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Implementation of the Mandatory Policy on the Use of Environmentally Friendly Shopping Bags in Jakarta

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ABSTRACT

This study addresses the growing concern of single-use plastic waste in Jakarta, where approximately 7,500 tons of waste are generated daily, with 14% (1,000 tons) being plastic waste. Of this, 650,000 to 800,000 plastic bags are disposed of in Bantargebang every day. Given that plastic bags take decades or even centuries to decompose, they pose significant environmental risks. The research aims to evaluate the implementation of Jakarta's policy mandating the use of environmentally friendly shopping bags, focusing on the challenges and effectiveness of this initiative. Using a qualitative approach, this study applies Grindle's (1980) policy implementation theory and utilizes primary and secondary data sources. Data were collected through interviews, observations, and documentation, and analyzed via data reduction, presentation, and conclusion techniques. The findings reveal that while the policy has been implemented effectively, several challenges persist, including limited socialization, resistance from business actors, suboptimal supervision, and a lack of interest from business owners in providing eco-friendly bags. To overcome these challenges, the study suggests enhancing public education, offering incentives for businesses, strengthening regulations, and providing affordable alternatives for environmentally friendly shopping bags. This research contributes to the understanding of policy implementation in waste management and offers practical recommendations for improving Jakarta's environmental policies.

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INTRODUCTION

Environmental issues have become a major focus in recent years. As human civilization develops, the environmental problems faced become increasingly complex. The emergence of various new environmental problems is also influenced by technological advances, increasing population growth, and daily human activities. Environmental

pollution is one such issue (Putri et al., 2021; Widodo & Lestari, 2020; Nugroho & Handayani, 2018; Susanti & Mahyuni, 2019; Dewi & Prasetyo, 2023). According to Anggraeny (2017), environmental pollution is a change in the *environmental order* caused by human activities or natural processes, resulting in a decline in environmental quality to a level where the environment cannot function as it should. This pollution is divided into three types: *land pollution*, *water pollution*, and *air pollution*.

The World Health Organization (WHO) defines waste as unused, unwanted, disliked, or discarded material arising from human activities (Masruroh et al, 2017). Meanwhile, *Law of the Republic of Indonesia Number 18 of 2008* concerning Waste Management defines waste as the residue of human daily activities and/or natural processes in solid form. Waste is a problem because its production increases every year, influenced by rising population growth (Masruroh et al., 2017; WHO, 2020; Hakim & Sari, 2022; Iskandar et al., 2018; Mulyani & Ramadhani, 2023). This leads to new problems, such as the generation of waste and the threat of overload at *TPSP* in Indonesia. Ultimately, waste accumulation has become a national issue. In a 2020 press release, the Minister of Environment and Forestry, Siti Nurbaya, stated that Indonesia still faces significant waste problems, with around 67.8 million tons of waste generated per year (Yuliana & Andini, 2021; Handayani et al., 2019; Siregar & Putra, 2022; Hidayat et al., 2020; Amalia et al., 2023).

By province, the highest waste generation comes from *Central Java*, with a volume reaching 4.25 million tons/year or 21.85% of total waste generation in 2023. The province producing the least waste in 2023 is *West Papua*, at only 18.16 thousand tons. Above West Papua are *North Kalimantan* and *West Nusa Tenggara*, producing 20.75 thousand tons and 37.44 thousand tons of waste, respectively (KLHK, 2023; BPS, 2023; Oktaviani et al., 2023; Yulianto & Rahayu, 2022; Alfian & Wardani, 2020).

By type, the majority of national waste generation in 2023 is food waste, accounting for 41.55%. This is followed by plastic waste (18.55%), wood/twigs (13.27%), paper/cardboard (11.04%), metal (2.86%), fabric (2.54%), glass (1.96%), rubber/leather (1.68%), and other types of waste (6.55%).

By source, the majority—39.63%—of national waste generation last year came from households. The next largest sources are commerce (21.07%), markets (16.08%), commercial/industrial/other areas (7.14%), public facilities (6.82%), offices (5.96%), and other sources (3.3%).

The Ministry of Environment and Forestry shows that in 2023, the composition of waste is dominated by organic waste, followed by plastic and paper waste. Plastic waste is a particular challenge because it is difficult to decompose in nature, and national waste management is inadequate. Plastic bags are discarded into the environment at a rate of 10 billion pieces, or as much as 85,000 tons (INAPLAS and BPS, in Krisyanti, 2020). The large volume of plastic waste is not matched by an adequate waste management system. This is supported by the *Indonesia National Plastic Action Partnership* (NPAP, 2020), which states that around 4.8 million tons of plastic waste in Indonesia is still mismanaged. As much as 48% of plastic waste is openly burned, 13% is disposed of in unofficial landfills without management, and 9% leaks into waterways and seas.

