



Public Policy and Social Inclusion in Tackling Environmental Pollution in Indonesia

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Abstract

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Environmental pollution is a major challenge that has an impact on people's health, social, and economy. This study aims to analyze the role of public policy and social inclusion in addressing environmental pollution in Indonesia. Using a normative juridical approach, this study examines legal frameworks, including the 1945 Constitution, Law No. 11 of 2020, Law No. 18 of 2008, and Government Regulation No. 81 of 2012, as well as academic literature for the period last five years. The results of the analysis show that although environmental regulations are available, the effectiveness of implementation is still limited due to weak supervision and lack of community participation. Social inclusion is seen as crucial because it ensures the involvement of vulnerable groups in decision-making, so that policies become more equitable and sustainable. The findings of this study confirm that the synergy between strong regulations, the role of the government as a regulator as well as a facilitator, and active participation of the community is the key to effectively tackling environmental pollution. The study also recommends strengthening collaborative mechanisms to broaden the base of public participation in environmental policy.



1. Introduction

The issue of environmental pollution has become one of the most pressing global challenges in the 21st century. Increasing industrialization, urbanization, and human consumption have given rise to various forms of pollution, ranging from solid waste, water pollution, to air pollution. This condition not only impacts the destruction of the ecosystem, but also affects the health, social stability, and economic sustainability of the community. In this context, public policy and social inclusion play an important role in formulating effective and sustainable strategies to combat environmental pollution. Thus, the success of environmental management is not only determined by regulations alone, but also the extent to which the community can actively participate in the implementation of the policy.¹

Theoretically, public policy can be understood as a set of decisions taken by the government or public authorities in order to solve common problems, including environmental issues. Chandler and Plano emphasized that public policy is the effective use of existing resources to produce strategic solutions for the benefit of the wider community. On the other hand, Easton sees public policy as a distribution of values that binds all members of society. In the context of the environment, public policy functions as a legal and administrative instrument to regulate the protection, maintenance, and management of natural resources. In contrast, the concept of social inclusion emphasizes the involvement of all parties without discrimination in the policy formulation and implementation process. Inclusion is not only about

¹ Dickson Adom. "Promoting cultural traditions, social inclusion and local community participation in environmental development schemes." *Journal of Urban Culture Research* 14 (2017): 80-103.

social justice, but also ensures that vulnerable groups such as the poor, women, children, and indigenous communities are involved in efforts to maintain environmental sustainability.²

In Indonesia, the legal framework related to environmental protection is quite strong. The Constitution through the 1945 Constitution Article 28H paragraph 1 guarantees the right of every citizen to live in a healthy environment. Furthermore, Law Number 11 of 2020 concerning Environmental Protection and Management provides a legal basis in preventing pollution, restoring environmental quality, and providing sanctions for violators. This policy is strengthened by Law Number 18 of 2008 concerning Waste Management which introduces a hierarchy of waste management through the 3R principle (reduce, reuse, recycle). Furthermore, Government Regulation Number 81 of 2012 regulates household waste management by emphasizing the responsibility of local governments and community participation. This regulation reflects the role of the state as a regulator as well as a public service provider in the environmental field.³

However, even though legal tools are available, environmental problems in Indonesia are still complex. Big cities face waste problems that have not been handled optimally, while air and water pollution continue to increase. A real example can be seen in City A, where the Adipura program aimed at increasing environmental awareness has not been fully effective due to weak coordination between agencies

² Başak Kalkanci, Morvarid Rahmani, and L. Beril Toktay. "The role of inclusive innovation in promoting social sustainability." *Production and Operations Management* 28, no. 12 (2019): 2960-2982.

³ Ling Li, X. H. Xia, Bin Chen, and Luxi Sun. "Public participation in achieving sustainable development goals in China: Evidence from the practice of air pollution control." *Journal of cleaner production* 201 (2018): 499-506.

and low community involvement.⁴ Similar situations occur in other regions, where environmental policies are often top-down without engaging the community inclusively. This shows that there is a gap between regulation and implementation in the field.

