ULRev
UNRAM Law Review is licensed under a Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. p-ISSN: 2548-9267 | e-ISSN : 2549-2365, Open Access at : *http://unramlawreview.unram.ac.id/index.php/ulr*

The Public Participation and Sustainable Development Perspective on Zero Waste Policy in Mataram City, NTB Province

Rahmadani
Universitas Mataram
rahmadanishmh@unram.ac.id

Ashari
Universitas Mataram
ashariari05@unram.ac.id

Putri Raodah
Universitas Mataram
putriraodah@unram.ac.id

ABSTRACT

This research aims to confirm that public participation has been accommodated and actualized in the policy and the implementation of the zero-waste policy in Mataram City from a sustainable development perspective. The particular purpose of this research is to identify the involvement of the community, 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 approaches, statutory approaches, and observation of facts in the field. The types of data 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 analyzed 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 obviously stipulated in Law Number 12 of 2011 on the Formation of Laws and Regulations, which contains that people have the right to be involved in the formulation of public policy. Participation is intended to ensure that each policy is stipulated to reflect community aspirations, the supervision function applicable, and the desires of the community can be accommodated. The public participation in formulating the draft regulation stipulates 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]

[1]Undang-Undang Nomor 12 tahun 2011 tentang Pembentukan Peraturan Perundang-Undangan.

DOI: https://doi.org/10.29303/ulrev.v7i2.313

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

Decision-making and/or the enactment of a policy by the government is usually a response to an issue. As we know, policy is an instrument for regulating, controlling, and solving a problem at hand. 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,"*[2] which 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 those are supposed to be preserved for the sustainability of the lives of future generations.

A sustainable growth is a concept of development carried out in a sustainable and environmental-friendly way while also considering social interests. This concept covers economic, environmental, and social aspects. Sustainable economic growth addresses three important aspects: economic, environmental, and social. The economic aspect refers to sustainable economic growth that does not harm environmental and social interests. The environmental aspect concerns the preservation of natural resources and the environment in order to remain sustainable. Meanwhile, social aspects refer to justice, equality, and community welfare.

In order to prevent the damage caused, there is a movement to reduce the amount of waste, which is currently known as the Zero Waste movement. This has been realized 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 as pilot areas for the running of this zero-waste program. NTB Zero Waste is seen as one of the solutions to supporting sustainable development due to its principles. That is, a development in line with efforts to protect the environment for the future.

With the large authority that the government has, the program (zero waste) can be utilized as a policy expected to have a big impact on the region. But it can also go badly if the execution is performed in an inappropriate way. 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.[3] The determination of this program is based on the reality of NTB's increasing waste production from day to day. Syamsudin, who is the Secretary of the NTB Environment and Forestry

[2]Emma Blomkamp, M. Nur Sholikin, Fajri Nursyamsi, Jenny M. Lewis and Tessa Toumbourou, *Understanding Policy-making 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. January 2018.

[3]SuaraNTB.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/.

Agency (LHK), stated that the volume of waste in 10 NTB districts and cities reached 3,388 tons, while the volume of waste disposed of every day reached 76 tons. On the island of Lombok itself, the condition of abundant and poorly handled waste 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 piles of garbage, is certainly contrary to the declaration of the Lombok island as one of the best tourist destinations in Indonesia.[4]

Based on that reality and in order to support sustainable development that considers 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 behavior, which is not an easy thing to do.

Thus, one of the important 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 findings of the research revealed that the concept of environment is under the theme of management and has a relationship with the concept 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.[5] Therefore, based on what has been outlined previously, it is interesting to do research related to public participation in the policy and the implementation of Zero-Waste policy in Mataram City within the framework of sustainable development. 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, which is a combination of normative law elements supported by additional data or empirical elements. The research was carried out by approaches conceptual and statutory approaches as well as observation of facts in the field. The types of data 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, then the data were analyzed using qualitative methods and explained descriptively.

[4]Rika Kurniawati. (2020). "Sosialisasi NTB Zero Waste Melalui Literasi Digital" *Jurnal Jupiter Vol. XVII No. 1*

[5]Rahmi Sri Ramadhani. (2022). *Perspektif Zero Waste dalam Implementasi Good Governance di Kota Mataram*. Jurnal Tata Sejuta Vol. 8 No.

