or facts in the field and secondary data, consisting of primary legal materials, namely Regional Regulations related to the Zero Waste Policy. Data collection techniques by studying related literature and field studies were then analysed using qualitative methods and explained descriptively.

ANALYSIS AND DISCUSSION

The Accommodation of Public Participation Normatively within the Zero Waste Policy in Mataram City

Public participation or community participation in formulating public policy is essential. Public participation is an important indicator in producing public policies that are appropriate and suitable for the objectives of organising the state, especially in a democratic country like Indonesia. Community participation in formulating or making policies and/or laws and regulations. The accommodation of public participation is explicitly regulated in Law No. 12/2011 on the Formation of Legislation, whereby the public has the right to be involved in forming public policies. This participation ensures that every policy reflects the community's aspirations, the control function can run, and the community's wishes can be channelled.

³Rika Kurniawati. (2020). "Sosialisasi NTB Zero Waste Melalui Literasi Digital" *Jupiter Journal*, 17(1), 46-60.

⁴Ramadhani, R., Cahyaningtyas, S., & Atikah, S. (2022). Zero Waste Perspective in the Implementation of Good Governance in Mataram City. *Jurnal Ilmiah Tata Sejuta STIA Mataram*, 8(1), 77-87. <https://doi.org/https://doi.org/10.32666/tatasejuta.v8i1.307>

Thus, in viewing a participatory policy, we can see in the substance of the policy rules whether it has accommodated the space for community participation within it when the form of the regulation has been stipulated and applied. The Zero Waste policy in Mataram City has been regulated and specified in the form of Mataram City Local Regulation Number 1 of 2019 concerning Waste Management. As the study object of the policy is already in the concrete structure as a local regulation, meaning that it has passed the planning, formulation and discussion stages, then in the first stage of this research, it is sufficient to examine the indicators of public participation, has it been accommodated, by identifying and assessing the norms in the Article of that Local Regulation.

Based on the identification and justification process carried out in Regional Regulation Number 1 of 2019 concerning Waste Management, the elements of public participation are found in the:

1. Article 2 mentions waste management principles, one of which is based on participatory principles.
2. Article 3 also states that one of the objectives of waste management is to increase the participation of the community and business actors to reduce and handle environmentally sound waste actively.
3. Article 9, which explains rights, obligations and responsibilities, mentions that the community has the right to participate in the decision-making process, implementation and supervision of waste management, and Article 10 explains that the community must be active in protecting the environment and waste management in terms of waste reduction and handling.
4. Chapter XII specifically mentions the role of the community in waste management.

In Article 49

- (1) The community can play an active role in waste management by:
 - a. increasing the ability, independence, empowerment and partnership in waste management;
 - b. developing community pioneering in waste management;
 - c. increasing emergency response or emergency actions in waste management, such as fires in Temporary Shelter (TPS), Reduce, Reuse, Recycle Waste Management Site (TPS3R), Integrated Waste Processing Site (TPST) or Final Processing Site (TPA) that are dangerous; and
 - d. submitting information, reports, complaints, suggestions and criticisms related to waste management.”⁵

Normatively, public participation has been sufficiently qualified in the norms or articles of the Regional Regulation on waste management of Mataram City, which is a form of concrete regulation in the attempt to embody the Zero Waste policy in Mataram City. However, an interview carried out with the Secretary of the Environment Agency (DLH) of Mataram City explained that the Zero Waste program or the perspective of waste management with the Zero Waste approach had been carried out in Mataram City long before the Province of NTB had become NTB-Zero Waste as the flagship and priority program. According to him, community involvement in this program is not something that is a significant barrier or constraint because the community has been sufficiently involved considering that the zero waste program is a community-based program and how to direct the community to be the driving force in the success of those programs, but in terms of awareness that might still be improved in terms of understanding of waste, a creative and effective waste management effort that can produce

⁵Regional Regulation Number 1 of 2019 on Waste Management

economic added value, not just how waste is reduced but also how it can be managed into an economic commodity that has an impact on people's income in other words, to ensure that people understand about the concept of sustainable waste management.