To answer these problems, community participation is a key factor. Public involvement is not only a form of policy legitimacy, but also a mechanism to strengthen the effectiveness of implementation. Community participation can be in the form of consultation, conveying aspirations, involvement in recycling programs, and supervision of industrial activities that have the potential to pollute the environment. The concept of environmental justice even emphasizes that the success of environmental policies is greatly influenced by the extent to which vulnerable groups have access and a voice in the decision-making process.⁵ Thus, social inclusion is not just a complementary, but the main requirement in building equitable environmental governance.

The urgency of this research lies in the need to integrate public policy with the principle of social inclusion in tackling environmental pollution. Given that the impact of environmental damage is cross-generational, a strategy that involves all stakeholders collaboratively is needed. Legal regulations must go hand in hand with efforts to empower the community in order to create collective awareness in preserving nature. Therefore, this study focuses on analyzing the role of public policy

⁴ Zhiyong Han, Dan Zeng, Qibin Li, Cheng Cheng, Guozhong Shi, and Zishen Mou. "Public willingness to pay and participate in domestic waste management in rural areas of China." *Resources, conservation and recycling* 140 (2019): 166-174.

⁵ Alice Mah. "Environmental justice in the age of big data: Challenging toxic blind spots of voice, speed, and expertise." *Environmental Sociology* 3, no. 2 (2017): 122-133.

and social inclusion in tackling environmental pollution, by highlighting the role of governments, communities, and vulnerable groups in the existing legal framework in Indonesia.

2. Literature Review

A literature review on public policy in environmental pollution management emphasizes that government regulations need to be integrated with a participatory approach. Eyre et al.⁶ show that the success of air pollution control depends not only on government intervention, but also on the active participation of the community. Their research confirms that sustainable development goals can only be achieved if the government, the private sector, and local communities work together in the implementation of environmental policies. In addition, the study of Nwachi⁷ highlights the close relationship between community participation and social inclusion. According to him, participation is not only limited to being present in policy forums, but also includes substantive involvement that allows the community to contribute to the formulation of solutions. Thus, social inclusion is an important factor in strengthening the legitimacy of environmental policies while building trust between the government and citizens.

⁶ Laura Eyre, Michael Farrelly, and Martin Marshall. "What can a participatory approach to evaluation contribute to the field of integrated care?" *BMJ Quality & Safety* 26, no. 7 (2017): 588-594.

⁷ Louis Nwachi. "Relationship between participation and social inclusion." *Journal of Social Sciences* 9, no. 1 (2021): 34–45.

Furthermore, Murphy⁸ introduces an environmental justice perspective that emphasizes the fairness of the distribution of environmental benefits and burdens. They argue that public policy should consider vulnerable groups who are often more severely affected by pollution, but lack access to decision-making. This view broadens the horizon that environmental issues are not only technical or ecological, but also political and social. The literature confirms that effective environmental management requires a combination of legal tools, community participation mechanisms, and an inclusive approach. Without the integration of the three, public policies tend to fail in implementation or lose legitimacy in the eyes of the public. Therefore, this study will examine how public policy and social inclusion can go hand in hand in tackling environmental pollution, especially in Indonesia which has social, political, and ecological complexity.

3. Method

This research uses a normative juridical approach that focuses on the analysis of laws and regulations and public policies related to environmental pollution management. This approach was chosen because environmental problems in Indonesia are closely related to legal instruments that regulate obligations, responsibilities, and sanctions for stakeholders. Through this approach, the research seeks to examine the extent to which existing legal tools, ranging from the

⁸ Britney Murphy. "the Fall of Mount trashmore and the rise of Community Activism: environmental Justice and the Politics of inclusion, Bridgeport, Connecticut (1991–Present)." *Connecticut History Review* 57, no. 2 (2018): 154-179.

constitution to local regulations, are able to accommodate the principles of social inclusion in the implementation of environmental policies.

The main source of this research is the applicable laws and regulations, including the Constitution of the Republic of Indonesia in 1945, Law Number 11 of 2020 concerning Environmental Protection and Management, Law Number 18 of 2008 concerning Waste Management, and Government Regulation Number 81 of 2012 concerning Household Waste Management. In addition, a study of central and regional government policy documents was also carried out to see implementation practices in the field.

