



The Role of Adat, the Business World, the Government, and Higher Education Personnel in Urgent Environmental Law Enforcement Efforts to Tackle the Growing Plastic Waste Crisis

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Abstract. Time perpetually advances, and circumstances evolve, influencing lifestyle modifications. Technological advancements have facilitated a more convenient, practical, and comfortable human existence. The tradition of using plates and spoons, necessitating dishwashing, has been supplanted by a culture of disposable plastic utensils. Plastic garbage is ubiquitous, prompting some communities to declare a waste emergency. A literature review has been conducted on the roles of customs, the business sector, government, and higher education workers in addressing the waste emergency associated with law enforcement initiatives. This study employs a literature review utilizing many data sources, including publications and the Internet. The study results indicate that all community sectors collaborated to address plastic trash, including Indigenous peoples, the corporate sector, central and regional governments, and higher education professionals, each according to their individual capacities. Importantly, public awareness of the need to mitigate garbage accumulation has begun to increase, offering hope for the future. Nonetheless, the issue of inundating plastic garbage resulting from alterations in actual life dynamics remains our responsibility.

Keywords: waste, customs, higher education personnel, business world, government, law

INTRODUCTION

Waste management in Indonesia is an inadequately addressed issue. Waste reduction initiatives at both the community and regional levels remain at approximately 5%, resulting in waste being directed to the Final Processing Site (TPA) while available landfill space is severely constrained. Apart from organic trash (70%), the predominant waste composition in landfills is non-organic garbage, specifically plastic waste (14%). The 3R Concept (Reuse, Reduce, and Recycle), a promising strategy, is extensively employed to manage plastic trash. An extensively studied option is converting plastic trash into fuel oil (Purwaningrum, 2016).

A Bachelor of Arts has implemented intelligent and creative solutions with ecobrick (Suminto, 2017). Plastic is extensively utilized in numerous aspects of human existence, ranging from food packaging to vehicle components. Plastic is the predominant and extensively utilized material for manufacturing automobile components, alongside metal in the form of iron. The primary issue with plastic is plastic garbage, which is incapable of natural decomposition. The remediation of plastic trash from the Earth's surface is a protracted process, particularly due to the pervasive and nearly uncontrollable utilization of plastic. Plastics contribute to the daily increase in air temperatures due to their non-porous polymer characteristics. Currently, the majority of products are manufactured without regard for their post-consumption disposition. Numerous products are intentionally engineered to deteriorate after a predetermined duration, referred to as "planned obsolescence." This design philosophy is responsible for overflowing landfills, marine plastic islands, and the proliferation of packaging and products that disrupt local ecosystems. Ecobricks represent an innovative approach to repurposing plastic trash into functional items, thereby mitigating pollution and the harmful effects associated with plastic debris. Ecobricks are a novel initiative to address plastic waste. Its purpose is not to eliminate plastic trash but to prolong the lifespan of plastic and convert it into a beneficial resource for humanity. The production of eco-bricks remains somewhat unpopular within the broader population. The majority of individuals continue to regard used plastic as mere household rubbish, so contaminating the environment and waterways, while remaining oblivious to the impact on daily life.

Plastic trash has been utilized in innovative products and services (Putra & Yuliandala, 2010). The majority of the waste originates from settlements, comprising 75% organic waste and 25% inorganic waste. Organic waste is extensively utilized for the production of compost, briquettes, and biogas; nevertheless, inorganic trash remains inadequately managed. Inorganic trash is challenging to decompose and is not biodegradable by natural processes. Consequently, a substantial expanse of land is required to mitigate the generation of this form of trash. Plastic garbage is the predominant kind of inorganic waste in the community. In 2008, the generation of plastic packaging waste was 925,000 tons, with around 80% of it posing a possible environmental hazard. Given its significant potential, it is preferable to employ this plastic trash in innovative goods and services to effectively manage plastic garbage, so enhancing our lives. Plastic waste productions, as innovative products, possess significant commercial potential. This product is commercially viable and capable of yielding revenues. This business is categorically classified into two types: products and services.

Housewives actively address plaque waste (Setiyati & Mulyasari, 2013). The escalating environmental degradation caused by plastic trash is growing concerning without intervention to address it. Individuals who are uninformed and engage in improper plastic trash management can precipitate health and environmental issues. This study seeks to ascertain the correlation between housewives' knowledge levels and their behaviors in the management of plastic garbage. The knowledge of housewives and their conduct in controlling plastic garbage are significantly correlated. This article seeks to examine the implementation of law enforcement in the management of plastic garbage, a prevalent issue affecting us all today.

METHOD

This study employs a Systematic Literature Review (SLR) methodology. The SLR technique systematically identifies, reviews, evaluates, and interprets all pertinent research about a topic of interest and its associated research questions. The SLR approach enables the systematic review and identification of journal articles, adhering to established procedures at each stage. This study's findings delineate the primary methodologies employed in creating web-based information systems, together with their respective pros and limitations (Wahyudin & Rahayu, 2020).