The significant obstacles in waste management during this time are:

1. Follow-up programs are still not sustainable;
2. Leaders who do not have the same commitment to waste awareness when there is a change in leadership;
3. The most crucial issue in handling waste is the budget issue.⁶

B. Implementation of Zero Waste Policy through the mechanism of Mataram City Regional Regulation Number 1 of 2019 concerning Waste Management.

How to implement the Zero Waste Policy through Regional Regulation Number 1 of 2019 concerning Waste Management in Mataram City. This study tries to observe the aspects of waste management conditions, patterns or models of waste management, community resources as seen from the indicators of public participation, as well as facilities and infrastructure for waste management in Mataram City.

1. The Waste Management Condition of Mataram City

a. Waste Collection Rate

The most extensive waste collection in Mataram City comes from households. In addition, waste comes from office, trade, tourism, industrial, and educational activities. The volume of waste in Mataram City, based on data from the Mataram City Environment Office in 2022, reached 263.98 tons/day, with a volume transported to the landfill of 258.57 tons/day. Approximately 5.41 tons/day of waste cannot be transported daily, and the waste is loaded onto the dump truck and stored in the transfer station to be taken to the landfill the next day. The average waste transportation ratio is three times per day for armrolls and dump trucks, while pick-ups and three-wheelers have a ratio of 2 times per day.

Waste handling in Mataram City still uses the *collect-transport-dispose-to-landfill* system (TPA). However, despite using this system, the Mataram City Government, through the Environmental Agency, still emphasises waste processing at the source of waste so that the amount of waste transported to the landfill can be minimised.⁷

b. Waste Facilities and Infrastructure

Waste infrastructure facilities in Mataram City that the Mataram City Environmental Agency currently manages include dump trucks, armrolls, open pick-up panthers, open pick-up kijang and garbage motorcycles. The number of waste infrastructure facilities and their conditions can be seen in the following table.

⁶The data processing and analysis of interviews with the secretary of the Mataram City Environmental Agency by researchers.

⁷Research and Development Agency of Mataram City Government (2022). Report on the study of waste management strategies in the city of Mataram.

Table 1. Waste Transportation Facilities of Mataram City

	Type of Infrastructure	Quantity (Unit)	Conditions	
				Lightly Broken
1	Dump Truck	37	32	5
2	Arm roll	19	16	3
3	Open Pick Up Panther	10	10	-
4	Open Pick Up Kijang	1	1	-
5	Garbage Motor	15	15	-

Source: Mataram City Environment Agency, 2022

TPST and transfer stations also support waste transportation facilities in Mataram City, which are already spread throughout the Mataram City area. Mataram City has 17 TPS, three integrated waste processing sites and 11 transfer depots.

2. Waste Transportation Pattern

The wastetransportation system in Mataram City from the source of waste has several types of transportation methods based on the source of waste. In general, the waste transportation patterns are:

- Model 1. Household waste is transported by 3-wheel motorcycles by neighbourhood waste officers. There is an agreement on the time and location of the meeting place between the neighbourhood waste officer and the dump truck operator (TPS Mobile), after which the waste will be transferred from the motorised 3-wheeler to the dump truck and taken to the landfill (TPA).
- Model 2. Motorised 3-wheelers transport household waste by neighbourhood waste officers to the transfer depot or TPS. There is an agreement on the dumping time between the neighbourhood officials and the community around the transfer depot and TPS. Waste from the transfer depot and TPS will be collected in containers and taken to the landfill (TPA).
- Model 3. Household waste is brought to the TPST by the community; then, the trash is processed at the TPST into fertiliser and magot cultivation. Then, the inorganic waste is pressed and will be processed further.
- Model 4. Waste from the street will be transported using a dump truck and taken directly to the landfill. The remaining unused waste will be carried to the TPS/transfer depot using a pick-up truck. From the transfer depot, it is then brought to the landfill (TPA).
- Model 5. Waste sourced from the market will be collected in containers prepared around the market. Then, the waste will be carried by armroll to the landfill (TPA).⁸

3. Waste Management Elements (Institutions)

The regulation of the Mayor of Mataram (Regional Regulation) Number 1 of 2019 on Waste Management has regulated the duties and obligations of various parties in the implementation of waste management.