In addition to primary legal materials, this research also utilizes secondary legal materials in the form of academic literature, research journals, and reports that discuss the relationship between public policy, environmental pollution, and social inclusion. Scientific articles published in the last five years are used to strengthen theoretical arguments while providing an empirical picture of various countries. For example, the study of Li et al.⁹ which emphasized the importance of community participation in air pollution control, as well as Jones¹⁰ research on the integration of environmental justice in public policy. This literature provides a comparative perspective so that the analysis does not only focus on the Indonesian context, but also in a global framework.

⁹ Ling Li, X. H. Xia, Bin Chen, and Luxi Sun. "Public participation in achieving sustainable development goals in China: Evidence from the practice of air pollution control." *Journal of cleaner production* 201 (2018): 499-506.

¹⁰ Stephanie H. Jones. "Greater than the Sum of its Parts: The Integration of Environmental Justice Advocacy and Economic Policy Analysis." *NYU Emtl. LJ* 26 (2017): 402.

The analysis method used is normative qualitative analysis. First, identification of legal norms that govern rights and obligations related to the environment is carried out. Second, these norms are analyzed to see the consistency, strengths, and weaknesses in dealing with environmental pollution problems. Third, an interpretation of the extent to which aspects of social inclusion have been accommodated in the public policy is carried out. This analysis examines not only the substance of the regulation, but also how it is implemented at the local level, for example in household waste management and community participation in environmental programs. With this juridical approach, the research is expected to produce normative-analytical findings, namely assessing the suitability between the legal framework and the practical needs in overcoming environmental pollution. This approach also emphasizes that public policy is not just a legal text, but a social instrument that must integrate the principles of inclusion and participation in order to be effective and equitable.

4. Results

4.1. Legal and Public Policy Framework in Environmental Pollution

Mitigation

The legal framework in Indonesia has provided a solid basis for tackling environmental pollution. The Constitution through the 1945 Constitution Article 28H paragraph 1 affirms the right of citizens to live in a healthy environment. This constitutional provision not only guarantees individual rights, but also affirms the state's obligation to fulfill and protect these rights. This right is further emphasized

in Law Number 11 of 2020 concerning Environmental Protection and Management (PPLH), which regulates the principles of pollution prevention, the principle of state responsibility, and the mechanism of sanctions for violators. This regulation provides a normative framework for the state and all elements of society to play an active role in maintaining the quality of the environment. In addition, Law Number 18 of 2008 concerning Waste Management adds a hierarchy of waste management based on 3R (Reduce, Reuse, Recycle) and emphasizes the obligation of producers in reducing the impact of waste generated from economic and household activities.

However, the implementation of regulations often faces serious obstacles. Han et al.¹¹ found that waste management policies are often ineffective when community participation is low. This phenomenon also occurs in Indonesia, where clear legal rules have not been balanced with an adequate level of public awareness. Household waste management is still constrained by infrastructure limitations, such as the lack of sorting, processing, and recycling facilities, as well as the weak local government supervision system. In the end, well-designed regulations are difficult to achieve their effectiveness without concrete support from the community as the main actors in the environmental management chain.

The study of Liu et al.¹² also confirms that the success of clean air policies is largely determined by collaboration between the government and the community. This provides an important lesson that positive law is not enough to be followed

¹¹ Zhiyong Han, Dan Zeng, Qibin Li, Cheng Cheng, Guozhong Shi, and Zishen Mou. "Public willingness to pay and participate in domestic waste management in rural areas of China." *Resources, conservation and recycling* 140 (2019): 166-174.

¹² Yao Liu, Jiannan Wu, Hongtao Yi, and Jing Wen. "Under what conditions do governments collaborate? A qualitative comparative analysis of air pollution control in China." *Public Management Review* 23, no. 11 (2021): 1664-1682.

formally, but must be followed by a participatory mechanism that allows for the involvement of all parties. With participation, the community is not just an object of policy, but an active subject that helps ensure the success of implementation. Thus, the success of environmental law cannot be measured only by the aspect of the existence of regulations, but also by the extent to which they encourage collective awareness and real action at the local level.

