

An analysis of the Plastic Regulations in Tackling the Soaring Littering of Plastic Shopping Bags in South Africa

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Abstract

Undoubtedly, plastic shopping bags are good because they are durable, smart, and tough. The concern is that people use plastic shopping bags only once and then throw them away into the environment where they cause significant harm to the environment and its inhabitants on land and in the water. Consequently, the government decided to regulate plastic bags usage by imposing a bag levy to encourage reuse and prevent dumping and pollution. However, despite the levy, plastic bag dumping and pollution have not decreased. This paper looks at the Regulatory interventions that have been introduced to address plastic carrier bags waste and both civil and criminal sanctions for holding polluters.

Keywords: Plastic carrier bags, plastic-bag litter, Pollution, Nuisance, Levy, Regulations.

Introduction

In the '70s, plastic carrier bags were introduced in South Africa purposefully as a durable, efficient, cost-effective shopping bags. Pursuant to this, various retail outlets started giving out plastic carriers bags freely as a container to carry goods purchased by their customers. However, plastic shopping bags became a nuisance and littered the environment as customers use and dump them carelessly as they could always get more free of charge as containers to carry their purchased items. As such, the use and disposal of large numbers of plastic bags have resulted in pollution and degradation of the environment in South Africa (O'Brien and Thondhlana, 2019). According to O'Brien and Thondhlana (2019) "single-use plastic shopping bag consumption is one of the leading causes of environmental and socio-economic problems worldwide, which has led to global calls for intervention strategies to reduce use. In South Africa, plastic bag use is still widespread despite intervention efforts based on levying taxes." Plastic carrier bags are a major source of litter, dirt, and a broad environmental issue in South Africa. It is pertinent to point out that as plastic bags are not biodegradable when they are dumped on the ground, they block the porosity of the soil and also impact the soil microbe activity. As such, the dumping of plastic bags into the environment is a nuisance and different studies have revealed that plastic shopping bags in South Africa continue to negatively impact the environment and the ecosystems (Obebe and Adamu, 2020). It is against the harmful environmental nature of plastic bags that, in 2003, South Africa enacted Regulations under section 24(d) of the Environment Conservation Act (Act no. 73 of 1989) to prohibit and combat the use of plastic carrier bags and flat plastic bags which intended to act against the uncontrolled spread of the plastic bags and decrease plastic bags litter, encourage reuse and recycling of plastic

bags. his legislation came with remarkable innovations as it combined standard and price-based economic tools targeted purposefully to reduce the public's demand for plastic bags (Witbooi, 2003). Section 24 (1) of the Regulation provides that, "carry bag means a plastic bag or a plastic packet which is distributed to the consumer." Sections 2 and 3 of the Regulations provide for prohibitions, offences and penalties on the supply of carry bags. Undoubtedly, to some extent, the Regulations have achieved some remarkable positive impacts on the environment because of its resounding success in reducing plastic bags litter consequently causing less devastation to marine life and the environment at large. This notwithstanding, the concern is that there is surge in the increased of plastic shopping bags waste in the country and this is exacerbated by the inefficient waste management infrastructure and charlatan behaviors of the consumers and retailers. As part of the strategies to address this, the Regulations require manufacturers to produce plastic bags to 24 microns being acceptable thickness of plastic shopping bags and in addition, imposed 50 cents levy per bag to be paid by the consumer (da Costa et al., 2020).

It is the responsibility of the government to implement appropriate interventions to curtail plastic carrier bags environmental pollution by setting strict regulations on its disposal and find ways to effectively implement and enforce these regulations (da Costa et al., 2020). To this effect, the South Africa government enacted Regulations under section 24(d) of the Environment Conservation Act (Act no. 73 of 1989) of the command and control approach. This approach is the most common environmental intervention because of its potential to be effective and efficient when it comes to implementation where there are relevant information and good institutional structures in place to ensure compliance (Mahlangu, 2009). However, if implementation fails, enforcement shall kick-in in order to achieve the desired results. This type of regulatory intervention has been shown to be acceptable by people and effective in meeting its target which in this situation will be to discourage the throwing and dumping of plastic carrier bags into the environment.

