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Extended producer's responsibility of companies using plastics for packaging commodities in India

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Abstract

The dream of Viksit Bharat can only be made possible with a contaminant-free environment. Governments and local bodies are making a concerted effort to meet the target. Still, there is a wide gap between the capability and goals. In this course, a defiler must take responsibility for its own emissions. Different trajectories have been drawn up based on consumerist significance. Produce retailed in plastic packaging generates a massive amount of plastic packaging waste. Since 2011, the directive intervention has been prescribed for companies in India, referred to as 'extended producer's responsibility'. Progressively, a nationwide system has been established to manage plastic packaging waste. As one of the newest developments of the 'polluter pays principle', the configured plan overlaps with several other legal responsibilities. Notably, environmental responsibility, as mentioned within corporate social responsibility, has a broader scope than this. Thus, a dubious situation is appearing as the company may claim fulfilment of both by performing only for the extended producer's responsibility. Then, it would be an excellent escape for companies from other environmental responsibilities, and this could be showcased as a misguided effort by lawmakers. Thus, it is a prudent time for a thorough examination of the entire mechanism, as it has been underway for more than a decade.

Keywords: Plastic packaging waste, extended producer's responsibility, polluter pays principle, corporate social responsibility

Introduction

Plastic, a material primarily made with synthetic resin by Leo Baekeland in 1907^[1]. The material is currently transformed and utilised by the majority of the population for various purposes. Currently, it provides numerous solutions to multiple problems. In 2024, India became the largest emitter of plastic, producing almost ten million metric tonnes per year^[2]. This may demonstrate its dependability, but cannot set aside the characterisation of the pollutant. It is being used for packaging various commodities. This has become one of the structured operations of producers, investors and brand owners (hereinafter referred to as 'PIBOs'). The packaging helps to complete the journey of the produce from production to consumption. When people in India purchase packaged commodities of their preference from a nearby retail store, they often have to bring a plastic bag provided by the manufacturer for packaging. The packet serves several purposes for the stakeholders of those PIBOs. The packaging provides secure handling, offers brand advertisement opportunities, includes information about the manufacturer, ingredients, necessary warnings, a batch number, and details on the limited retention of quality. Additionally, it indicates disposing of the packet in the wastebasket for cautious waste management. In this instance, there are two possibilities with the plastic used for packaging. It can either be left in the wastebasket, which may assure safe waste management. Alternatively, it can be thrown anywhere, which people in India habitually do with plastic packaging waste. In both sketches, a virtuous responsibility arises for the plastic generator to ensure the secure management of plastic packaging waste. Swedish academic Thomas Lindhqvist formally introduced this type of responsibility in a report submitted to the Swedish Ministry of Environment in 1990, known as 'Extended Producer's Responsibility'^[3].

Extended Producer's Responsibility (EPR)

Lindhqvist has defined the EPR as 'an environmental protection strategy that makes the manufacturer of the product responsible for the entire life cycle of the product and especially

for the take back, recycling and final disposal of the product' ^[4]. Kate McKerlie *et al.* mentioned EPR as a policy measure that recognises the producer's role in reducing the environmental impact throughout the life cycle of the product ^[5]. According to the Organisation for Economic Co-operation and Development, EPR is 'an environmental policy approach in which a producer's responsibility for a product is extended to the post-consumer stage of a product's life cycle, including its final disposal' ^[6]. Rule 3(g) of the Plastic Waste (Management and Handling) Rules, 2011, also defines EPR. It has been described as the responsibility of a manufacturer of plastic carry bags, multilayered plastic pouches, and sachets to ensure the environmentally sound management of these products throughout their life cycle. Furthermore, in Rule 3(h) of the Plastic Waste Management Rules 2016, EPR is defined as the producer's responsibility for the environmentally sound management of the product throughout its life cycle, including at the end of life.

Classification of Extended Producer's Responsibility

EPR has been classified variably depending upon the set of activities and mode of performance. Considerably, both have been accepted and performed accordingly by the PIBOs. The Westernisation of EPR is classified based on involvement, assistance, accountability, and sensitisation. Parallel to this, the Indianization of EPR has been categorised depending on the mode of discharge.