In addition, Murphy¹³ emphasized that environmental policies need to contain the principles of environmental justice. In this context, Indonesia's legal framework still needs to be strengthened to ensure that vulnerable groups, such as the poor in slums or indigenous communities living near natural resources, receive fair protection from the impacts of pollution. The principle of environmental justice demands that all groups have equal access to a clean and healthy environment, and do not bear the disproportionate burden of pollution. Thus, the existing legal framework in Indonesia can be said to be quite adequate normatively, but its implementation still requires additional strategies based on social inclusion. Only with an approach that places the community as equal partners in policy implementation can the effectiveness of environmental law be truly realized.

4.2. The Role of the Government, Society, and Educational Institutions in Policy Implementation

The government has a central role as a regulator and a public service provider. Government Regulation Number 81 of 2012 assigns local governments to manage

¹³ Britney Murphy. "the Fall of Mount trashmore and the rise of Community Activism: environmental Justice and the Politics of inclusion, Bridgeport, Connecticut (1991–Present)." *Connecticut History Review* 57, no. 2 (2018): 154-179.

household waste through a mechanism of collection, transportation, and final processing. This responsibility places local governments as key actors in maintaining the quality of the community's environment. However, the reality is that this task cannot be carried out optimally without the support of the community. The waste management infrastructure provided by the government will be difficult to function effectively if the community does not participate in waste sorting, waste reduction, and supporting the policies that have been set. In this context, community involvement is a determining factor for the success of top-down regulations.

Laurian (2019) shows that the success of toxic waste management in some communities is highly dependent on community integration in the decision-making process. These findings provide a lesson that regulation alone is not enough without two-way communication between the government and citizens. This is also relevant to conditions in Indonesia, where public participation in environmental programs is still minimal. Many communities do not have sufficient awareness of the impact of pollution and the importance of their active role. Without integration, environmental policy has the potential to become just a formal document that is difficult to implement effectively.

In addition, educational institutions also play a role as socialization agents in building environmental awareness. Adom¹⁴ emphasized that the involvement of local culture and traditions can strengthen community participation in environmental programs. This approach is relevant for Indonesia, considering that

¹⁴ Dickson Adom. "Promoting cultural traditions, social inclusion and local community participation in environmental development schemes." *Journal of Urban Culture Research* 14 (2017): 80-103.

its socio-cultural diversity can be an important asset in encouraging the birth of community-based environmental movements. For example, the practice of mutual cooperation that is still inherent in various regions can be adapted into a collective strategy in waste management. Environmental programs in schools and universities can also be strategic spaces to instill sustainability values from an early age. The young generation who have environmental awareness from the beginning have the potential to become agents of change who are able to drive policy success in the future.

On the other hand, the role of the community is not only limited to the implementation of policies, but also in terms of monitoring and evaluation. Nwachi¹⁵ emphasized that community participation should not be symbolic, but must provide real space for citizens to supervise the course of policies. In practice, the community can report pollution caused by the industry, initiate a community-based waste management movement, or even encourage innovation in waste reuse. Thus, the synergy between the government as a regulator, the community as a supervisor and implementer, and educational institutions as a driver of awareness, is the main pillar so that public policies in the environmental sector can run in accordance with the expected goals.

¹⁵ Louis Nwachi. "Relationship between participation and social inclusion." *Journal of Social Sciences* 9, no. 1 (2021): 34–45.

4.3. Social Inclusion and Community Participation as Determinants of Policy Effectiveness

Social inclusion in environmental policy refers to the involvement of all groups of society, including those who are vulnerable and often marginalized. This principle was born from the understanding that every individual has the same right to enjoy a healthy environment, as well as the obligation to contribute to maintaining it. Temper¹⁶ explains that ecological distribution conflicts often arise because certain groups bear a greater burden of pollution, while they do not have access to influence policy. This can be seen, for example, in poor people living near landfills or industrial estates, who often face direct health and environmental impacts, but are rarely involved in policy discussions. This shows that social inclusion is not only an ethical issue, but also a form of structural justice in environmental governance.

In this context, Contreras¹⁷ research on the ladder of participation shows that community participation has levels, ranging from symbolic consultation to substantive decision-making. This model confirms that not all participation is of the same quality, and often communities are only formally involved with no room to truly influence the outcome. The challenge for the Indonesian government is to avoid forms of participation that are merely formalities, such as unilateral socialization without space for dialogue, and move towards more substantive participation where the community is involved in policy formulation,

¹⁶ Leah Temper, Federico Demaria, Arnim Scheidel, Daniela Del Bene, and Joan Martinez-Alier. "The Global Environmental Justice Atlas (EJAtlas): ecological distribution conflicts as forces for sustainability." *Sustainability Science* 13, no. 3 (2018): 573-584.