Research Methodology

This paper used a literature review approach to discuss the significance of tackling and combating the spiral plastic shopping bags debris and littering in South Africa. Pursuant to this, relevant contemporary scholarly works were searched and retrieved from the google scholar search platform. Keywords such as plastic carrier bags, plastic-bag litter, pollution, littering, nuisance, levy, polluter pays, precautionary principles and regulations were inserted into the search platform. Thereafter, scholarly works generated were retrieved and used to assess how the problem of dumping, disposing, and discarding of plastic shopping bags into the environments are being addressed and how to use different environmental law tools to tackle and combat plastic bags pollution and degradation.

Literature Review

It is imperative for the government to ensure proper implementation of the Regulations

in order to tackle and curb plastic shopping bags pollution in South Africa (Brennholt et al., 2018). Levy charged has been the prominent control and deterrent but many scholars have indicated that this has continued to be unsuccessful as it is contrary to the polluter pays principle and it is effective on a short term basis only (Mogomotsi et al., 2019). As such, the effectiveness of the levy is on the decline even though it continues to be implemented by retail shop owners at the payment tills. Of note, it seems that the increase in dumping of plastic bags may be due mainly to the low levy price of plastic bags which is 50cents a bag. Against this backdrop, there have been more quantity demands of the plastic bags by consumers because they are affordable hence the demand and littering of the plastic bags skyrocketed. The concern is that most of the dumped plastic bags which are not biodegradable end up in landfills and remain as hard waste in the soil (Rajmohan et al., 2018). The other concern is that dumped plastic bags are light in weight and when the wind blows, they are easily carried away by the wind and they often end up in the river and this creates a long-term harmful environmental hazard to marine inhabitants and environments (Sharma and Chatterjee, 2017). According to Deng et al., (2001), "plastic debris, representing 80-85% of the total litter in the ocean, has been identified as an emerging environmental issue by United Nations Environmental Programme due to their damages to marine organisms and critical habitats. It is estimated that at least 8 million tons of plastics are dumped into the world's ocean annually. The increasing production of plastics coupled with a slow degradation rate and improper disposal could result in the continuous accumulation of plastics in the marine environment. Larger plastics already released to the environment are degraded inevitably through mechanical actions, which leads to the formation of an emerging contaminant, referred to as microplastics (MPs)" (Deng et al., 2021).

Research has shown that when plastic bags are dumped into the river or ocean, they break into microplastics which resemble foods that can be eaten by marine animals such as fish and turtles. By eating these microplastics, marine animals ingest these toxic. Against the backdrop of this assertion, Deng et al., (2001) indicate that "over the last decade, microplastics as emerging contaminants have received a great deal of international attention, not only because of their continuous accumulation in both marine and terrestrial environment, but also due to their serious threats posed to the environment and found in the different environmental compartments such as marine, freshwater, wastewater, and soil." Most times, plastic bags dumped in the environment constitute nuisance and irritants, and it is the responsibility of the municipalities to manage and evacuate bins and waste generally. However, it has been shown that the government has not been efficient in discharging this responsibility, thus resulting in, plastic bags littering with some of these litters find their way into rivers, lakes, estuaries, and oceans and become dangers to marine ecosystems and surroundings.

While levy should continue to be imposed, it is also imperative that for the environment to be plastic bags litter-free, there is a need to implement and enforce Section 24(2) of the Regulations which provides for the offences and penalties such that "any person who contravenes any provision of these regulations is guilty of an offence and liable, on first conviction, to fine not exceeding R10 000 or imprisonment for a period not exceeding one year or to both such fine and such imprisonment, and

in the case of a second or subsequent conviction to a fine not exceeding R100 000 or to imprisonment not exceeding ten years or to both such fine and such imprisonment.” This has potential to bite and deter polluters.

