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Plastic Pollution

Ameya Wagh[1], Falguni Bhavsar[2], Raj Shinde[3]
[1, 2, 3]*Department of Applied Sciences and Humanities, PCCOE*

Introducing plastic "Buy-Back" policy to tackle the plastic pollution in India.

Abstract: Plastic pollution is one of the fastest growing environmental challenges of our time. Since the 1960's, various concerns were raised regarding plastic waste generation (Plastic pollution) around the globe. Everyday tons of plastic waste is generated in various cities across the world. Since the 1950's close to half of the plastic is ended up in landfills or dumped in the wild which is one of the most common ways of disposing plastics, and only 9% of plastic has been adequately recycled. It is also estimated that around 4 to12 million metric tons of plastic waste ends up in the oceans. This points out that this is a collective failure of all human kind to find a feasible solution for the plastic disposal.

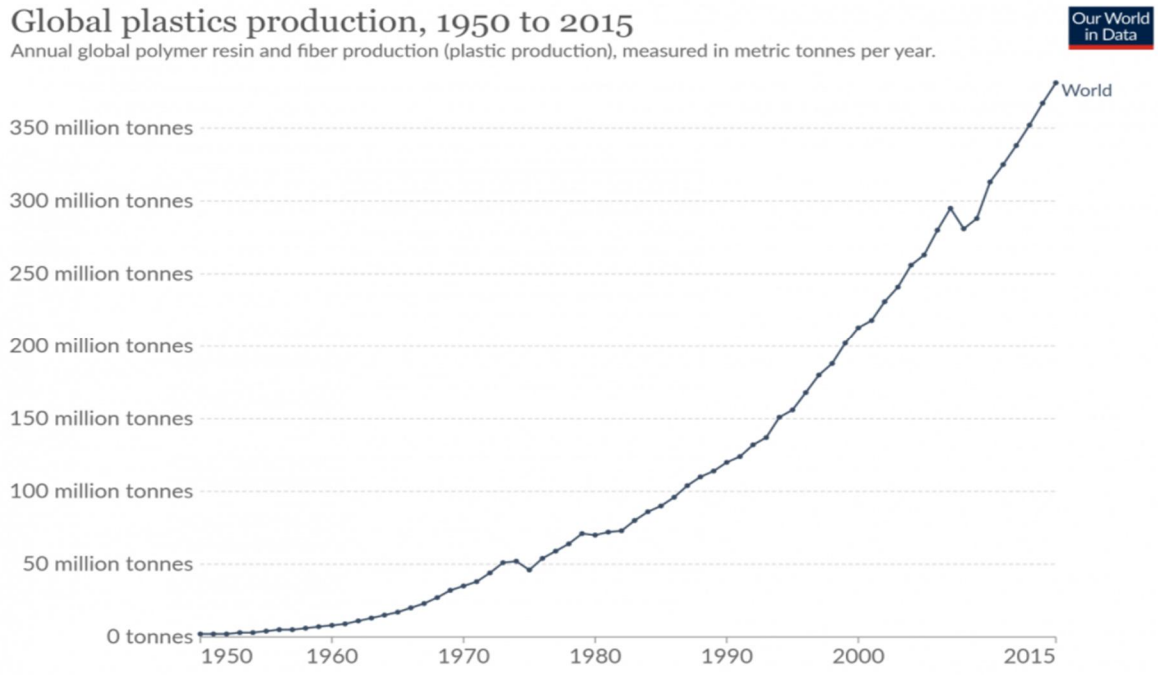
I. INTRODUCTION

This was about a global aspect now lets take a look at the regional aspect:

In the last few years,various concerns are raised regarding the plastic waste generated in India. Everyday tons of plastic waste is generated in various cities across the country, around 6,60,787 tons of plastic is produced annually and of which only around 60% is reportedly recycled. Measures have been taken at municipal,state and central level to control the plastic pollution.

Q] What is plastic pollution?
Plastic pollution is a type of pollution which is caused by the plastic and causes a big problem in the environment and posses a threat to the wild, marine and human habitat.