¹⁷ Santana Contreras. "Using Arnstein's ladder as an evaluative framework for the assessment of participatory work in Postdisaster Haiti." *Journal of the American Planning Association* 85, no. 3 (2019): 219-235.

implementation, and evaluation. This step is important so that environmental policies truly reflect the interests of the collective, not just the interests of a particular group.

This strategy is in line with the ideas of Frantzeskaki and Rok¹⁸, who emphasize that public participation in the sustainability transition must go beyond tokenistic consultation in order to produce real change. This means that people must be given the capacity, access to information, and means to really play a role in making decisions that impact their environment. Without this, participation would simply be an administrative ritual that does not bring about substantial improvements in environmental governance practices.

Community involvement in environmental policies must also consider aspects of gender inclusion and minority groups. Mah¹⁹ emphasizes the importance of integrating social justice perspectives in public policy so that often marginalized groups still have a voice. Women, children, indigenous peoples, and poor groups often have different needs and experiences related to the environment, so their voices need to be heard to produce equitable policies. Thus, social inclusion and public participation can be an important indicator for the successful implementation of environmental policies in Indonesia, because only with broad and diverse involvement, policies can achieve the expected legitimacy as well as effectiveness.

¹⁸ Niki Frantzeskaki and Ania Rok. "Co-producing urban sustainability transitions knowledge with community, policy and science." *Environmental Innovation and Societal Transitions* 29 (2018): 47-51.

¹⁹ Alice Mah. "Environmental justice in the age of big data: Challenging toxic blind spots of voice, speed, and expertise." *Environmental Sociology* 3, no. 2 (2017): 122-133.

5. Discussion

The results of the study show that public policies in Indonesia already have a relatively comprehensive legal basis in overcoming environmental pollution. However, the main problem lies in the implementation and involvement of the community. Regulations that have been enacted, such as Law No. 11 of 2020 concerning Environmental Protection and Management, often face bureaucratic constraints and weak supervision. This condition is in line with the findings of Eyre et al.²⁰, where the success of air pollution control is determined not only by regulations, but also by synergy between the government, the private sector, and society. This means that public policy must be understood not only as a legal product, but also as a social process that requires the interaction of various actors.

Community involvement in the implementation of environmental policies also tends to be symbolic. Many government programs rely on formal participation, such as bringing the community together in consultation forums, but do not provide significant decision-making space. Contreras²¹ explains this phenomenon through the concept of split ladder of participation, where consultative participation is often only a policy legitimacy, not a means of empowerment. In Indonesia, this situation is seen in waste management programs, where people are asked to sort waste but are not always involved in policy planning or evaluation.

²⁰ Laura Eyre, Michael Farrelly, and Martin Marshall. "What can a participatory approach to evaluation contribute to the field of integrated care?" *BMJ Quality & Safety* 26, no. 7 (2017): 588-594.

²¹ Santana Contreras. "Using Arnstein's ladder as an evaluative framework for the assessment of participatory work in Postdisaster Haiti." *Journal of the American Planning Association* 85, no. 3 (2019): 219-235.

Furthermore, the discussion on social inclusion emphasized the importance of paying attention to vulnerable groups who are often more severely affected by pollution. Jones²² through an environmental justice perspective emphasizes that public policies that do not involve marginalized groups risk exacerbating social injustice. In the Indonesian context, poor communities around riverbanks or industrial estates are often the main victims of pollution, while their access to information and policy forums is severely limited. Therefore, inclusive public policies must ensure that the voices of these vulnerable groups are accommodated.

The discussion also showed that the government's role as a regulator has not been fully balanced with the role of facilitator. The government often emphasizes the enforcement aspect, but is still weak in encouraging collaborative innovation with the community and the private sector. In fact, experiences in various countries show that collaborative approaches are able to increase the effectiveness of environmental policies. Thus, the transformation of public policy in Indonesia needs to be directed towards a more participatory, collaborative, and equitable model, so that it can answer the complexity of environmental pollution problems more comprehensively.