ANALYSIS AND DISCUSSION

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

Public participation or community participation in formulating public policy is an essential aspect of the process. Public participation is an important indicator in producing public policies that are appropriate and suitable for the objectives of organizing the state, especially in a democratic country like Indonesia. In terms of community participation in the formulation or making of 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 the formation of public policies. This participation is intended to ensure that every policy taken reflects the aspirations of the community, the control function can run and the wishes of the community can be channeled.

Thus, in viewing a participatory policy, we can essentially 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 applies. In the context of the Zero Waste policy in Mataram City, it has been regulated and stipulated 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 form 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:

1. Article 2, which mentions the principles of waste management, one of them is based on participatory principles.
2. Article 3, which also states that one of the objectives of waste management is to increase the participation of the community and business actors to actively reduce and handle environmentally sound waste.
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 in Article 10 explains that it is obligatory for the community to 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."[6]

[6]Regional Regulation Number 1 of 2019 concerning Waste Management

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 of the attempt to embody the Zero Waste policy in Mataram City. However, as 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. And according to him, community involvement in this program is not something that is a major 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 economic added value, not just how waste is reduced but also how it can be managed into an economic commodity that produces 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.[7]

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

How the implementation of the Zero Waste Policy through the mechanism of 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 largest waste collection in Mataram City comes from households. In addition, waste comes from office activities, trade activities, tourism activities, industrial activities 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. There are approximately 5.41 tons/day of waste that cannot be transported every day and the waste is loaded onto the dumptruck and stored in the transfer station to be taken to the landfill the next day. The average waste transportation ration is 3 times per day for armrolls and dump trucks, while pick-ups and three-wheelers have a ration 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 emphasizes waste processing at the source of waste, so that the amount of waste transported to the landfill can be minimized.[8]

b. **Waste Facilities and Infrastructure**

[7]Processing and analysis of interview data with the secretary of the Mataram City Environmental Agency by researchers.
[8]Research and Development Agency of Mataram City Government (2022). Report on the study of waste management strategies in the city of Mataram.

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

Table 1. Waste Transportation Facilities of Mataram City

	Type of Infrastructure	Quantity (Unit)	Conditions	
			Good	Lightly Broken
1	Dump Truck	37	32	5
2	Armroll	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

Waste transportation facilities in Mataram City are also supported by the existence of TPST and transfer stations that are already spread throughout the Mataram City area. Mataram City has 17 TPS and 3 integrated waste processing sites and 11 transfer depots.

2. Waste Transportation Pattern

The waste transportation 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 neighborhood waste officers. There is an agreement on the time and location of the meeting place between the neighborhood waste officer and the dumptruck operator (TPS Mobile), after which the waste will be transferred from the motorized 3-wheeler to the dumptruck and taken to the landfill (TPA).
- Model 2. Household waste is transported by motorized 3-wheelers by neighborhood waste officers to the transfer depot or TPS. There is an agreement on the time of dumping between the neighborhood 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 waste is processed at the TPST into fertilizer 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 dumptruck which will be taken directly to the landfill. The remaining waste that is not collected will be carried using a pick-up truck to the TPS/transfer depot. From the transfer depot, it is then brought to the landfill (TPA).
- Model 5. Waste sourced from the market will be collected in containers that have been prepared around the market. Then the waste will be carried by armroll to the landfill (TPA).[9]

[9]Ibid

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 utilize waste;
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 in the form of: 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 have responsibilities in the implementation of waste management from the source of waste to the TPS. The responsibilities include:

a. Conducting socialization activities on the reduction and sorting of waste with a container system;
b. Conducting assistance and socialization of the time and place of garbage disposal that has been determined;
c. Making provisions/*Awiq-Awiq* relating to waste management at the neighborhood 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 that is obliged in the implementation of waste management, including:

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 centers 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/utilized, 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 own waste to the final disposal site or can cooperate with third parties and or related regional apparatus.

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

Sustainable growth is a concept of economic development that is carried out in a sustainable way and without damaging the environment and protecting social interests. This concept covers the economic, environmental and social aspects associated with sustainable economic development and growth. Sustainable economic growth must be carried out by considering three important aspects, namely economic, environmental and social aspects. The economic aspect refers to sustainable economic growth without damaging environmental and social interests. The environmental aspect includes the preservation of natural resources and the environment in order to remain preservable and sustainable. Meanwhile, social aspects include aspects of justice, equality and community welfare.[10]

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 emphasizes the direction of sustainable development based on human rights and equality to promote social, economic and environmental development (United Nations General Assembly, 2015).[11]