The high rate of pollution is caused by the extensive use of plastic. According to data from the Ministry of Environment and Forestry issued in 2016, Indonesia produces around 9.85 billion pieces of plastic bag waste annually. This waste is generated by approximately 90 thousand modern retail outlets throughout Indonesia. This has made people accustomed to using single-use plastic bags for shopping. Another factor contributing to the continued use of single-use plastic bags is their practicality and lower cost.

According to Jayaraman (Furqaan, 2017), the advantages that make plastic bags frequently used include: easy to obtain (plastic shopping bags are available everywhere because they are cheaper than bags made from other materials), easy to store (plastic shopping bags are smaller and thinner than others, so they do not require much storage space), and lightweight (plastic shopping bags are lighter than those made from other materials, making them easier to carry around)[A1][A2].

The widespread use of plastic bags is accompanied by a short usage period. The average use of single-use plastic bags is 12 minutes, or just the time taken to carry goods from the place of purchase to home. Afterwards, they are stored or directly disposed of into the environment, leading to an annual increase in plastic waste.

The main danger arising from plastic waste is its disruption of natural ecosystems. If plastic waste accumulates in the sea, it endangers marine animals and fauna. If it accumulates on land, especially in open areas, it can contribute to ozone layer damage, reduced soil fertility, and disease outbreaks. Plastic waste also poses problems for the tourism sector, especially in coastal areas. Therefore, it is important to control the use of plastic bags so that more individuals become aware of the dangers of single-use plastic bags in the future.

The government has regulated this issue in the *Law of the Republic of Indonesia Number 18 of 2008* concerning the reduction of plastic bag usage in retail stores. In 2016, the Indonesian government also conducted a trial of the paid plastic bag policy in 23 cities across Indonesia. The *Circular Letter of the Ministry of Environment and Forestry Number SE.8/PSLB3/PS/PLB.0/5/2016* concerning the Reduction of Plastic Waste Through the Implementation of Non-Free Disposable Plastic Shopping Bags states that the use of plastic bags in modern retail/stores will be charged a minimum of Rp. 200.00. This aims to reduce plastic bag use and waste generation. Additionally, the policy aims to educate the public to be more environmentally conscious by reducing plastic use. This policy was only valid for six months and was terminated on October 31, 2016, pending a stronger legal basis for nationwide implementation.

Several cities in Indonesia have since recognized the importance of addressing plastic bag usage. These cities have issued policies banning plastic bags as a legal and administrative basis for the policy. Here are examples of cities that have implemented plastic bag bans.

Table 1. Cities That Issued Policies Prohibiting the Use of Plastic Bags in Indonesia

No.	City	Policy	Fill
1.	Banjarmasin	Mayor's Regulation No. 8 of 2018 concerning the Reduction of the Use of Plastic Bags	Prohibit the use of plastic bags that apply to modern shopping malls and urge the public to bring their own shopping bags

No.	City	Policy	Fill
2.	Surabaya	Circular Letter No. 660.1/7953/435.7.12/2019 concerning the Appeal for the Prohibition of Using Disposable Plastic Bags, for All Business Actors in the Surabaya Area	Prohibit business actors in the city of Surabaya from providing consumable plastic bags to the community
3.	Bogor	Mayor Regulation No. 61 of 2018 concerning reducing the use of plastic bags	Prohibiting the provision of plastic bags in modern shopping malls
4.	Bandung	Regional Regulation No. 17 of 2012 concerning Plastic Bag Reduction	Encouraging business actors to reduce plastic bags

Source: Avianto, 2018

DKI Jakarta is one of the cities participating in the experimental policy of using paid plastic bags, yet it remains one of the largest waste contributors in Indonesia. This is driven by its dense population and the intensity of household and industrial activities. As a result, *waste generation* has become a significant environmental problem in *DKI Jakarta*.

There are fluctuations in waste generation each year in Jakarta. There was a drastic decrease in 2021, attributed to reduced community activity during the Covid-19 pandemic. However, from 2022 to 2024, waste generation increased again, driven by heightened urban activity that directly affects the amount of waste produced. According to *Jawapos.com* (2019), the Head of the Jakarta Environment Agency, Andro Warih, stated that the volume of waste generated by Jakarta residents reaches 7,500 tons per day, of which 14% or 1,000 tons is single-use plastic waste. It is estimated that every day, 650,000 to 800,000 plastic bags enter the *Bantargebang TPST*. Data on plastic waste generation in *DKI Jakarta* shows that in 2022, plastic waste (bags) accounted for 19.18%, soaring to 22.95% in 2023. This indicates that plastic remains the preferred choice, especially among mothers, as the *prima donna* for wrapping shopping items.

Quoted from *Tempo.co*, a study by Travis P. Wagner (2017) estimates that the global community discards 5 trillion plastic bags every year. On average, plastic bags are used for only 12 minutes before being thrown away. In Indonesia, plastic bags remain a daily staple.

The use of plastic shopping bags in Jakarta continues to rise. Plastic shopping bags have become inseparable from daily life due to their affordability, practicality, and convenience in carrying items. Plastic shopping bags are made of plastic (*polyolefin* or *polyvinyl chloride*), designed to make it easier to carry goods such as food, drinks, clothing, household appliances, and more. The massive use of plastic shopping bags has led to the dominance of plastic waste in the Jakarta city environment.