DISCUSSION

Constitution of the Republic of Indonesia 1945

Article 28H, paragraph (1) of the 1945 Constitution of the Republic of Indonesia grants every individual the right to a quality and healthy living environment. The Constitution mandates that the government is required to deliver public services in waste management. The government holds legal authority and responsibility for trash management, however operational management may involve partnerships with private entities. Consequently, waste management must be executed in an integrated and complete manner, encompassing collection through to waste processing. Waste reduction encompasses limitation, repurposing, and recycling initiatives. The waste management activities encompass sorting, collection, transportation, and final processing.

The government's role is highly crucial in trash management. To now, the government lacks explicit legal restrictions regarding plastic garbage and its management strategy. Local governments face challenges in enabling regional apparatus work units to effectively manage

plastic garbage. Currently, efforts are confined to promoting ecologically sustainable behavior and fostering community engagement, but with minimal frequency of execution. The Bone Regency Environment Agency acknowledges that waste management has thus far relied on inadequate government policies, primarily focusing on the collection and disposal of waste at the Final Disposal Site (TPA). Nevertheless, it is confined solely to the downtown region of the district.

Simultaneously, no initiatives can be undertaken to mitigate trash in remote regions due to distance limitations and the lack of transportation resources. At the village level, community members are significantly deprived of access to information, while local administrations face constraints in executing extensive and regular socialization efforts. The Institute for Research and Community Service at Hasanuddin University disclosed this information during community service events. The villagers are largely uninformed about the hazards of plastic garbage. The village community fails to comprehend that refuse discarded in the river ultimately reaches the sea, where it may be ingested by marine life or result in the demise of fish and other aquatic organisms.

The local administration has failed to optimize initiatives to build and augment the number of garbage banks, resulting in the majority of plastic waste being discarded in rivers or incinerated. BLHD has implemented a suitable technological solution for converting trash into biogas; nevertheless, the quantity is limited, and in certain communities, there is a reluctance to use it due to a lack of qualified personnel. To far, the Indonesian government has implemented numerous initiatives to address plastic waste. In 2016, the government implemented a pilot scheme to diminish plastic usage by imposing a fee of two hundred rupiah on consumers opting for plastic bags for groceries. The government partners with multiple stores to initiate the program. The trial program has effectively reduced plastic bag usage by 60%. Nonetheless, the initiative encountered difficulties, prompting numerous discussions within shop sectors regarding the community's accustomed reliance on complimentary plastic bags.

Law No. 18 of 2008

The primary mandate of Law No. 18 of 2008 regarding Waste Management is a management paradigm. Plastic garbage should not be seen as disposable refuse; rather, it necessitates careful consideration for effective and proper management to prevent it from becoming a contaminant. The paradigm shifts from collecting, transporting, and disposing to minimizing material usage

that may become garbage (reduce) and resource recycling (recycle). Article 28 H, paragraph (1) of the 1945 Constitution stipulates that every individual is entitled to a successful existence in both body and mind, to inhabit a conducive and healthy environment, and to access health care. Realizing this is exceedingly challenging without the genuine involvement of all societal strata to endorse environmental preservation initiatives for the benefit of future generations. Achieving this will be challenging without the involvement of all societal strata. The Earth is a loan from our descendants, not a legacy from our forebears. It is a phrase that embodies profound significance in fulfilling the mandate of the 1945 Constitution. (Hakim, 2019).

Presidential Regulation of the Republic of Indonesia No. 7 Year 2005

Article 13 of the PPLH Law stipulates that environmental pollution control is executed by the government, local authorities, and accountable individuals, each exercising their designated powers, roles, and responsibilities, encompassing three regulations: prevention, countermeasures, and recovery. However, this has not been observed, and numerous devices remain inadequate in monitoring the three configurations. If rubbish, such as textile waste from factories or domestic refuse, is still present in the sewer due to waste disposal outcomes, businesses and communities should assume responsibility for its management. This primary source must be rectified and addressed as a violation. According to Law No. 18 of 2008 regarding Waste Management, it is prohibited for individuals to dispose of waste within the territory of the Republic of Indonesia, import garbage, or litter, as part of a collective obligation to preserve the sustainability of residential areas. There are currently no stringent regulations on breaches for individuals who indiscriminately dispose of rubbish within the Republic of Indonesia, and the penalties for littering remain ambiguous. In an effort to implement the PPLH Law in Indonesia through regulations and provisions to ensure environmental protection, our law enforcement officials have demonstrated suboptimal performance in supervision and legal enforcement, which is inconsistent and not prioritized by the government. This is evidenced by Presidential Regulation No. 7 of 2005 concerning environmental issues in Indonesia, highlighting the increasing degradation of coastal and marine ecosystems, rising water pollution levels, and inadequate waste management practices. Public and industry understanding of waste disposal necessitates decisive governmental intervention to avert this environmental transgression. Among the three approaches to environmental law enforcement, administrative sanctions represent the primary recourse to civil and criminal law. To enhance

public awareness and engage business stakeholders, these administrative sanctions entail imposing penalties for various infractions that result in environmental harm jeopardizing human safety and health, breaches of environmental permit regulations, suspected falsification of requisite documents, and violations pertaining to business licenses. The enforcement of trash disposal regulations by law enforcement is inconsistent, with numerous businesses failing to fulfill their obligations. The enforcement of environmental law for trash disposal is not adequately sanctioned, with several leniencies in the application of administrative penalties.

