




THE MENACE OF PLASTIC WASTE- A LEGISLATIVE ANALYSIS FROM THE INDIAN PERSPECTIVE

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ABSTRACT

Plastic debris may cause some 'serious harm' not only to humans but also to the natural environment. This is because, after its disposal, it may either emit harmful chemicals or absorb toxic pollutants as an aftereffect proven by scientists. There are various reasons for the increase in waste like rapid population growth, urbanization, industrial growth, and growth in the usage of plastic which has led to severe waste management problems around the world. To address the problems of the waste issues prevalent in society, an impactful legal system is required to make an action plan and to enforce the provisions of law, both internationally and within the domestic framework of our country. Similarly, to deal with the problem of plastic waste, Indian policymakers have brought much-sought legislation and amended them with the changing needs of society. The problem of plastic waste is contemporary in which plastic is not a problem, but waste is a problem. It started due to mismanagement and lack of awareness amongst the public and the manufacturer of plastic products. The problem started in the eighties when there was an absence of legislation, which could have dealt with the waste. And in India, the first legislation came into force in 2011. This Article seeks to reflect on plastic waste regulations and international conventions along with domestic legislation. It looks into the working of Waste Regulation Board actions and implementation along with the policies framed by the Government of India to regularize and then minimize the generation of plastic waste. It further discusses the questions arising out of amendments that need to be made to make the Swachh Bharat Mission a success as a part of India's efforts to achieve Sustainable Development.

1. INTRODUCTION

The problem of plastic waste is an additional issue to the already paramount problems, faced by the world for protection of the natural environment. Plastic waste is another threat which has become a trans boundary problem, as this waste reaches astonishing levels for the efforts to counter it, and then disposal in an environmentally friendly manner. Plastic has created a good industry for the product for which it is used, but at the same time created a world problem and challenge in its disposal and management.¹ The responses to the problem have led to adoption of legislations, but it lacks in the effective assessment of the problem, which in turn is a hindrance to the prevention and protection measures to be adopted.² The need for biodegradable plastics has become urgent in the last few years³ and after several international calls regulations started with the Basel Convention.⁴ The effect of this Convention percolated through legislations, when member state agreed to the provisions of the Basel Convention. The provisions for legislations in most countries are in nascent stage, but the challenges were increased. In India usage of plastic packaging and plastic product has increased drastically⁵ due to which landfill sites, rivers and ocean filled with plastic posing danger to the environment. Harmful gases and micro plastic emit from the plastic which causes air pollution, soil pollution, water pollution and harmful for human health.⁶ National Green Tribunal of India has many times ordered to ban the disposable plastic items. The foremost concern was to decrease the plastic waste because in India the state of New Delhi alone accounts for 96,00 metric tons per day plastic waste.⁷ Reports suggested that a high rate of waste increase will be seen by 2030 which would be around 165 million tons annually⁸ pushing India at 4 the place in waste generation. Then, India would be requiring many landfill sites for holding the plastic waste up to 20 years.⁹

2. INTERNATIONAL CONVENTIONS

International law with its beginnings in the Trail Smelter Arbitration,¹⁰ calculating environmental liability, and keeping third generation Human rights as solidarity rights¹¹ for environmental matters were formally initiated with the Stockholm Declaration, 1972 and its principles having a major impact on environmental law. The sequence of events after that with the World charter for Nature 1982,¹² and then the Hard law with the Vienna Convention, 1985 for Depletion of Ozone layer and its protocols,¹³ initiated work on environmental matters, The breakthrough came with The Earth Summit, 1992,¹⁴ a broad framework on all matters pertaining to environment and its protection based on principles and action work were brought into effect. The procedural rights for environmental matters in each country were framed due to the Aarhus Convention on Access to Information, public participation in decision making, and access to justice, 1998 where European Nations made reporting of all pollutants and registers for pollution creation to be maintained.¹⁵ The Basel, Rotterdam and Stockholm conventions share the common objective of protecting human health and the environment from hazardous chemicals and wastes falling within their respective scopes. The conventions had started differently on with The Basel Convention on Trans boundary movement of Hazardous waste, 1989 followed by The Rotterdam Convention on the Prior Informed Consent Procedure for certain hazardous Chemicals and Pesticides in International Trade, 1998, and The Stockholm Convention on persistent organic pollutants, 2001. The combination of these conventions together with the organizations like UNEP, Food and Health Organization (FAO) and World Health Organization (WHO), they seek to achieve the aim of protecting all life and environment on the planet.¹⁶

STEPS TOWARDS MANAGEMENT OF PLASTIC WASTE IN INDIA.