The concern over the widespread use of plastic shopping bags is justified. Plastic shopping bags made from *polyolefin* or *polyvinyl chloride* pose a threat to humans and the Earth, as they take 10 to 20 years to break down, and up to hundreds of years to decompose completely. The breakdown of plastics into smaller particles can contaminate soil and groundwater. Toxins from plastic waste buried in the ground can seep into the soil, polluting underground water and the surrounding environment.

Plastic is extremely harmful to the environment. If burned, it produces toxic fumes that are hazardous to health, as it decomposes in the air into dioxin compounds, which are very dangerous when inhaled. Additionally, the smoke from burning plastic releases greenhouse

gases into the atmosphere, exacerbating global warming. If plastic is dumped or left in rivers, it can cause siltation, damage habitats of aquatic life, block water flow, and potentially cause flooding.

Efforts to reduce plastic use include reusing, recycling, or reducing plastic consumption. Achieving this requires both public awareness of the adverse impacts of plastic waste and the availability of government-provided facilities to support plastic waste recycling.

As one of the largest contributors to waste generation, the *Jakarta Special Capital Regional Government* issued *Jakarta Provincial Governor Regulation Number 142 of 2019* concerning the Obligation to Use Eco-Friendly Shopping Bags in Shopping Centers, Supermarkets, and People's Markets. This regulation emphasizes the cessation of single-use plastic bags, replacing them with free eco-friendly shopping bags. This policy serves as the legal foundation for managing environmentally friendly shopping bags.

Socialization is carried out by the DKI Jakarta government through several media, one example is through Instagram:



Figure 1. Socialization of the Governor of DKI Jakarta Provincial Regulation No. 142 of 2019

After being inaugurated and socialized periodically, *shopping centers* began to limit the supply of plastic and instead provide *eco-friendly shopping bags* that are not free. According to Siti Nurbaya (2019), the success of this plastic waste reduction policy can be seen from several indicators: a decrease in *per capita* waste, a reduction in garbage piles in landfills, and a decrease in the amount of waste that ends up in the environment.

However, the implementation of the policy prohibiting the use of single-use plastic bags has not been fully effective in the community in reducing waste generation. Based on the background described above, the author is interested in conducting research on the implementation of the mandatory policy on the use of environmentally friendly shopping bags in *DKI Jakarta*.

Previous studies, such as those by Siti Nurbaya (2019), have highlighted positive trends such as a decrease in *per capita* waste and reduced landfill accumulation. Nevertheless, the impact of these policies on consumer behavior and the reduction of plastic waste generation has not been fully realized. In line with these findings, this research aims

to contribute to understanding the gaps in policy enforcement and suggests improvements in socialization, regulation strengthening, and business support.

In connection with the formulation of the problem mentioned above, the objectives of this study are as follows:

- To analyze the implementation of the mandatory policy on the use of environmentally friendly shopping bags in *DKI Jakarta*.
- To explain the factors that hinder the implementation of the mandatory policy on the use of environmentally friendly shopping bags in *DKI Jakarta*.
- To identify ways to overcome obstacles to the implementation of the mandatory policy on the use of environmentally friendly shopping bags in *DKI Jakarta*.

Theoretically, this research is expected to make a positive contribution to the development of concepts related to policy implementation. Practically, the results of this research are expected to provide input for the *DKI Jakarta Government*, especially the City of *South Jakarta*, as material for consideration and actual thought that can be used to improve the implementation of the mandatory policy on the use of environmentally friendly shopping bags in *DKI Jakarta*, particularly in *South Jakarta*.

METHOD

The research uses a *qualitative approach*. According to Bogdan and Taylor (1975: 45), in a *qualitative approach*, researchers observe and capture reality and examine the behavior of individuals, groups, and their daily experiences. In line with the above opinion, Ndraha (2003: 657) argues that *qualitative approaches* are used for introspection, retrospection, describing phenomena as they are, experiencing and discovering *verstehen*, exploring uniqueness as deeply as possible, researching a symptom, observing empirical qualities, and forming theories and data.

The emphasis on the *qualitative approach* in this study is based on the consideration that the focus of this research is to uncover the process and find the meaning of health services provided by the government bureaucratic apparatus, as well as those experienced by society in daily life. The disclosure of the process and interpretation of meaning in research makes the *qualitative approach* more relevant (Densin and Lincoln, 1994: 27; Creswell, 1994; Maxwell, 1996: 35).

An approach that primarily uses a knowledge paradigm based on a *constructivist* view (individual experience or advocacy view) employs three main strategies:

1. *Ethnography* research, which is a form of research focusing on sociological meaning through closed field observation of sociocultural phenomena (Emzir, 2007: 143).
2. *Grounded theory* research, which is a general theory of the scientific method dealing with the generalization, elaboration, and validation of social science theories (Glaser and Strauss in Emzir, 2007: 193).
3. *Action research*, which is informal, qualitative, formative, subjective, interpretive, reflective, and an experiential research model, in which all individuals are considered participants who are knowledgeable and supportive (Hopkin in Emzir, 2007: 233).