The local government in the implementation of waste management, has the following duties:

- a. Developing and increasing public awareness and business actors in waste management;
- b. Allocating funds for waste management;
- c. Conducting research and development of waste reduction and handling technology;
- d. Facilitating, developing and implementing efforts to reduce, handle and utilise waste;

⁸Ibid

- e. Facilitating the provision of waste management infrastructure and facilities;
- f. Encouraging and facilitating the development of benefits from waste management;
- g. Encouraging and facilitating the application of local waste management technology that develops in the community to reduce and or handle waste;
- h. Coordinating integration in waste management between local government agencies, between waste management institutions, as well as between local government agencies, waste management institutions with communities and business actors;
- i. The local government provides waste facilities and infrastructure: temporary waste disposal sites, final waste disposal sites, transportation of waste from TPS to TPA and providing TPS in public places and on the side of the road deemed necessary.

The subdistricts and villages are responsible for implementing waste management from the source of waste to the TPS. The responsibilities include:

- a. Conducting socialisation activities on the reduction and sorting of waste with a container system;
- b. Conducting assistance and socialisation of the time and place of garbage disposal that has been determined;
- c. Making provisions/*Awiq-Awiq* relating to waste management at the neighbourhood level;
- d. Conducting monitoring and evaluation of cleaning staff and supporting facilities;
- e. Conduct monitoring and evaluation of waste generation in the region.

The role of the community in the implementation of waste management includes:

- a. Maintain cleanliness in the environment;
- b. Dispose of waste according to a set time and schedule;
- c. Actively participate in waste reduction and handling;
- d. Prepare waste containers in line with the environment-friendly regulations or standards of waste containers;
- e. Using materials that can be reused, recycled and or easily decomposed in natural processes;
- f. Every driver of public transportation or private vehicle is obliged to provide waste containers;
- g. Every manager of public facilities, social facilities, offices, companies and shopping centres must provide a TPS;
- h. Every person or entity using land or location in the region is obliged to maintain the cleanliness of buildings, courtyards, drainage channels, footpaths/sidewalks, the environment and surrounding areas;
- i. Every person who sells merchandise by carrying, shouldering, pushing carts or other means of transportation and street vendors are required to provide trash bins to accommodate the waste generated to be taken to the nearest Mobile TPS and / or transfer depot;
- j. Every person or business that produces waste solid, liquid or gas containing hazardous substances either individually or in groups is obliged to have a catch basin or tank and carry out the management of the waste according to the provisions of laws and regulations;
- k. Every owner of land that has not been developed/utilised is obliged to maintain cleanliness and build/install a fence so that it is not used as a garbage dump site;
- l. Every person and or entity that produces waste of at least 2.5 m³ in a day is obliged to dispose of their waste at the final disposal site or can cooperate with third parties and or related regional apparatus.

A. The Perspective of Sustainable Development in Zero Waste Policy in Mataram City

Sustainable growth is a concept of economic development carried out sustainably and without damaging the environment and protecting social interests. This concept covers sustainable economic development and growth's economic, environmental and social aspects. Sustainable economic growth must be carried out by considering three important economic, environmental and social factors. Financial refers to sustainable economic growth without damaging environmental and social interests. The environmental aspect includes preserving natural resources and the environment to remain preservable and sustainable. Meanwhile, social elements include aspects of justice, equality and community welfare.⁹

In its development, the concept of sustainable development was reviewed in 2015 at the UN Conference on Sustainable Development in New York, discussing the 2030 Agenda for Sustainable Development (SDGs) with 17 new Millennium Development Goals that aim to be achieved in 2030. That agenda emphasises the direction of sustainable development based on human rights and equality to promote social, economic and environmental development (United Nations General Assembly, 2015).¹⁰

In this second research discussion, it is attempted to analyse the aspects of sustainable development in the Zero Waste policy in Mataram City from the following elements:

1. Community Involvement for Empowerment and Human Resource Development

Community participation in waste management is where people, as consumers and producers of waste services and citizens, influence the quality and operation of the available infrastructure services.¹¹ Based on those things, community participation in the management of waste infrastructure is the direct involvement of the community in activities affecting the quality and continuity of waste management. These activities can consist of contributions or paying retribution and providing trash bins to ensure the sustainability of infrastructure functions to support community activities. One of the approaches to the community to support government programs in maintaining cleanliness is to habituate the community to behaviours that suit the program's objectives. This includes changing people's perceptions of organised waste management, local social, structural, and cultural factors, as well as habits in waste management.