A. CONSTITUTIONAL LAWS¹⁷


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We all aspire to live a dignified life in pollution free environment and expects our legislatures to take necessary measures for making our planet habitable. Though the industrialization and urbanization are the need of the hour but not at the cost of environment. The parliament of India is empowered to make such laws for providing pollution free life cycle to people of India. The Legislatures of our country keeping the environment at utmost importance have framed the rules, regulations, statutes and laws to keep the environment protected.

The Constitution of India is supreme which provides provisions about right to life, amongst many rights fall, which also includes right to pollution free environment for everyone.¹⁸ It is the legal responsibility of the State agencies to take care of the individual's health and ensure his physical and mental wellbeing, protection from hazardous kinds of activity.¹⁹ Stockholm Conference,²⁰ in which India amongst many other countries participated and took the pledge to protect and preserve the natural environment. In order to fulfill the goals as set out in Stockholm Conference parliament brought 42nd Amendment in the Constitution of India and by virtue of Article 253 of the constitution of India which empowers the Parliament of India to make laws for the implementation of the agreements, treaties or convention under the umbrella of Article 253 enacted "The Environment Protection Act" which provides protection and improvement of environment.²¹

Article 48 A spells out the Directive Principles of State Policy to protect and improve the environment, in the same breadth Article 51A(g) casts a duty upon every citizen to protect and improve the natural environment. Though Article 19 guarantees every citizen to practice any profession or carrying on any trade, occupation or business, to form associations but same is to be read in the perspective that no individual shall be allowed to carry out any trade, profession or business which is detriment to the environment.

B. ENVIRONMENT PROTECTION ACT

The Environment Protection Act was enacted in 1986, specifically aimed for the protection of our ecosystem.²² The government of India is duty bound to protect the environment and for said purpose the Government has made rules for waste so that problem can be solved. EPA is the primary legislation for the protection of environment which contains important provisions concerning the Environment. EPA Deals with the procedures and safeguards, prohibition and restrictions, compliance regarding of the Hazardous waste. Any violation of these rules will attract strict action. The amendments which are made to these waste regulations must be notified to the public at large and to all stakeholders. In order to protect the environment many Acts have been enacted by the Government which are in form of underlying rules.

1. The Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2021
2. The Plastic Waste (Management and Handling) Rules, 2021
3. Bio-Medical Waste (Management and Handling) Rules, 2019
4. The E- Waste (Management and Handling) Rules, 2018
5. The Batteries (Management and Handling) Rules, 2020

C. PLASTIC WASTE LEGISLATION

Responsibility of different stakeholders under the Plastics (Manufacture, Usage and Waste Management) Rules, 2021

The Government has notified the Plastic Waste Management Rules, 2021, updating the earlier Plastic Waste (Management and Handling) Rules, 2016. The rules, which were applicable to municipal areas, have now been extended to all villages. These rules regulate plastics waste existed in landfills. Main thrust on the minimization and source segregation and recycling and specifically stated it will adopt the Polluter's Pays Principles. Also, Government aimed at total ban of single use plastic through the new rules. Rules prescribed that there should be State Pollution Control Board for the States only and Pollution Control Committee for the Union Territories also freshly added UTs. In these states municipal bodies formed as per the rules will be responsible for collection, segregation, transportation and disposal of used plastics waste.

The Government of India Vide notification dated 04/02/2011 introduced new Plastic Waste rules for regulating the frame work for the issue of

plastic waste in the country. For effective implementation of these rules, Government of India reviewed the old rules and enacted the Plastic Waste Management Rules, 2021.²³ In these new rules responsibility is levied on to the producer and plastic waste processing facility (PWPF) towards environmentally sound management of the product until the end of its life.

The consumption of plastic is increasing every day and there is no proper substitute of plastic,²⁴ Using of plastic cannot be blamed for but the problem lies in the non-implementation of rules, handling and managing of plastic waste efficiently and effectively. How the waste is to be collected, how and where the same is to be stored, how the same is to be transported,²⁵ though everything is mentioned in the rules, but all are being ignored, sometimes deliberately and sometimes due not non awareness and these rules. All institutional waste generators are not only required to segregate and properly store the plastic waste but they are required to handover the said segregated waste to authorized waste processing centers and to pay such user fee or charges as prescribed to said centers.