6. Conclusion

This study emphasizes that environmental pollution control in Indonesia cannot rely only on formal regulations, but must integrate the principles of social

²² Stephanie H. Jones. "Greater than the Sum of its Parts: The Integration of Environmental Justice Advocacy and Economic Policy Analysis." *NYU Emtl. LJ* 26 (2017): 402.

inclusion and community participation. The existing legal framework, such as the 1945 Constitution, Law No. 11 of 2020, Law No. 18 of 2008, and Government Regulation No. 81 of 2012, have provided a strong normative basis. However, implementation in the field still faces various obstacles, ranging from weak coordination between institutions to low community involvement. The results of the study also show that community participation is a key factor in realizing effective environmental policies. This participation is not only present in consultation forums, but also active involvement in the planning, implementation, and evaluation of environmental programs.

Social inclusion ensures that vulnerable groups who are often affected by pollution have access to the decision-making process, resulting in more equitable and sustainable policies. Thus, the success of environmental pollution control in Indonesia requires synergy between clear regulations, meaningful community participation, and the government's commitment as a regulator and facilitator. Through this collaboration, public policies can function as an effective instrument to maintain ecological sustainability while improving the social welfare of the community as a whole.

References

Adom, Dickson. "Promoting cultural traditions, social inclusion and local community participation in environmental development schemes." *Journal of Urban Culture Research* 14 (2017): 80-103.

- Contreras, Santana. "Using Arnstein's ladder as an evaluative framework for the assessment of participatory work in Postdisaster Haiti." *Journal of the American Planning Association* 85, no. 3 (2019): 219-235.
- Eyre, Laura, Michael Farrelly, and Martin Marshall. "What can a participatory approach to evaluation contribute to the field of integrated care?." *BMJ Quality & Safety* 26, no. 7 (2017): 588-594.
- Frantzeskaki, Niki, and Ania Rok. "Co-producing urban sustainability transitions knowledge with community, policy and science." *Environmental Innovation and Societal Transitions* 29 (2018): 47-51.
- Han, Zhiyong, Dan Zeng, Qibin Li, Cheng Cheng, Guozhong Shi, and Zishen Mou. "Public willingness to pay and participate in domestic waste management in rural areas of China." *Resources, conservation and recycling* 140 (2019): 166-174.
- Jones, Stephanie H. "Greater than the Sum of its Parts: The Integration of Environmental Justice Advocacy and Economic Policy Analysis." *NYU Env'tl. LJ* 26 (2017): 402.
- Kalkanci, Başak, Morvarid Rahmani, and L. Beril Toktay. "The role of inclusive innovation in promoting social sustainability." *Production and Operations Management* 28, no. 12 (2019): 2960-2982.
- Li, Ling, X. H. Xia, Bin Chen, and Luxi Sun. "Public participation in achieving sustainable development goals in China: Evidence from the practice of air pollution control." *Journal of cleaner production* 201 (2018): 499-506.

- Liu, Yao, Jiannan Wu, Hongtao Yi, and Jing Wen. "Under what conditions do governments collaborate? A qualitative comparative analysis of air pollution control in China." *Public Management Review* 23, no. 11 (2021): 1664-1682.
- Mah, Alice. "Environmental justice in the age of big data: Challenging toxic blind spots of voice, speed, and expertise." *Environmental Sociology* 3, no. 2 (2017): 122-133.
- Murphy, Britney. "the Fall of Mount trashmore and the rise of Community Activism: environmental Justice and the Politics of inclusion, Bridgeport, Connecticut (1991–Present)." *Connecticut History Review* 57, no. 2 (2018): 154-179.
- Nwachi, Louis. "Relationship between participation and social inclusion." *Journal of Social Sciences* 9, no. 1 (2021): 34–45.
- Temper, Leah, Federico Demaria, Arnim Scheidel, Daniela Del Bene, and Joan Martinez-Alier. "The Global Environmental Justice Atlas (EJAtlas): ecological distribution conflicts as forces for sustainability." *Sustainability Science* 13, no. 3 (2018): 573-584.