According to Lindhqvist, a producer has four types of responsibility with respect to the waste generated from the produce.

- a) A producer having physical responsibility to collect waste generated from the produce. It might be a waste of pre-packaging, post-packaging, or after-consumption of the produce. Presumably, the responsibility for involving human resources in the collection and management of waste generated from the commodity lies with...
- b) A producer must have financial responsibility for the dues made from the arrival of the pollutant till the end of its life. It is one of the paramount responsibilities of the producer to rectify the mess that arises from the interests of a set of people. In the protection of interests, necessary financial charges for collection, management, and even against any environmental complications are to be incurred.
- c) A producer has informative responsibility for the produce. The producers must provide essential information about the product. Such information is to be declared to all. It includes information related to the substances used by the manufacturer in the production process. If any form of environmental hazard has been utilised, it must be declared by the producer. Furthermore, the process of waste collection, along with the importance of waste management and disposal, also falls under the producer's responsibility.
- d) The producer has liability for the environmental damage caused by the product or its waste. If all environmental hazards and waste cannot be managed, there is a risk of ecological damage. In this regard, the producer has absolute liability to restore or compensate for the same ^[7].

Apart from the above-mentioned classification, the EPR can also be categorised into three varieties of conduct, depending on the different processes used to manage waste.

- a) A producer of waste must try to reuse the material without any processing or with the least possible changes, if possible. With this application, producers have numerous options to manage waste. Besides, it reduces the emission of fresh pollutant material.
- b) A producer has the responsibility to recycle the waste. It reduces the burden of waste while ensuring further utilisation of the material for its intended purposes. The use of recycled materials must be mentioned, as they are derived from waste. Producers must ensure they are appropriately used to avoid causing any environmental damage.
- c) A producer also has the responsibility to dispose of waste that has no other utility. Furthermore, such disposal should be conducted in a manner that does not harm the environment, considering the life cycle of the contaminant ^[8].

Polluter Pays Principle and Extended Producer's Responsibility

The concept of the polluter-pays principle was first discussed by A. V. Kneese and J. H. Dales in the mid-twentieth century ^[9]. The principle has been that those who cause pollution are supposed to pay for managing it. The concept aimed to reduce pollution. The principle was enshrined in a Draft Declaration of Principles on Air Pollution Control submitted by the Committee of Ministers of the Council of Europe in 1968 ^[10]. Then, the Organisation for Economic Co-operation and Development introduced it in 1972 ^[11]. The concept of the polluter pays principle has been incorporated into Principle 22 of the Stockholm Declaration of 1972 ^[12]. Again, the principle has been clearly mentioned in Principle 16 of the Rio Declaration 1992 ^[13]. The principle clearly states that the polluter of any part of the environment shall be liable for the resulting damage. This responsibility arises not only after pollution has occurred but also from the first day of preparing a product to the end of its life cycle. The concept of EPR stems from the polluter-pays principle, which holds that a producer is responsible for the pollution caused by their production. The connection can be observed in the OECD discussion, where the EPR has been mentioned in relation to the polluter-pays principle. It is also clear that the concept of the polluter pays principle is very broad and somewhat inadequate when the product itself is a pollutant material. The same issue arises for the responsibility of plastic packaging waste. Therefore, the EPR is a step ahead of the polluter-pays principle. When the burden of pollution on the producer arises after the pollution has occurred, under the polluter pays principle, the EPR assigns responsibility to the producer from the very first day of production to the end of the product's life.