Findings and Discussion

The imperative of the South African Government to act against the uncontrolled spread of dumping of plastic shopping bags through the introduction of Regulations is the right thing to do. These Regulations seek to ensure that by imposing a levy, the number of plastic bags demanded by consumers will reduce as reuse and recycling of plastic shopping bags will be encouraged. Also, Section 24(2) Prohibition on the supply of carry bags limits the thickness of plastic shopping bags to less than 30 microns in order to reduce the weight and make it more flexible. Remarkably, section 24(3) is in line with the polluter pays principle which is a viable environmental law tool used to hold perpetrators civilly and criminally liable for polluting and degrading the environment. Hence, this principle together with precautionary principle have the ability to deter polluters from duping plastic shopping bags to the environment. With regard to the precautionary principle, the levy is a caution indicating to the consumer that an amount had to be collected in order to deter the dumping of plastic shopping bags used to carry goods purchased in the retail shops. It also indicates to the consumer that plastic bags can be used several times rather than buying new bags at every opportunity of shopping. Over and above, consumers of plastic shopping bags are made to meet the costs of pollution and prevention measures through levies. As such, polluters are made to bear the overall expenses of preventing and controlling plastic shopping bags pollution. More importantly, these principles-precautionary and polluter pays are potent environmental economic tools that present remarkable incentives to ensure and encourage compliance with environmental obligations and at the same time punish errant polluters by exploring their civil and criminal responsibilities as enshrined in the Regulations.

However, it is important to highlight that while there have been Regulations to combat plastic waste, there has been a soaring increase in the consumption of plastic shopping bags irrespective of the levy and sanctions being imposed. It is pertinent to point out that due to inadequate transport system and where they are available, very exorbitant transport fares are charged by the transporters. In order to carry goods purchased from the shops to different destinations and homes, commuters mostly opted to buy plastic carrier bags and walk home by travelling longer distances with their heavy goods and items purchased in the shops contained in the bags. In this situation, plastic carrier bags become handy and comfortable to discharge the tasks. Again, it is concerning that despite Regulations, consumers and retailers keep buying plastic bags regardless of the levy. This setback is attributable to the government because there is no intensive awareness creation that levy is being imposed to deter from buying more plastic bags and dumping them into the environment. Therefore, there are awareness and educational gaps on the importance of the levy imposed on plastic carrier bags and their impact on the environment. In order to address this problem, the government should intensify public awareness and dissemination

information about the environmental harms of not reusing plastic bags and dumping them into the environment. Another way to address the problem is through the increase in the amount of levy and more importantly, having functional and efficient waste management systems whereby wastes are dutifully collected and dumped in designated places.

Conclusion and Recommendations

Despite the Regulations that seek to tackle and combat plastic shopping bags in South Africa, behaviour and attitudes of the retailers and consumers have not changed as they keep dumping single-used plastic shopping bags into the environment and this is having devastating environmental harm and the consequences are that since plastic bags are derived from petroleum by-products, they would definitely impact the environment and cause environmental harms when they release carbon dioxide to the environment. Levies and taxes are being imposed on plastic shopping bags to deter single-use plastic bags to reduce littering but most of the consumers are able to afford the frequent purchase, hence defeating the purposes of the levies and taxes. The imperative of effective and efficient waste management systems should be intensified by the municipalities. Dumping can lead to blockage of waterways and if not evacuated and cleared it could result in severe flooding, impact marine resources and human health and well beings. To control and minimise dumping, there is a need to consider other interventions such as punitive sanctions, monitoring, and aggressive enforcement. Ensuring all stakeholders and role players are on the same page in order to ensure that there are behavioural and attitudinal changes where the culture of reusing plastic bags is adopted and more importantly, after their lifespan, the bags should be properly disposed of and processed.

Single-use of plastic bags by customers should be discouraged and retailers should provide incentives for customers who reuse plastic bags several times. This recommendation will be more effective if carried out in collaboration with the government. Also, retailers should be encouraged to become innovative by using alternative types of carrier bags such as paper bags. Paper bags are easily dissolved and can even be processed as manure to be used in farms. Both precautionary and polluter pay principles should be properly utilised by; imposing higher levies and taxes on plastic bags in order to encourage reuse and recycling; develop biodegradable alternatives to plastic packaging; punitive sanctions in form of levies and taxes should be collected and use to improve and strengthen waste collections, evacuations and management in order to make the environment sustainably clean.

More importantly, the current Regulations in place seem to be inadequate. As such, there is a need for the municipalities to deploy anti-dumping, anti-pollution environmental tools in their toolboxes to tackle and combat plastic shopping bags littering.

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