This research uses a *qualitative approach*, meaning research that produces significant findings according to data and information from the field. According to Sugiyono (2012: 32), in *qualitative research*, data collection is not guided by theory but by facts found in the field. Meanwhile, theory only serves to help researchers formulate various research questions, not to guide data collection and analysis. Qualitative research methods, according to Bogdan and Taylor in (Moleong, 2002: 3), are research procedures that produce descriptive data in the form of written or spoken words from people and observable behaviors.

Qualitative research conducted in a particular social setting is not intended to represent or generalize that setting. This is due to the contextual nature of qualitative research, which seeks to examine social phenomena at the micro level and does not intend to generalize (Bungin, 2010: 45).

Newman in (Sugiyono, 2012) states that qualitative research shapes events in social reality that are meaningful to events in society or organizational institutions by focusing on interactive processes and events that prioritize authenticity. Assessment is conducted explicitly using theories, facts, and field data, depending on the situation or event involving the subject, and employs thematic analysis that directly involves researchers.

Furthermore, according to (Moleong, 2002), the use of *qualitative methods* is based on three main considerations:

1. Easier adaptation to multiple or complex realities.
2. The ability to present the essence of the relationship between researchers and informants/respondents.
3. Greater sensitivity and adaptability to value patterns, meaning that researchers can adjust to many influences and value systems encountered.

RESULTS AND DISCUSSION

Implementation of the Mandatory Policy on the Use of Environmentally Friendly Shopping Bags in DKI Jakarta

Governor's Regulation Number 142 of 2019 concerning the Obligation to Use Environmentally Friendly Shopping Bags has been stipulated and signed by the Governor of DKI Jakarta Anies Baswedan on December 27, 2019 in Jakarta. In this regulation there are eight chapters and 30 articles. This regulation comes into effect on July 1, 2020. The government gave a transition period of six months before the regulation was actually enforced. This transition period is used to socialize business actors and the public about the ban and give them time to adapt to this new rule. This ban was enforced to reduce the amount of single-use plastic waste that pollutes the environment in Jakarta, which is around 14% of which is single-use plastic.

The regulation regarding business actors in the prohibition of providing single-use plastic bags and the obligation to provide reusable shopping bags is a step that aims to reduce the use of single-use plastics in DKI Jakarta. They are also required to socialize to consumers about the use of eco-friendly shopping bags and the negative impact of the use of single-use plastic bags. However, the regulation also provides flexibility for business actors to continue

to provide single-use plastic packaging bags for unpackaged foodstuffs. If there are already alternatives to other packaging bags that are more environmentally friendly, then the provision of single-use plastic bags must be stopped. This is an effort to reduce the use of single-use plastics in the distribution and sales sectors.



Figure 2. Subjects Regulated in the Regulations
Source: environment Jakarta.go.id

The regulation regarding the obligation of shopping center and market managers to require the use of environmentally friendly shopping bags by all operating business actors is an important step in an effort to reduce the use of single-use plastic bags. In addition, shopping center managers also have the responsibility to provide information, supervise, foster, and reprimand to traders in shopping centers and markets regarding the ban on single-use plastic bags and the importance of using environmentally friendly shopping bags. This is part of efforts to socialize and implement the rule at the business and consumer levels.

Business actors are given regional fiscal incentives in the form of regional tax reductions or reliefs if they comply with the obligations and procedures for socializing the use of environmentally friendly shopping bags in accordance with the rules stated in Governor's Regulation Number 142 of 2019. It aims to incentivize businesses that support responsible environmental measures and contribute to reducing the use of single-use plastic bags. On the other hand, if the managers of business actors do not comply with these obligations, they can be subject to administrative sanctions such as written reprimands, forced money (with a minimum amount of 5 million rupiah and a maximum of 25 million rupiah), license freezing, and even revocation of permits. This is an effort to encourage compliance with established rules and increase environmental responsibility in the shopping sector.

Eco-Friendly Shopping Bags are shopping bags that are designed for repeated use and can be made from different types of materials such as dry leaves, paper, fabric, polyester, or other recycled materials. These shopping bags should have an adequate thickness, so they are strong and durable for repeated use. In addition, these shopping bags must be designed to be reusable multiple times and recyclable to reduce environmental impact.



Figure 3. Subjects Regulated in the Regulations
Source: environment Jakarta.go.id

Disposable Plastic Shopping Bags are shopping bags that have a hand handle and are used to transport or carry goods. These bags are made from or contain plastic base materials, such as thermoplastic polymers, latex, polyethylene, thermoplastic synthetic polymers, or other similar materials. These pouches are designed for single-use use and are usually non-reusable.