A lecturer in Environmental Law at the Undip Doctoral Program in Law, Adji Samekto, asserts that law enforcement remains a conceptual framework that has yet to be implemented effectively; evidence indicates that industrial actors have caused environmental harm that warrants legal action (Kompas.com, 2009). In light of Article 33, paragraph (3) of the 1945 Constitution, the Indonesian populace must diligently manage the territory of the Republic of Indonesia, which is the second greatest contributor to trash, potentially leading to socio-economic issues. Law enforcement is crucial for safeguarding the environment of the Republic of Indonesia. The regulations established for community members and business entities for environmental protection have been in place for an extended period, yet their implementation is suboptimal.

Legal Aspects of the Dangers of Plastic to Health

The investigation into the legal implications of plastic threats to health and the environment constitutes a normative legal study employing both a legislative and a case method. This study will establish a paradigm for trash management in Sleman Regency. The findings of this study indicate that Law Number 18 of 2008 regarding garbage Management fails to address plastic garbage and does not impose a ban on its production. Consequently, Law Number 18 of 2008 regarding trash Management has failed to curtail plastic usage, resulting in plastic trash being detrimental to human health and the environment. (2) To date, there exist no laws or regulations that prohibit the utilization of plastics detrimental to human health and the environment; and (3) The resolution lies in the absence of regulations banning plastics that pose risks to health and the environment, allowing plastic waste to be repurposed into crafts such as various bags, wallets, newspaper hats, folders, and similar items, as practiced by the residents of Sukunan Village, Sleman Regency (Dewi & Raharjo, 2019).

Environmental Law Enforcement Against Plastic Waste

Indonesia's enforcement of environmental laws requires decisive action from various authorities; the inadequacy of law enforcement in safeguarding the environment is evidenced by the significant volume of plastic waste in the ocean, with Indonesia ranking second in contributions to oceanic plastic waste, following China. Christine Halim, chairperson of the recycling association, stated that garbage remains an issue in Indonesia due to the insufficient implementation of environmental laws. Mechanisms for the enforcement of environmental legislation have yet to be executed in practice. (Merdeka.com, 2018). The evidence indicating significant plastic garbage in the Indonesian sea demonstrates that environmental law enforcement in Indonesia is suboptimal. The impact of plastic waste in Indonesia's oceans jeopardizes multiple facets, including harm to marine ecosystems, disruption of tourism, diminished productivity for fishermen, and threats to the health of fish and coastal residents due to environmental pollution. Data from the World Food Agency indicates that by 2048, our nation's food supply will predominantly derive from marine sources, where the consumption of marine animals may pose health risks to humans if these food sources become contaminated by waste disposal (Dewi & Raharjo, 2019).

Eighty percent (80%) of oceanic garbage originates from terrestrial sources that discharge into the sea. This issue must be addressed at its origin, specifically regarding the government's objectives for managing water pollution remediation to safeguard the environment and avert marine pollution, as articulated in the PPLH Law. As a governmental authority empowered to act against transgressors of environmental regulations, it is imperative to adopt a resolute stance and diligently monitor offenders to optimally protect the nation's environment. Nonetheless, the factor that impedes the enforcement of water pollution regulations is the suboptimality of the oversight mechanism for upholding our environmental legislation.

In Indonesia, insufficient enforcement of environmental laws undermines public and industry understanding on the protection of the nation's environment. To far, there are no regulations imposing fines for the negligent disposal of waste in confined areas or on roadways. The ineffectiveness of many rules and governmental initiatives is seen in the accumulation of waste in Indonesia's oceans, primarily originating from rivers that discharge into the sea. This undoubtedly affects environmental health, exacerbating pollutants and impacting human well-being. Given the current situation, the government must implement rigorous measures, including administrative, criminal, and civil sanctions, to be implemented by authorities and law enforcement agencies. Determined initiatives from the government are anticipated to alter

the perception of Indonesia as a plastic waste-free nation. A nation with stringent environmental law enforcement is anticipated to enhance public awareness and engage business entities regarding the ramifications of plastic waste, in accordance with the objectives and mandates of the PPLH Law in Indonesia, thereby fostering collective environmental protection.

CONCLUSION

The legal foundation for these issues comprises five elements: Law of the Republic of Indonesia No. 32 of 2009 regarding Environmental Protection and Management, Bali Provincial Regulation Number 5 of 2011 on Waste Management, Bali Governor Regulation Number 47 of 2019 on Source-Based Waste Management, and Awig-awig. The Bugbug Pawos Traditional Village 31 governs the village environment in accordance with the Tri Hita Karana concept, as outlined in the Pararem of Bugbug Traditional Village Number 13/PRM/DAB/V/2021 about Source-Based Waste Management. The function of the corporate sector. The responsibility of the corporate sector and higher education professionals in addressing the issue of plastic waste is to develop innovations like eco bricks for use in various essential items for human life.

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