Corporate Social Responsibility and Extended Producer's Responsibility

Howard Bowen introduced the concept of corporate social responsibility ^[14]. In this concept, the various responsibilities of corporate firms are outlined, as they generate profit while operating within society using all available resources. These responsibilities are to be fulfilled after all the stakeholders of corporate firms have fulfilled

their responsibilities. However, such responsibilities are aimed at the betterment of various parts of society. It includes work for the health of people and livestock, education of children, environmental responsibility, or any form of donation for welfare purposes ^[15]. On the other hand, EPR is enforceable as a mandatory obligation mentioned under legal provisions. However, it has an outcome-based connection in the environmental aspect. When corporate firms, such as PIBOs, perform EPR for their products, it also fulfils their ecological responsibility toward society. The EPR is very specific as it ends by referring to particular factors. However, environmental responsibility under corporate social responsibility is much broader and does not end after the fulfilment of any specific target. In this regard, corporate social responsibility is broader and encompasses all the requirements of society. From this perspective, fulfilling EPR also fulfils corporate social responsibility. This may present considerable opportunities for some corporate firms. Still, it will result in a massive loss for the environment, despite the limited profit share suggested for addressing social responsibility.

Development of Extended Producer's Responsibility in India

Responsibility towards society is an inherent part of the Indian tradition. People of India follow the concept of '*Sarve Bhavantu Sukhinah, Sarve Bhavantu Niramaya*'. PIBOs are artificial persons with responsibilities similar to those of natural persons towards stakeholders and society. From this perspective, PIBOs also have a responsibility towards the environment. The Indian judiciary, observing incidents such as the Bhopal gas leak case and the Oleum Gas leak case, transformed strict liability into absolute liability for the damage caused by the polluter. Gradually, the aftermath of the pollution was devastating, and it failed to achieve the necessary outcome to protect the environment. Besides this, various unusual materials have emerged in recent years for regular use in business practices. PIBOs producing packaged commodities generate a considerable amount of plastic packaging waste. Observing this issue, the Central Government of India prepared the Plastic Management Policy in 1999 ^[16]. Initially, the responsibility for collecting plastic packaging waste was assigned to local bodies. However, the amount of plastic emissions was significantly higher than the amount of plastic packaging waste collected. This issue has been recognised and acknowledged as a responsibility of the PIBOs as well. After that, the Plastic Waste (Management and Handling) Rules 2011 were enforced. In this provision, the concept of the producer's responsibility for plastic packaging waste is outlined. Furthermore, the Plastic Waste Management Rules 2016 have been implemented, superseding the existing rules ^[17]. The provision also mentioned the producer's responsibility for the plastic packaging waste. Lastly, amendments have been made to the regulations to provide guidelines relating to plastic packaging waste ^[18].

Extended Producer's Responsibility of Companies Using Plastic Packaging in India

Several PIBOs in India produce commodities that require plastic packaging. These PIBOs have responsibilities mentioned under Rule 9 of the Plastic Waste Management Rules 2016. It states that PIBOs shall work with the relevant

authority, individually or collectively, through a proper channel to collect plastic waste. The main goal of the PIBOs under EPR is the collection of used multilayered sachets, pouches, or packaging ^[19]. According to the guideline provided for EPR in 2018, a collection point for plastic packaging waste is to be built by the PIBOs. A plan for the collection process of plastic packaging waste is to be submitted to the concerned pollution control board ^[20]. The legal provision also instructed PIBOs to stop using non-recyclable plastic ^[21]. All PIBOs must register under Rule 13 of the Plastic Waste Management Rules, 2016, to use plastic for packaging commodities. A record of such use of plastic shall be kept by the PIBOs as mentioned in the guideline under the Plastic Waste Management (Amendment) Rules 2022. Depending on this, a portal was introduced on 5th April 2022 by the CPCB for the registration of PIBOs with EPR ^[22]. According to the Minister of State for the Ministry of Environment, Forests, and Climate Change, Government of India, more than 37,000 PIBOs have been registered in the EPR for plastic packaging as of October 2024 ^[23]. As of December 2024, the total number of PIBOs registered for EPR on plastic packaging waste is 44,659 ^[24]. These PIBOs generate approximately 8 million tonnes of plastic packaging waste annually ^[25]. Plastic packaging waste has been categorised into four groups based on its characteristics, as outlined in the guidelines provided under the amended provisions of the rules. Several annual targets have been set for managing different categories of plastic packaging waste under the amended provisions of the rules. PIBOs have been directed to establish waste plastic collection points and recovery facilities. The recovered waste is offered to establishments for waste management, recycling, or disposal of plastic packaging waste. In fulfilment of the EPR, PIBOs are required to obtain a certificate for their completion annually. In the event of non-fulfilment of this responsibility, further provisions for environmental compensation under the concept of the polluter-pays principle have been mentioned.