In order to reduce the generation of waste sourced from plastics used by the community and to increase public awareness to create a clean and healthy environment, the Governor of DKI Jakarta as the Provincial Government of DKI Jakarta ratified Governor Regulation No. 142 of 2019 concerning the Obligation to Use Environmentally Friendly Shopping Bags in Shopping Centers, Supermarkets and People's Markets.

One of the legal bases for the existence of this regulation is Regional Regulation No. 3 of 2013 concerning Waste Management where 3Rs (Reduce, Reuse, and Recycle) are carried out. The obligation to carry this shopping bag is one of the efforts to manage waste that is included in the reduce, where to reduce everything that results in waste. In addition, the foundation of this Governor's Regulation is also through Regional Regulation No. 2 of 2018 concerning Markets.

Factors Inhibiting the Implementation of the Mandatory Policy on the Use of Environmentally Friendly Shopping Bags in DKI Jakarta

The mandatory policy of using environmentally friendly shopping bags in DKI Jakarta is interpreted as an effort by the DKI Jakarta local government to reduce the generation of plastic waste in DKI Jakarta. This meaning has the purpose of providing legal protection and certainty to the community.

The factors that hinder the implementation of the Mandatory Policy on the Use of Environmentally Friendly Shopping Bags in DKI Jakarta are explained by the statement of the Head of the Waste Reduction Section of the South Jakarta Environment Agency District stating that:

As a follow-up to DKI Jakarta Provincial Regulation Number 3 of 2019 concerning the Management of Household Waste and Similar Household Waste, the South Jakarta Environment Agency is responsible for socializing, monitoring, and evaluating the compliance of business actors in reducing single-use plastics. In practice, a number of obstacles in the field hinder the effectiveness of this policy, so it is necessary to sharpen strategies and cross-sector collaborations such as:

1) Consumer behavior, consumers are still used to getting free plastic bags, so volunteers and field workers often find buyers do not bring their own bags even though they have been informed (repeatedly) in the morning and evening in traditional malls and markets.
2) Due to the cost burden, many supermarket traders and people's markets are reluctant to provide eco-friendly bags for free because the price per sheet is still high around Rp 1,500-2,000, reducing consumer purchasing power and MSME margins.
3) Limited institutional and regulatory capacity, limited human resources in the Environment Agency and related agencies result in uneven policy socialization and suboptimal field supervision. The lack of coordination between regional apparatus (e.g., Satpol PP, Trade Office, Health Office) makes it difficult to enforce sanctions for violators, so the deterrent effect has not been clearly felt.
4) The availability and quality of alternatives, eco-friendly bags that are waterproof and strong enough to carry wet goods (fish, vegetables) are still limited, so traders and buyers in people's markets tend to revert to single-use plastics for practicality reasons. The supply of alternative bags in some traditional markets is uneven, especially in the suburbs of Jakarta, which makes policy implementation inconsistent across shopping points.
5) Communication and socialization strategies are less effective, policy socialization materials are often one-way (pamphlets, banners), without being accompanied by training programs or workshops for traders and local communities. The language and manner of delivery have not been adapted to the character of the audience (e.g., simple language for traditional market traders), so policy messages are not well absorbed.

The mandatory policy of using friendly shopping bags in DKI Jakarta will be the operationalization of various waste management policies in DKI Jakarta which has a big goal of encouraging DKI Jakarta to become a sustainable city. Factors that hinder the Implementation of the Mandatory Policy on the Use of Environmentally Friendly Shopping Bags in DKI Jakarta, as conveyed by the research informant of the Kebayoran Baru Sub-district who explained that on May 11, 2023 that:

Kebayoran Baru District, which consists of ten villages, has a variety of trading points ranging from modern shopping centers (malls) to supermarkets. As the spearhead of government services at the sub-district level, the Kebayoran Baru Sub-district Head plays a role in facilitating policy socialization, monitoring implementation in the field, and coordinating with related agencies and business actors.

1) The characteristics of people's markets, street vendors and stalls in the Kebayoran Baru area still rely on single-use plastic bags for the speed of transactions. The informal transaction system makes it difficult for village officers to reprimand one by one consistently.

2) Consumer perceptions and habits, Kebayoran Baru residents who are used to getting "free" plastic bags are reluctant to bring their own bags, especially for daily small shopping. Low collective consciousness—still considered a personal matter, not a shared responsibility.
3) The availability and distribution, supply of eco-friendly shopping bags (canvas, spunbond) in local grocery and wholesale stores is limited, making it difficult for traders to obtain them on a regular basis.
4) The cost burden for MSMEs and wholesalers, the price of alternative bags (~Rp 1,500–2,000 per share) adds to the capital burden of small traders in Tebet, whose profit margins are already thin.
5) The socialization strategy is not yet specific, the general campaign through the village information board has not been accompanied by direct training or demonstrations of the use of alternative bags in local markets and supermarkets.