In reviewing the impact of the NTB-Zero Waste program implemented in Mataram on **Human Resources Development** from a sustainable development perspective, NTB Zero Waste has begun to open people's minds despite not much and still not optimal. An example of the impact is the rise of innovations in the field of waste management initiated by the community in various villages, providing support from the program such as making bio pores, distributing 107 composer bags, up to campaigns, and socialisation has revived the creativity of the community to see the potential of waste that was initially only considered as useless waste. The people who know the potential of waste management with innovations have been able to find alternative income since this program was established. The influence of the involvement of regional heads from many news reports has indirectly increased the community's enthusiasm to participate in this program. Some people who are creative in waste management innovations have benefited from the hyper-exposure of this activity by the government. This is shown in various programs in several regions 2022, such as local seed businesses and waste craft products. For example, in Sekarbela Sub-district, Mataram City, there is a PILSADAR (Sorting Waste from Home) program, PASCA (Sekarbela Sub-

⁹<https://an-nur.ac.id/esy/pertumbuhan-ekonomi-berkelanjutan-konsep-dan-tantangan-dalam-ekonomi-kontemporer.html>

¹⁰Faturachman Alputra Sudirman, Phradiansah. (2019). Tinjauan Implementasi Pembangunan Berkelanjutan: Pengelolaan Sampah Kota Kendari. *Sospol: Sosial Politik Journal*, 5(2), 295.

ADamanhuri, Enri dan Padmi, Tri. (2010). *Pengelolaan Sampah Edisi Semester I*. (Bandung: Program Studi Teknik Lingkungan Fakultas Teknik Sipil dan Lingkungan Institut Teknologi Bandung).

district Waste Patrol), MAGGOT SAMPLE, JBB (Friday Clean Together), and Wednesday Waste Alms which are the flagship programs of the Sekarbela Sub-district government. The government conducts socialisation directly and through social media owned by the Sekarbela Sub-district; the government has carried out this process on the five programs held by the Sekarbela Sub-district government.¹²

Furthermore, from the aspect of *Public Awareness*, based on the report of the waste management strategy study in Mataram City in 2022, it is stated that, in general, the awareness of the people of Mataram City in sorting organic and inorganic waste in their homes is still very lacking. However, there have been regulations emphasising that waste that will be taken to the landfill must be sorted out, according to the Decree of the Head of the NTB Provincial Environment and Forestry Service Number: 660/4179/TPAR/DLHK/2021 concerning Provisions for the Transportation of Sorted Waste. The provisions for waste disposal at Kebon Kongok Mataram Landfill include:

- a. Waste sorted into at least two types, as follows: Organic and Non-Organic;
- b. Transportation by tricycle, the organic waste is collected in a separate package/container with non-organic or can be by blocking the tricycle tub;
- c. Organic waste is dropped off at a location determined by the landfill officer after weighing;
- d. Non-organic waste only that can be brought to the final processing area (landfill);
- e. Waste that is not sorted is not permitted to be dumped into the Kebon Kongok Regional Landfill (TPA);
- f. This provision applies to all independent waste transporters, including:
 - Transport vehicles from offices, other government agencies or institutions;
 - Private transporters, housing, educational institutions, shops, trade and others;
 - Independent waste transporters by villages, sub-districts and others.
- g. Provisions belonging to the Environment Agency (DLH) of West Lombok Regency and Mataram City will be regulated separately.

Several villages have been sorted independently based on the survey, including Dasan Cermen Village. However, there are still many people who dispose of waste without sorting. There are also people in Mataram City who do more waste sorting, so the waste disposed of at the landfill should already be sorted. But, until now, the waste that goes to the dump is still not optimally sorted, even though the City of Mataram has stipulated that on July 1, 2022, the waste that will be transported to the landfill has to be sorted.