The Government has constituted a committee for the purpose of monitoring of implementation of Plastic Waste regulation, 2016, the main emphasis of the Government is to make the people aware of the benefits of reducing and reusing of plastic and recycling of plastic waste, in furtherance of it the Ministry of Housing and Urban affairs, Government of India has started a campaign through 'Swatch Bharat Mission'.²⁶

2. Recycling by organized sector

The plastic industry and the petrochemical sector both are a major source of country's GDP. State which tried to ban plastic had faced losses in millions.²⁷ Even if government think of ban of the single use plastic it would be ineffective²⁸ unless some alternate material would be provided by the government itself. Overall, it can be seen that impact on the turnover and in the jobs will be on high level. Thus, it can be seen that a complete ban is not possible but it is possible to manage the waste. As per report of the CPCB²⁹ 4059 tons of waste is generated by 60 cities daily. The plastic waste which is collected by the authority in that about 94% contain thermoplastic which can be recycled which can be termed as LDPE, PVC, PET, HDPE and other are thermocol and thermoset which are not easy to recycle.³⁰

The FICCI, has reported that there are more than 7500 recycling units in the country some are registered and some are not.³¹

But these recyclers are not enough because there is a gap between the collection facility and treatment facility and ironically only less than 30% waste which is collected is being treated properly. Rest of the valuable waste which can be used for further process is dumped in the landfills because there is no more recycler which would be required to treat that waste.³² Recycling industries are in loss and there are many challenges for the organized sector and enterprises like segregation of waste, technological advancement, good infrastructure, legal compliance, procedure to get permissions from the pollution control board etc. If these challenges can be addressed properly recycling industries can grow easily and then the waste will not remain a problem.³³

3. Formal vs. Informal

In India the percentage of plastic recycling is estimated at around 60%.³⁴ from collection to segregation and processing are done by the local kabadiwala and waste pickers. This is a cost-effective skill and provides recycled plastic at a very low price to the Indian industries.³⁵ Informal recycling is done in most unsustainable way and without any well-equipped advance technology due to which hazardous substances gets released in the environment. The recycled product is also not so good in quality. Informal recycling leads to many social and environmental problems like child, women labor etc. are some problems associated with informal recycling.³⁶ Government should through subsidies or tax incentives set up the plants for the plastic waste and address the safety and health issues of the recyclers and operators by giving them proper training.

D. PROBLEMS OF PLASTIC WASTE IN INDIA

According to the CPCB³⁷ report and the CES³⁸ report on the waste survey was done in 60 cities and it was found that more than 10% plastic waste was lying there from total quantity of solid waste. The valuable plastic waste is thrown in the landfill without any processing. According to the Plast India Foundation Report³⁹ 45% of total plastic waste was contributed by the flexible packaging sector. After that rigid packaging 17%, building and construction plastic waste 13%, agricultural plastic waste contributes 9%, electronic plastic waste only 2%, automotive plastic waste 7%, household waste 7%, and others 3%. According to the plastic waste management rule (EPR) responsibility is of producers, brand owner, importer to take back the plastic waste because they were the persons who introduced product in the market. So, the entities which are causing flexible packaging plastic waste must take back waste to recycle them properly. The half of the problem then can be solved by their efforts only. Now comes what kind of plastic is littering more. According to the report of the break free from plastic⁴⁰ the types of plastic contributing more is LDPE and 'other' are 39.38 % and 43.42% respectively used by brand owners which are less recyclable because of compostable material.

Covid 19 increased the demand of single use plastic which enhanced the problem of plastic waste which was already out of control. Millions of tons pandemic associated plastic waste like PPE kit and online shopping packaging material entered into the Global Ocean. Though there were strict and separate provisions/ guidelines by BMWWR, 2016, BWTF, and Quarantine Centers for managing the waste from sample collection to treatment in the hospitals but the same were not being followed adequately. This mismanagement of plastic waste ended up in the ocean and landfill sites which will have unknown long-term effect.⁴¹