The factors that hinder the implementation of the Mandatory Policy on the Use of Environmentally Friendly Shopping Bags in DKI Jakarta are in line with the statement of traders at Pasar Jaya Tebet Barat stating that:

As one of the business actors in Pasar Jaya Tebet Barat, I would like to convey some of the real obstacles that we face in the implementation of the mandatory policy of using environmentally friendly shopping bags:

1) The price and business capital, "eco-friendly bags" (spunbond or thick paper) are sold for Rp 1,500-2,000 per sheet. For traders with fast capital turnover and thin margins like me who sell vegetables, fruits, or wet side dishes, providing these alternative bags for free will immediately erode daily profits. Finally, we are forced to impose additional fees on buyers, who often refuse.
2) Buyer attitudes and old habits, the majority of buyers in traditional markets come without preparing their own bags and expect free plastic bags, because that has been the practice for a long time. When I offer paid eco-friendly bags, more often than not they choose to stick with regular plastic bags from other merchants who have not implemented policies.
3) Due to limited stock and supply chains, the supply of spunbond bags at large wholesalers is often empty or late to ship. We can't guarantee daily availability even though in the market, daily stock is very important. If the alternative bags run out, we will provide regular plastic again so that transactions are not hampered.
4) Quality for wet products, for juicy vegetables, fish, or meat, spunbond bags get moist quickly and sometimes tear. Buyers are worried about broken bags when bringing wet goods home. We were also forced to use thin plastic as an additional layer to be safe, which actually increased the use of plastic.
5) The lack of touching socialization, we rarely participate in "workshops" or formal socialization. Policy information is conveyed through pamphlets at the village hall or banners in market corners, but there is no direct demonstration or simulation of how to use environmentally friendly bags. It is more effective if there is a short training in the market or direct assistance by village officers.

6) There is no real incentive, if I as a trader comply with the policy for example not providing single-use plastics, there is no reduction in market levies or special awards. Without incentives, we feel like we're just 'disadvantaged' without any real gains.

Factors that hinder the implementation of the policy of using environmentally friendly shopping bags in DKI Jakarta The essence of communication as the main pillar in interaction in the community is becoming increasingly prominent. Communication between the Jakarta Environment Agency, market managers, and traders is a key element that shapes the level of traders' compliance with the policy. This communication dynamic covers various aspects, ranging from counseling and coordination to handling challenges and obstacles faced in policy implementation. Meanwhile, in the realm of consumer behavior, social campaign communication strategies and education used by the Environment Agency also play an important role in shaping consumer understanding and awareness of the importance of using environmentally friendly shopping bags.

Inhibiting factors that arise in the implementation of the policy of mandatory use of environmentally friendly shopping bags in DKI Jakarta:

1) Limitations of socialization and communication

The lack of clear and consistent information regarding the procedures and benefits of using eco-friendly shopping bags means that traders and market managers do not fully understand this policy. An extension process that is not optimal can cause miscommunication between related agencies, such as between the Environment Agency and market managers and traders. It can be the main obstacle in the implementation of the policy of using environmentally friendly shopping bags. Here are some aspects of these limitations:

a. The use of limited extension methods (for example, only through posters or static announcements) makes information not delivered dynamically and comprehensively to all business actors and consumers.
b. The lack of use of digital technology and social media reduces the reach of information, especially among the younger generation and business actors who rely more on digital platforms.
c. Limitations in the coordination mechanism between the Environment Agency and business actors cause information and policy directions to not be conveyed consistently.
d. The absence of discussion forums or regular meetings to share updates and feedback results in unclarity in the implementation of policies in the field.
e. The communication channels used are not optimal to reach all levels of society and business actors, especially in people's market areas that have different local communication characteristics.
f. The information presented is often general and not tailored to the needs and characteristics of each segment (e.g., the difference between shopping malls and people's markets).
g. The information presented often does not include technical details or implementation procedures, leaving businesses at a loss about the practical steps to take.

h. Inconsistencies in messages delivered in different places and by different agencies create confusion and reduce the level of compliance.

2) Resistance from business actors

Resistance from business actors often emerges as one of the main challenges in the implementation of the policy of using environmentally friendly shopping bags in DKI Jakarta. Here are some aspects of resistance that are often encountered:

a. Eco-friendly shopping bags generally have higher production costs than conventional plastic bags. This makes business actors worried about increasing operational cost burdens and impacting their profit margins.
b. This increase in costs has the potential to be passed on to consumers, which can reduce business competitiveness, especially in price-sensitive market segments.
c. Business actors must change long-standing operational methods, such as the habit of providing single-use plastic bags. These changes take time and adjustment, which is not always easy to do quickly.
d. The distribution and availability of eco-friendly shopping bags that are still limited can hinder the smooth operation of businesses, especially in people's markets or locations with distribution infrastructure that is not optimal.
e. Concerns that consumers will be reluctant to use eco-friendly bags for price or convenience reasons can make business actors hesitate to implement the policy in full.
f. Consumers who are already accustomed to the convenience and low cost of single-use plastic bags may find it difficult to quickly adapt to more environmentally friendly options.
g. Without support in the form of subsidies or financial incentives, business actors feel that they have to bear the entire burden of additional costs without significant compensation from the government.
h. Businesses facing competitive pressures may feel that their primary focus is on maintaining operational stability and profitability, so policy innovations that are considered risky are not a priority.