Q] What are landfills?
Landfills are the places where usually all kinds of waste is dumped and plastic waste is a huge portion of that waste.
As we saw earlier that year around in the world plastic waste is generated in huge amounts and they are usually disposed in landfills or in the oceans . However burying in landfill dose not solve the problem but creates an additional problem of soil pollution because of which soil gets contaminated and it even affects the ground water and the quality of the soil.



https://recyclecoach.com/wp-content/uploads/2021/09/Image_2_Global_Plastic_Statistics-1536x1084.png

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https://www.google.com/url?sa=i&url=https%3A%2F%2Fokcredit.in%2Fblog%2Fplastic-bottle-manufacturers-in-india%2F&psig=AOvVaw0quoEMTpr48M1zi3OXe5W0&ust=1647511618701000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCNDHjtmyyvYCFQAAAAAdAAAAABAK

Different types of pollution are caused because of plastic pollution:

1) *Land Pollution:* Land pollution is one of the reasons which is caused by plastic as all the plastic waste is collected and disposed in the landfills. Creating a giant heap or pit full of plastic which will not decompose with the time and will degrade the quality of soil.



https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.teriin.org%2Farticle%2Fplastic-waste-pollution-minute-make-years-break&psig=AOvVaw1AcChonCr2l3nsZUw8ODoU&ust=1647511234832000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCNjgu460yvYCFQAAAAAdAAAAABAP

2) *Marine Pollution:* Marine pollution is also caused by the plastic waste,which gets dumped in the ocean because of many reasons which may contain like waste left on the beaches, came from the drainage system and the trash like plastic bags,bottles and other plastic items thrown into the river. Which affects and posses a threat to the marine life.



https://www.gettyimages.co.uk/detail/news-photo/garbage-including-plastic-waste-is-seen-at-the-beach-of-news-photo/1232417948

3) *Air Pollution:* Air pollution is also caused because of the plastic waste collected for disposal which sometimes is burned which then releases toxic gases like dioxins, mercury in the atmosphere and poses a great threat to the health of plants, humans and wildlife.



https://www.google.com/url?sa=i&url=https%3A%2F%2Fwww.scienceabc.com%2Feyeopeners%2Fwhy-cant-we-burn-garbage-in-a-closed-environment-that-doesnt-let-fumes-escape.html&psig=AOvVaw1ti5x_Vw4YDNEqZtViq62G&ust=1647513014240000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCMC05re2yvYCFQAAAAAdAAAAABAh

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II. INTRODUCTION

This literature review is based on the problem of plastic waste and the solution how we can limit the problem of plastic waste. The solution we came upon was the **"plastic buy-back policy"**. We are optimistic that if implemented correctly, this policy can help in limiting the plastic waste and the pollution caused by plastic.

A. What is buy-back policy?

Plastic buy-back policy is a policy in which the customer (public) will get back a fixed price payment which will be paid by the centre (company) in return for a specific amount of the plastic (which may contain any type of recyclable plastic like bottles, milk pouches, tetra packs etc.) provided by the customers (public).



https://www.google.com/url?sa=i&url=https%3A%2F%2Fethicalmarketingnews.com%2Fscottish-government-launch-ambitious-deposit-return-scheme&psig=AOvVaw2kyW4FYTuIUSSk0cgUr6Tm&ust=1647513581363000&source=images&cd=vfe&ved=0CAsQjRxqFwoTCJDD0ca4yvYCFQAAAAAdAAAAABAJ

III. METHODOLOGY

Here are some steps to be followed by the citizens, etc. to work out this policy as follows:

A. Always throw the bottles in the trash bins.
B. Don't throw the trash on the roads on the sidewalks, because of which the plastic waste later end's up in the drainage and which causes the drain to get clogged
C. As far as possible try to recycle the plastic.

The road map for a neat disposal of plastic trough buy-back policy:-

1) First plastic collection center's would be opened in public places like malls,railway stations,bus stops and near by residential zones. These center's would be placed in 2km radius from its nearest residential zone for easy accessibility for the public.
2) These centers would be fully functional with a human interventions.
3) Finding a way to set a fair and profitable price for both organization and the public, which will make them interested and invested in this policy . And will also be profitable for the organization who will be offering the service.
4) Then the collected plastic will be transported to the plastic recycling plants then there they would be sorted according to the requirements and be recycled.
5) The recycled plastic is used for various manufacturing purposes like packaging, road construction and can be forced of good like diminished the reliance on fossil fuels. 16.3 barrels of oil are saved every time 1 ton of plastic is recycled, so using recycled plastic can be help transitioning from fossil fuels to renewable energy.
6) Advantages from the buy back policy:-
a) This would generate job opportunities.
b) If it is successful then this would impact the nature in a good way and will help deplete or limit the pollution generated by plastic.
c) The problems like heap or pit of plastic landfills, drainage clogging, air pollution because of the burning of plastic because off which toxic gasses are released which makes the air toxic, etc will be solved or be limited.