IV. EFFECT OF WASTE: ON THE PUBLIC HEALTH AND ENVIRONMENT

Due to high growth in the production of industrial goods, a significant improvement has been seen in the industrial performance. High technological and advanced industries have increased the productivity performance and made India one among the top ten industrial countries of the world.⁴² Core productive areas in which industries are working, are metal, chemical, food, fertilizers, paints, pesticides and many more. Along with fine qualities of products, goods and services what components are spreading in the environment are food additives, pesticides, plastic waste, metal scrap, chemical waste, hazardous waste, and untreated effluents from the manufacturing units.⁴³ These industrial effluents waste and emissions causing pollution in the environment and leading to health hazard for the human being.⁴⁴ Biodegradable wastes are easy to handle and recyclable. But non-biodegradable waste cannot be decomposed and not easy to handle. They remain in the soil or sea for thousands of years and also without any degradation. A very notable example is Plastic which is used in various forms and commonly used by the industries. To make the product long lasting industries are using improved quality of plastic, so their life increases even after discarded by the customer. This discarded plastic is the reasons of various type of pollution like air, water, soil. With more and more plastics being employed in human lives, and increasing pressure being placed on capacities available for plastic waste disposal, the need for biodegradable plastics and biodegradation of plastic wastes has assumed increasing importance in the last few years.⁴⁵ Improper disposal of plastic waste has led to the environment pollution which is evident from the fact, like deterioration of our nature, death of the aquatic animal,⁴⁶ severe disease in the human, blocked sewage system causing disease and foul smells,⁴⁷ spoiling the agricultural land and causing reduced productivity.⁴⁸ Many times the water percolation reduced which resulted in the soil aeration thus resulted in infertility in such land.⁴⁹

The plastic waste generates serious health issues like hormone related cancers, neuro related disorder, infertility etc. Nano plastic Micro plastic releases from our daily used things and attracts microorganism. After combining together, they enter anywhere in our body, deepest ocean and even on the top of Himalayas also.⁵⁰

The human health is linked with the environment and the plastic waste is deteriorating the same, to tackle the said situation a health summit was

organized to examine its effect in Amsterdam. In the said summit a question was raised that when micro plastic enters our body, do it make us sick. In this regard a Dutch organization conducted various research and Netherland also pointed out various health issues arises due to micro plastic. They pointed out that various kinds of plastic additives which are mixed to make plastic flexible, heat resistant, durable, water resistant and colorful, are hazardous for human health, they concluded that micro plastic and Nano-plastic damages human DNA, leads to oxidative stress and inflammation.⁵¹

V. GOVERNMENTAL POLICIES AND INTIATIVES

For combating the problem of plastic pollution, government of India has initiated numerous projects. One project was initiated in the year 2018 for elimination of single use plastic by the end of year 2022 under the supervision of Prime Minister. Further the Government has made a Draft of new plastic waste rules, 2022 and has sought suggestion from the public. The Government is finding an alternate of plastic, in this regard an investment has been made with 'Parley for the ocean' for developing 'eco-innovative plastic'. For strengthening the plastic waste management, government is collaborating in various programs relating to environment, recently they collaborate with the programs of plastic waste and the National Mission for Clean Ganga (NMCg).⁵²

Another project is "Aviral – Reducing plastic waste in the Ganga"⁵³ started in the locality of Haridwar and Rishikesh (Uttarakhand). Aviral is project which started as a partnership between German Development Agency GIZ & the Alliance. By using sustainable or replicable solution they have started various activities which include events to raise awareness about plastic waste, source Segregation, clean up activity. Also, some Indian Startup like "Trashcon" and 21 Century Polymers in Rishikesh (Haridwar) also started to treat water bodies and make them plastic free. Under the Prime Minister's Science, Technology and Innovation Advisory Council "Swachh Bharat Unnat Bharat Abhiyan" was started to introduce the new global innovative technology to make everybody breathe and live in pollution free, neat & clean environment. This also a step towards achieves the sustainable goals. A project waste to wealth model was launched in October 2021 under which government adopted new rules that has provisions to minimize plastic waste. Likewise, Swachh Bharat Mission: Urban 2.0, Phasing out single use plastic, Swachh Surevelskan 2022, new rules on plastic waste in 2022 were introduced to help the environment thrive better. Sikkim was the first state to put ban on disposable Plastic bags/ plastic plates and packaged drinking water in government offices in 1998. Some more examples are Kumbakonam, a city in Tamil Nadu, Ambikpur, and Chamrapur, Taliparamba (Zero- landfill city model) where the Govt. ban plastic and make source segregation mandatory. State under obligation to look after FRs of Indian citizens by applying best practices, but citizens will also perform FDs by their respective acts.

VI. CONCLUSION

In the preceding paras of this article, we have briefly discussed about the impact of pollution on the environment and its effect on the health of human being. Though much is done but still much more is required to be done by every stake holder. Time to time laws and rules have been made by the state but are they enough to tackle the situation, the time will tell, and for this reason the state keeps bringing the new acts and rules for the betterment of the society. The only concern is the effective implementation or execution of these rules. We must take the route of reduce, recycle and reuse, further citizens must remember and follow their duty by doing all such acts and deed required to be done from them for making our planer pollution free.

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