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

1. **Community Involvement for Empowerment and Human Resource Development**

The aspect of community participation in waste management is the process where people as consumers and producers of waste services as well as citizens influence the quality and operation of the infrastructure services available to them.[12] 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 how to habituate the community to behaviors that suit the objectives of the program. This includes changing people's perceptions of organized 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 the city of Mataram on the aspect of ***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

[10]https://an-nur.ac.id/esy/pertumbuhan-ekonomi-berkelanjutan-konsep-dan-tantangan-dalam-ekonomi-kontemporer.html

[11]Faturachman Alputra Sudirman, Phradiansah. (2019). "Tinjauan Implementasi Pembangunan Berkelanjutan: Pengelolaan Sampah Kota Kendari" *Sospol: Jurnal Sosial Politik Vol 5 No 2*: 295.

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

by the community in various villages, providing support from the program such as making biopores, distributing 107 composer bags, up to campaigns and socialization has revived the creativity of the community to see the potential of waste that was initially only considered as useless waste. The people who see 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 enthusiasm of the community in taking part in this program. Some people who are creative in waste management innovations have been able to benefit from the hyper exposure of this activity by the government.

This is shown in various programs in several regions in 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-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 socialization both directly and through social media owned by Sekarbela Sub-district, this process has been carried out by the government on the five programs owned by the Sekarbela Sub-district government.[13]

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. Although there have been regulations emphasizing 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, including:

a. Waste sorting into at least 2 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.

Based on the survey, there are several villages that have carried out sorting independently, including Dasan Cermen Village. However, there are still many people who dispose of waste without sorting. In fact, there are also people in Mataram City who do more waste sorting, so the waste that is disposed of to the landfill should already be in a sorted position. But in fact, until now the waste that goes to the landfill 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.

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

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

2. **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. These outcomes are being felt by both the government and the community.

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 main supplier of human needs. Referring to the milestone achievements, Zero Waste has provided results but has not shown a significant and striking impact in order to support regional development from an environmental aspect. This is due to the fact that NTB Zero Waste is basically a long-term work program that must be carried out seriously 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 the quantity of 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 Matram City, the impact of the program 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 already exist, including Magot BSF, Ecoblock, and RDF (Refuse Drived Fuel). These three products, which are processed or converted from organic and non-organic waste, are a concrete model of how waste can be diverted. 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 provides 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 and cannot be recognized as regional revenue due to several sequences of technical steps. Starting from the planning side on the utilization of regional 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. But on the other hand, the emergence of various new industries from waste management can also be a great opportunity that will 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.[14]

CONCLUSION

1. 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 major 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 about 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.
2. 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 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, from the social aspect (community welfare), it is limited to the people's empowerment efforts, increasing understanding, providing education, and socialization. The prosperity aspect in terms of development justice has not been fully apparent because the results of the economic aspect or profit for the community are still not significant.

Acknowledgments

This research was funded by the Beginner Lecturer Research (PDP) scheme grant by the Research and Service Institute (LPPM) of Mataram University.

BIBLIOGRAPHY

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

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.

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

Faturachman Alputra Sudirman, Phradiansah. (2019). "Tinjauan Implementasi Pembangunan Berkelanjutan: Pengelolaan Sampah Kota Kendari", *Sospol: Jurnal Sosial Politik Vol 5 No. 2.*

[14]Lalu Muhamad Fauzi Imansyah (2021). Pelaksanaan program zero waste di provinsi NTB dalam perspektif ekonomi Syariah. Masters Thesis, UIN Mataram.

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

Lalu Muhamad Fauzi Imansyah (2021) *"Pelaksanaan Program Zero Waste Di Provinsi Ntb Dalam Perspektif Ekonomi Syariah*.

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.*

Rahmi Sri Ramadhani. (2022). "Perspektif Zero Waste dalam Implementasi Good Governance di Kota Mataram" *Jurnal Tata Sejuta Vol. 8 No. 1*.

Rika Kurniawati. (2020). "Sosialisasi NTB Zero Waste Melalui Literasi Digital" *Jurnal Jupiter Vol. XVII No. 1*.

Sedarmayanti. (2009). *Reformasi Administrasi Publik, Reformasi Birokrasi, dan Kepemimpinan Masa Depan (Mewujudkan Pelayanan Prima dan Kepemerintahan 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" *Jurnal Demokrasi Vol. VI, No, 1*.

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

Badan Litbang Pemerintah Kota Mataram. (2022). *Laporan Kajian Strategi Pengelolaan Sampah di kota Mataram*.

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

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

PermenLHK No. 14 of 2021 concerning Waste Management in Waste Banks.