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IV. CONCLUSION

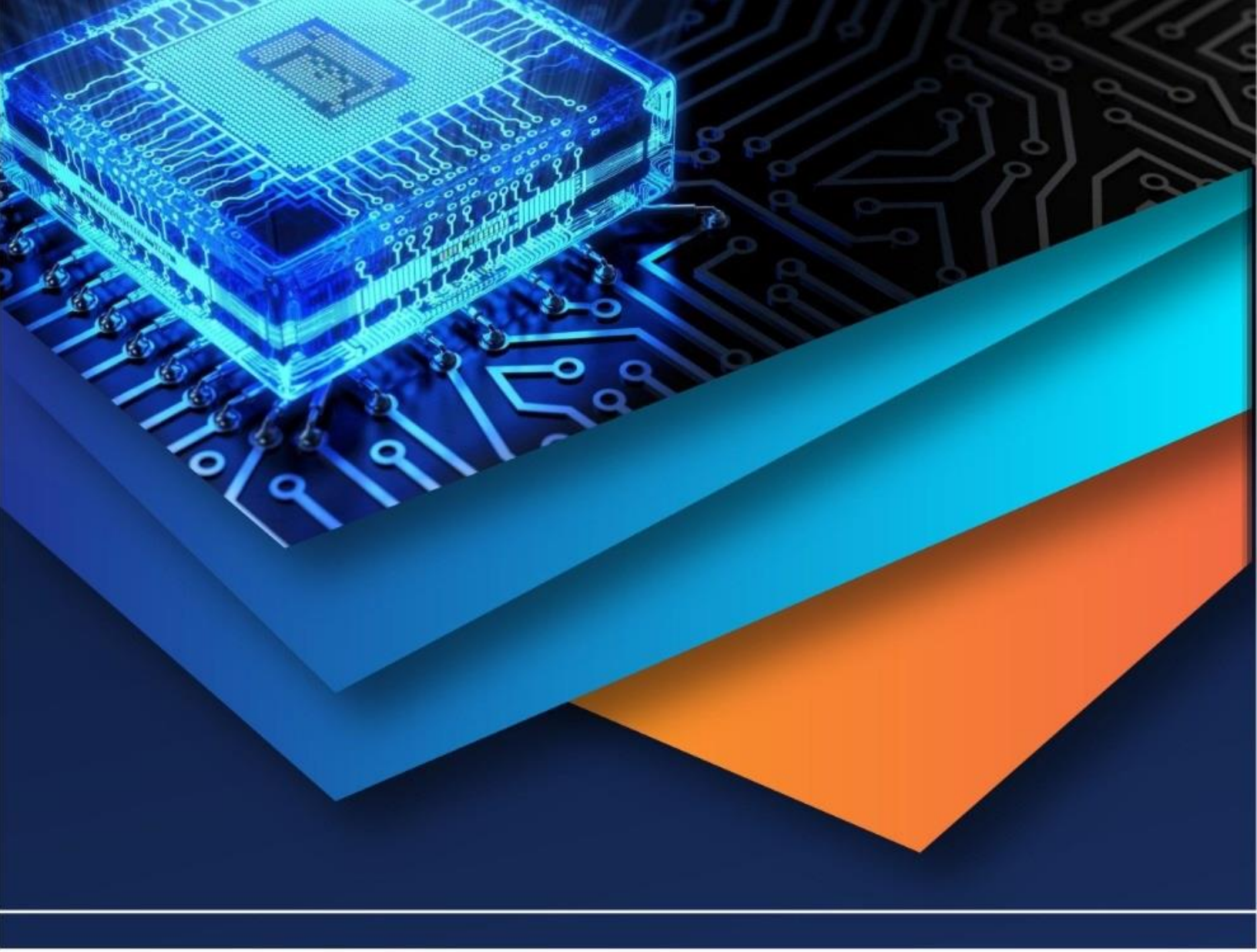
The conclusion is that Plastic is a big problem in today's world and this problem needs attention in order to secure safe future for up coming generations. Though somethings are been done to cure this problem but more work is needed to be done. Spreading awareness among people and greater initiatives by business giants and scientists to eliminate plastic from our daily lives needs to be taken. We must implement Reduce, Reuse, Recycle policy and more than that invent some better alternatives to prevent plastic use at basic level and hopefully by implementing this project effectively will help us to cure this problem.

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