3) Consumer behavior that still does not want to change habits

The implementation of the mandatory policy of using environmentally friendly shopping bags, consumer behavior is often a significant inhibiting factor. Some aspects that show consumer behavior that is still not optimal include:

a. Consumers have long been accustomed to using single-use plastic bags that are easy to get and free.
b. Changing habits requires time and high awareness to adopt more environmentally friendly alternatives.
c. Many consumers consider it impractical to carry their own bags because they must always remember them before shopping.
d. The convenience of getting plastic bags that are automatically available at the checkout often makes consumers reluctant to switch.

e. Information about the benefits of using eco-friendly bags for the environment and health has not been effectively conveyed to consumers.
f. Socialization that is not optimal makes some consumers still doubt the effectiveness and urgency of this policy.

4) Inconsistent enforcement of laws and regulations

Less consistent enforcement of laws and regulations is one of the main obstacles in the implementation of the policy of using environmentally friendly shopping bags. Some of the aspects underlying this problem include:

a. The provisions in the regulations are often not specific enough, thus providing room for interpretation that varies from one region to another.
b. The lack of clear technical and operational guidance makes it difficult for supervisory officials to implement sanctions uniformly.
c. In some places, business supervision can be carried out strictly, while in the people's market supervision tends to be loose.
d. This difference in the intensity of supervision leads to the application of inconsistent sanctions and creates a perception of injustice.
e. The limited number of officers and resources available results in incomplete supervision, especially in areas with high transaction volumes.
f. The lack of adequate technology or monitoring systems also contributes to the inability to control policy implementation in real time.

Efforts Made to Overcome Obstacles to the Implementation of the Mandatory Policy on the Use of Environmentally Friendly Shopping Bags in DKI Jakarta

The mandatory policy of using environmentally friendly shopping bags in DKI Jakarta is interpreted as an effort by the DKI Jakarta local government to reduce the generation of plastic waste in DKI Jakarta. This meaning has the purpose of providing legal protection and certainty to the community.

Efforts to overcome the factors that hinder the implementation of the mandatory policy on the use of environmentally friendly shopping bags in DKI Jakarta are in line with the statement of the Head of the Waste Reduction Section of the South Jakarta Environment Agency said that:

Efforts to overcome the factors that hinder the implementation of the mandatory policy on the use of environmentally friendly shopping bags:

1) The approach is through contextual socialization, organizing regular training in people's markets, supermarkets, and shopping centers every month. The LH Service Officer demonstrated how to use spunbond bags and recycled paper bags, including tips on caring for them so that they are durable for repeated use. Holding a "Dialogue of Traders for the Environment" at the sub-district level, involving representatives of traders, mall management, and community leaders to share practical obstacles and solutions in the field.

2) Subsidies and economic incentives, proposing an assistance scheme in the form of vouchers for the procurement of environmentally friendly bags for 500 MSMEs every quarter, in collaboration with the Cooperatives and SMEs Office.
3) Strengthening integrated supervision, building a mobile-based "SiPantau Plastik" reporting application, so that field officers from various OPDs can record violations in real-time and connect to a centralized sanction system.

The mandatory policy of using environmentally friendly shopping bags in DKI Jakarta will be the operationalization of various waste management policies in DKI Jakarta which has a big goal of encouraging DKI Jakarta to become a sustainable city. Efforts are being made to overcome the factors that hinder the implementation of the mandatory policy on the use of environmentally friendly shopping bags in DKI Jakarta, as conveyed by the research informant of the Tebet Sub-district who explained that on May 11, 2023 that:

Follow-up plan from Tebet District to overcome the factors that hinder the implementation of the mandatory policy on the use of environmentally friendly shopping bags in shopping centers, convenience stores, and people's markets in DKI Jakarta:

1) Focusing on the people's market, it organizes a monthly "Traders' Dialogue with the Sub-district Head" in both major markets, to listen to first-hand obstacles and demonstrate the use of eco-friendly bags.
2) Increasing access and incentives, coordinating with the South Jakarta City Cooperatives & SMEs Office to distribute spunbond bag starter packages to 200 traders in Tebet every quarter. Rewarding ("Environmentally Friendly Traders" certificate) for orderly traders as a non-financial incentive.
3) Empowering the village task force, prioritizing monitoring of this policy in the monthly work target of PPSU/PLH, with a special allocation of patrol days for "Plastic Free Markets" in two markets. Training village officers using a simple application (WhatsApp chatbot) to report violations in real-time to the District.
4) Community-based education strategy, collaborating with RW/RT for the "Plastic-Free RW" program with door-to-door campaigns and creativity competitions to make recycling bags. Involving elementary schools/madrassas around Tebet in poster competitions and small theaters with the theme of plastic reduction.
5) Accelerating the enforcement of sanctions, establishing a "Tiered Reprimand System" at the sub-district level: verbal reprimands → written reprimands of the sub-district → recommendations for OPD fines, with a one-week completion deadline for each stage.