According to information from the sub-district, to realise the achievement of the Mataram City policy of transporting sorted waste to the landfill, the sub-district has conducted socialisation to its citizens. However, due to various limitations of the socialisation target, it still cannot maximally cover the entire community.

Sustainable Development-based waste management (waste is transformed into economic value and remains environmentally conscious)

In the *Aspect of the Environment*, the Zero Waste management system based on sustainable development is the positive benefits to the environment felt by the community, such as the reduction of waste disposed to landfill and reused goods that can be recycled so that activities or lifestyles such as this have a very positive effect on the community, as has been done in the Sekarbela sub-district, which ends in environmental cleanliness, fresher, cooler, healthier, and more comfortable air and reduces the risk of flooding. Both the government and the community are feeling these outcomes.

¹²Research and Development Agency of Mataram City Government (2022). Report on the study of waste management strategies in the city of Mataram.

In addition, one of the main goals of zero-waste practices is to prevent plastics from entering the oceans and landfills. This is very important because the environment is the leading supplier of human needs. Referring to the milestone achievements, Zero Waste has provided results but has not shown a significant and striking impact to support regional development from an environmental aspect. This is because NTB Zero Waste is a long-term work program that must be carried out thoughtfully and continuously. The real impact of this action program can only be felt by the next generation in the next few years. So far, NTB Zero Waste has only succeeded in contributing to a 15% reduction in waste quantity and 35% in waste handling. According to this data, at least the community has felt the environmental impact of reducing waste. This reduction in waste quantity is in line with the emergence of product innovation and renewable energy materials.

Besides that, from the economic aspect, it comes from reuse and recycle activities that can turn waste or garbage into something that provides profit for the people who do it. In terms of the economy, although there has been an innovation program that produces economic value from waste management activities in Mataram City, the program's impact that affected local revenue is still not optimal. This means that the economic benefits of the Zero Waste program are still only a potential. Some examples of processed waste products exist, including Magot BSF, Ecoblock, and RDF (Refuse Derived Fuel). These three products, processed or converted from organic and non-organic waste, are a concrete model of diverting waste. However, although the promotion of renewable industrial products has emerged, such as the plastic fuel processing industry, Magot BSF, Ecoblock, and RDF are already running, it still does not provide revenue to the regional government because there is no document on the transfer of existing assets at the industrial site that offers an opportunity for the region to exploit the source of income from running business activities.

Though, according to various sources, there is income from the sale of RDF from the landfill to PLN as an alternative fuel user, the revenue is still relatively low. It cannot be recognised as regional revenue due to several technical steps. Starting from the planning side on utilising restricted goods that can bring economic value to the previous year's Regional Property Needs Plan, Regional Property Utilization Plan, setting unit price standards and other administrative things. On the other hand, the emergence of various new industries from waste management can also be an excellent opportunity to provide economic benefits that create jobs for the community and provide income for regional revenues from the renewable energy sector and renewable alternative raw materials.¹³

CONCLUSION

Normatively, public participation has been sufficiently formed in the norms or Articles of Regional Regulation Number 1 of 2019 concerning Waste Management, which is a form of concrete regulation in an attempt to embody the Zero Waste policy in Mataram City. Community involvement in this program is not a significant barrier or obstacle, but the follow-up of the program is still not sustainable. The leadership aspect does not have the same perception and commitment to the concern for waste, and a change in leadership leads to changing perceptions and programs. The most crucial problem so far in handling waste is the budget issue.

The implementation of the Zero Waste policy is in line with the concept of sustainable development, as reflected in the policy statement, and included in the application of the

¹³Lalu Muhamad Fauzi Imansyah (2021). Pelaksanaan program zero waste di provinsi NTB dalam perspektif ekonomi syariah. Masters thesis, *UIN Mataram*.

policy, in this case, the implementation of waste management activities. And it has been significantly noticeable and running on the economic and environmental aspects, even though it is still not optimal. Meanwhile, the social part (community welfare) is limited to the people's empowerment efforts, increasing understanding, providing education, and socialisation. The prosperity aspect in terms of development justice has not been fully apparent because the results of the economic part or profit for the community are still not significant.