Possibilities and Challenges of Extended Producer's Responsibility for Plastic Packaging Wastes in India

In the twenty-first century, the nation's international image in the environmental aspect is one of the major concerns. The initiative has the potential to reduce plastic packaging waste gradually. In Switzerland, EPR has reduced plastic packaging waste by 3% annually. The EPR also reduces the burden of pollution on the soil and other environmental parts. The EPR for plastic packaging waste also ensures that raw materials are available for recyclers and processors of plastic waste, who operate as parallel businesses. If a large portion of the plastic packaging waste is recycled, a tremendous amount of greenhouse gases would be reduced. PIBOs would reduce their use of plastic packaging and seek sustainable alternatives. For this reason, PIBOs will encourage research on sustainable alternative packaging materials.

On the other hand, the initiative to reduce and control plastic packaging waste generated by PIBOs presents several challenges and opportunities within the Indian framework. There are challenges related to social disparity, distinctive livelihoods, stakeholder interests, and many more. The concept has been developed with consideration of the circumstances in Sweden, which have a distinct set of producers, stakeholders, consumers, and governmental

mechanisms, among others. Thus, challenges are mentioned hereunder.

- a) Presently, India is the most populous country in the world ^[26]. Markets and residences in urban areas, as well as some rural parts of the country, are densely populated, which creates issues in collecting plastic packaging waste after customers have consumed it.
- b) PIBOs in India are very negligent in fulfilling EPR. Although a considerable number of registrations have been done, compliance is still to be achieved. These PIBOs registered for EPR on plastic packaging waste must fulfil the target and submit it in the annual return to the relevant SPCBs or CPCB. However, 56 percent of them did not submit such information ^[27]. This clearly demonstrates the PIBOs' intention regarding the EPR mechanism.
- c) The retail sector in India is very unique. It features large shopping outlets as well as small shops selling packaged commodities in plastic. Even unorganised small retailers selling packaged commodities generally have no idea about the necessary retail licenses ^[28].
- d) After so many years of environmental renaissance, a part of the country could not be covered with a waste collection and management mechanism. Even in urban areas, the waste collection system has different issues.
- e) People of India have minimal education about the environment in general. The majority of people are not aware that plastic is a pollutant. Proper waste management is only possible when people are aware of contaminants and the appropriate handling of waste.
- f) Governments in India are working on public awareness, waste collection and waste management, but they it is failing in various parts. The government is failing to inform the public about the littering caused by plastic packaging. From metropolitan cities to rural areas, plastic waste from packaged commodities can be found in all public places. Besides this, waste collection is often handled by local authorities and governments; however, the requirement still cannot be fulfilled. Most plastic packaging waste collectors lack health security and other required benefits ^[29]. Even the expenditure of governments for the management and disposal of plastic packaging waste is significantly lower compared to the spending in different countries.
- g) Most of the plastic packaging waste processors are from the private sector, having no interest in protecting the environment but to fulfil their own interests ^[30].

A significant gap remains in achieving the ultimate goal of making plastic packaging waste-free in the country.

Conclusion

The manufacturing process of packaged commodities for consumption generates a substantial amount of plastic waste in India. To address the issue, lawmakers introduced a provision requiring extended producer responsibility for plastic packaging waste in India. The concept is an outcome of the Polluter Pays principle. The legal provisions provide responsibility for the management and disposal of plastic packaging waste to the PIBOs. The idea also has similarities with the environmental responsibility inherent in corporate social responsibility. Although the target sector of the EPR is specific, environmental responsibility within corporate social responsibility is broad enough. Nevertheless, the EPR

on PIBOs has significant potential in this era. This type of initiative will help the nation achieve sustainability and a pollutant-free environment. During this journey with the EPR for plastic packaging waste, various challenges have been observed, which are hindering the smooth implementation of the legal provision. If all these factors are correctly handled, the EPR for plastic packaging waste in India may set an example in the international environmental policy decisions.

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