The success of the mandatory policy of using environmentally friendly shopping bags depends on the synergy between the sub-district government, sub-districts, business actors, and the community. Through the concrete steps above, it is hoped that the level of compliance in Tebet District will increase significantly in the next 6 months, in line with the growth of collective awareness and ease of access to alternative pockets.

Efforts to overcome the obstacles to the implementation of the mandatory policy on the use of environmentally friendly shopping bags in DKI Jakarta, this is in line with the statement of traders at Pasar Jaya Tebet Barat stating that:

As a business actor in Pasar Jaya Tebet Barat, we welcome the various efforts that have been and will be made by the DKI Jakarta Provincial Government and partners, but still have some notes to improve the implementation of the mandatory policy of using environmentally friendly shopping bags in DKI Jakarta:

1) Eco-Friendly Pocket Purchase Voucher, we appreciate the existence of vouchers worth IDR 500,000 per quarter. With that funding, we can try different types of bags (spunbond, recycled paper) without reducing our own capital. Note: The voucher claim process should be made easier (the nearest dealer at Pasar Minggu), because the queue at the Cooperative Office is quite long.
2) The "Pocket Exchange" program and discounts for consumers, consumer incentives in the form of small discounts (e.g. Rp 1,000 per purchase) when bringing their own pockets are effective in encouraging new habits. Some of our buyers have started to regularly bring cloth bags. Note: The amount of the discount should be adjusted to the average spending in the traditional market (Rp 50,000–100,000), for example increasing to 2–3% to feel significant.
3) Field socialization and training in the market, the presence of village officers for demonstrations on the use and maintenance of environmentally friendly bags are very helpful. When there is a "market tour workshop," we can immediately try and ask questions. Note: The schedule should be informed two weeks in advance via the trader's WhatsApp group, so that more people can attend.
4) Bag quality testing, waterproof and strong bag test project to withstand wet load gives confidence to switch. We have obtained samples of coated spunbond bags that do not leak when carrying fish. Note: It is necessary to have a standard maximum price, for example below Rp 1,500 per share so that small traders can still afford to buy.
5) In collaboration with private actors, the presence of alternative bag sales "corners" at the entrances of malls and supermarkets has not been felt in traditional markets. We hope that similar cooperation can be carried out in market areas, for example small booths that sell cheap and quality bags.

In facing challenges and obstacles during the implementation of the policy of using environmentally friendly shopping bags, the Jakarta Environment Agency needs to integrate various strategies that support each other so that policy goals can be achieved and the level of compliance of business actors increases. Some of the integrative efforts that can be implemented include:

1) Socialization and education of the community, this can be done with the following steps:
    a. Conducting campaigns and counseling to the public about the negative impact of plastic bags and the benefits of using environmentally friendly bags.
    b. Providing educational materials in shopping centers, supermarkets, and people's markets in the form of posters, banners, or digital media.
    c. Involve the environmental community, schools, and community organizations in the plastic waste reduction movement.
2) Support and incentives for traders and business actors

a. Provide subsidies or assistance for people's market traders so that they can provide eco-friendly shopping bags at affordable prices.
b. Encourage local manufacturers to create a cheaper shopping bag alternative that is easily accessible to small traders.
c. Provide awards or incentives for shopping malls and stores that successfully implement this policy well.

3) Strengthening regulations and supervision
   a. Conduct regular inspections and evaluations of shopping malls, convenience stores, and people's markets to ensure policies are implemented correctly.
   b. Provide warnings and sanctions to business actors who still use single-use plastic bags.
   c. Encourage additional regulations, such as banning the production or distribution of certain plastic bags at the producer level.
4) Provision of affordable shopping bag alternatives
   a. Promote the use of shopping bags made of fabric, wicker, recycled paper, or other biodegradable materials.
   b. Inviting micro, small, and medium enterprises (MSMEs) to participate in the production of environmentally friendly shopping bags.
   c. Encourage shopping malls and convenience stores to provide shopping bag borrowing or exchange programs.

CONCLUSION

Based on the results of the research and discussion, it can be concluded that the implementation of the mandatory policy on the use of *environmentally friendly shopping bags* in *DKI Jakarta* has generally proceeded well, although the types of benefits generated and the resources utilized are not yet optimal. Several factors have been identified as inhibiting the effective implementation of this policy, including limited socialization and communication, resistance from business actors, suboptimal supervision, and a lack of interest from business actors in providing *environmentally friendly shopping bags*. To address these obstacles, various efforts have been made, such as increasing socialization and public education, providing support and incentives for traders and business actors, strengthening supervision, and offering alternatives to *environmentally friendly shopping bags*. These measures are expected to enhance the effectiveness of the policy and encourage greater public and business participation in reducing plastic waste in *DKI Jakarta*.

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