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BIBLIOGRAPHY

Book

Eka Putri Paramita, dkk. (2021). Strategi Komunikasi dalam Program Zero Waste Menuju NTB Lestari oleh Dinas Lingkungan Hidup dan Kehutanan Provinsi Nusa Tenggara Barat, *Prosiding Saintek*, Vol. 3.

Emma Blomkamp, M. Nur Sholikin, Fajri Nursyamsi, Jenny M. Lewis and Tessa Toumbourou, (2018). *Understanding Policymaking in Indonesia: In Search of a Policy cycle*, Search by The Policy Lab (The University of Melbourne) and the Indonesian Centre for Law and Policy Studies (PSHK), for Knowledge Sector Initiative.

Damanhuri, Enri dan Padmi, Tri, (2010). Edisi Semester I. *Pengelolaan Sampah*. (Bandung: Program Studi Teknik Lingkungan Fakultas Teknik Sipil dan Lingkungan Institut Teknologi Bandung).

Erawati, Intan dan Mussadun. (2013). Partisipasi Masyarakat dalam Pengelolaan Sumber Daya Lingkungan Mangrove di Desa Bedono Kecamatan Sayung, *Ruang Journal*, 1(1).

Faturachman Alputra Sudirman, Phradiansah. (2019). Tinjauan Implementasi Pembangunan Berkelanjutan: Pengelolaan Sampah Kota Kendari, *Sospol: Sosial Politik Journal* 5(2).

Halim Abdul, dan Muhammad Iqbal. (2012) *Pengelolaan Keuangan Daerah*. Yogyakarta: UPP AMP YKPN.

Imansyah, Lalu Muhamad Fauzi (2021) Pelaksanaan program zero waste di provinsi NTB dalam perspektif ekonomi syariah. *Masters thesis, UIN Mataram*.

Marschall, Melissa J. (2006). Citizen Participation and the Neighborhood Context: A New Look at the Coproduction of Local Public Goods. *Political Research Quarterly. Academic Research Library*.

Ramadhani, R., Cahyaningtyas, S., & Atikah, S. (2022). Zero Waste Perspective in the Implementation of Good Governance in Mataram City. *Jurnal Ilmiah Tata Sejuta STIA Mataram*, 8(1).

Rika Kurniawati. (2020). Sosialisasi NTB Zero Waste Melalui Literasi Digital, *Jupiter Journal* 17(1).

Sedarmayanti. (2009). *Reformasi Administrasi Publik, Reformasi Birokrasi, dan Kepemimpinan Masa Depan (Mewujudkan Pelayanan Prima dan Pemerintahan yang Baik)*. Bandung: Refika Aditama.

Soerjono Soekanto & Sri Mamudji. (2006) *Penelitian Hukum Normatif: Suatu Tinjauan Singkat*, Rajagrafindo Persada: Jakarta.

Syakwan Lubis. (2007). Partisipasi Masyarakat dalam Kebijakan Publik, *Demokrasi Journal*, 6(1).

Ulfa Syahru Ramadhani. (2020). *Implementasi Partisipasi Masyarakat dan Transparansi Kebijakan Publik Terhadap Kualitas APBD*. Elibrary Unikom.

Research and Development Agency of Mataram City Government (2022). Report on the study of waste management strategies in the city of Mataram.

Website:

Suarantb.com. (2023) “NTB Libatkan Semua Kekuatan Sukseskan Zero waste” Available from: <https://www.suarantb.com/gaya.hidup/lingkungan/2019/276573/NTB>. (Accessed March 15, 2023)

Website Provinsi NTB. (2023). Available from: <https://www.ntbprov.go.id/program-unggulan-ntb/zero-waste>. (Accessed March 15, 2023)

An-nur.ac.id. (2023). Available from: <https://an-nur.ac.id/esy/pertumbuhan-ekonomi-berkelanjutan-konsep-dan-tantangan-dalam-ekonomi-kontemporer.html> (Accessed August 04, 2023)

Law and Regulation:

Law Number 12 of 2011 as amended by Law Number 13 of 2022 on the Formation of Legislation.

Regional Regulation of Mataram City Number 1 of 2019 on Waste Management.

Regulation of the Minister of Environment and Forestry Number 14 of 2021 on Waste Management in Waste Banks.