

## The Concept of Control and Manage Plastic Pollution of India/World

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### -----ABSTRACT-----

*The Plastic is part of requirement. So we can't avoid them. Every country tired from plastic pollution. Government try to stop problem, so it creating many rules, but it's not effected in human mentality. In this research paper, given direction to protect our country from plastic pollution problem, in which 1) Given financial demand to waste plastic, 2) Swachh Bharat Abhiyan inside creating 'Bharat Swccata Knedra'. 3) There make product, which use in Plastic dam construction also use like road divider, foot path etc. In this concept plastic is set as like place which is recent requirement of people. In this paper I'm given example of India, how to India protect from Plastic pollution problem. And I know all world accept this technique because this is requirement of world.*

**Keywords:** Plastic, Pollution, Machine, Government, Environment.

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### I. INTRODUCTION

Plastic are use in our daily life and that now become requirement. But other side this is creating large problem of plastic pollution. Plastic is one of the major toxic pollutants now a days. Plastic is a non- biodegradable substance, composed of toxic chemicals, plastic pollutes earth, air and water. We know more than a 100 million tons of plastic is produced world-wide each year. Disposal of plastic through recycling, burning or land filling is a myth because it does not undergo bacterial decomposition. And per day by per day this problem become increased.

So this research paper is very important because without any restriction of present use of plastic, here given solution of this problem. If this technique adopt every country then mostly this problem can be controlled. In this research paper given solution of plastic pollution problem of India. This technique required because need of world.

This research technique explained in four part,

- 1) Part 1 – Information about plastic pollution
- 2) Part 2 – Given financial demand to waste plastic
- 3) Part 3 – Role of 'Bharat Swccata Knedra' in Swachh Bharat Abhiyan.
- 4) Part 4 – Effect of waste plastic product

### PART 1- INFORMATION ABOUT PLASTIC POLLUTION

Plastics are make of a non-renewable resource, which gives us more reasons to use recyclable shopping bags. They are a hazard to wildlife animals, if they are not disposed properly. Lastly, plastic bags clogs roadside drains, which could cause the flooding of the street at heavy rain falls. Plastic pollution possible in media which is given bellow.

**Air pollution** -The chemical used to make plastic bags are xylene, ethylene oxide and benzene. This are toxic chemicals, so when fire the plastic, it then harmful to human body.

**Land pollution** -Maximum items available in market in a plastic packing structure, but after use waste plastic are out in land. Improper garbage system, covered waste plastic more and more space of land.

**Ocean pollution** - In 2012, it was estimated that approximately 165 million tons of plastic pollution in the world's oceans. Approximately 150 ( $\pm 25$ ) million tons of plastic merge every year in ocean. so plastic pollution mostly effected in ocean animals.

### **Available waste plastic on earth in percentage :-**

Plastic is an unsynchronized material, so in earth that can be available as a waste plastic many years. Waste plastic included items as,

Chips & confectionary bags (18.6 %), Supermarket /Retail bags (7.4 %), Garbage bags (6.7 %), Packaging (6.7 %), Food Bags (5.2 %), Bottles / caps /lids(11.9 %), Pet bottles(10 % ), Water/soft drink bottles(2.6 % ), Fruit juice bottles (3.4 % ), Straws (7.0 % ), Cups/utensils (2.2 % ), Milk bottles (1.6 % ), Cling wrap (4.0 % ), Food containers (1.7 % ), Cigarette lighter (1.2 %), 6 pack rings (1.4 %), Others(8.5 % ), and this waste plastic items life is approximately minimum 10 years to maximum 500 years and above.

***Toxins used in the production of plastic :-***

- Polyethylene Terephthalate (PET) :- Antimony oxide, diazomethane, lead oxide, nickel. Ethylene oxide, and benzene.
- High Density Polyethylene (HDPE) :- Chromium oxide, benzoyl peroxide, hexane, and cyclohexane .
- Polyvinyl Chloride (PVC) :- Benzene, carbon tetrachloride, 1,2-dichloroethane, several phthalates, ethylene oxide, lead chromate, methyl acrylate, methanol, phthalic anhydride, tetrahydrofuran, and tribasic lead sulfate.
- Low Density Polyethylene (LDPE) :- Benzene, chromium oxide, cumene hydro peroxide, and tert-butyl hydro peroxide .
- Polypropylene (PP) :- Methanol, 2,6-di-tert-butyl-4-methyl phenol, and nickel dibutyl dithiocarbamate .
- Polystyrene (PS) :- Styrene, ethylbenzene, benzene, ethylene, carbon tetrachloride, polyvinyl alcohol, antimony oxide, and tert-butyl hydroperoxide, benzoquinone .

***Effect of Plastic on Human Body***

The Centers for Disease Control designate many of these toxic substances as known human carcinogens. They also designate particular toxic effects that are uniquely associated with each substance. Some of the most significant toxic effects associated with substances used or emitted in plastic production include:

- Benzene (PET, PVC, LDPE, PP) :- Known human carcinogen, workplace exposure depresses the nervous system
- Chromium oxide (HDPE, LDPE) :- Suspected carcinogen, damaging to the liver and nervous system
- Dioxins and other chlorine-based chemicals (PVC, PS):- Known human carcinogens, damaging to the immune system, hormonal system, and fetal development; prolonged exposure to chlorine-based gases in the workplace can damage the eyes, skin, respiratory system, and nervous system
- Ethylene oxide (PET, PVC):- Known human carcinogen, damaging to the nervous system, renal system (urinary tract and kidneys), skin, and eyes.
- Lead (PET, PVC): - Damaging to the cardio-vascular system, digestive system, renal system (urinary tract and kidneys), blood formation, eyes, and the development of fetuses and children
- Nickel (PET, PP):- Suspected human carcinogen, damaging to the cardiovascular system, nervous system, respiratory system, and skin
- Phthalates (PET, PVC): - Damaging to the hormonal system
- Styrene (PS): - Strongly suspected to be a human carcinogen; damaging to the nervous system, liver, and eyes.

***Disadvantage Plastic Pollution:-***

- 1) A plastic cup can take 50-80 years and bottles 400-450 year to decompose
- 2) An estimated 14 billion pounds of trash, much of it plastic, is dumped in the world's oceans every year.
- 3) Americans use 2.5 million plastic bottles every hour
- 4) Plastic garbage in the ocean kills as many as 1 million sea creatures every year
- 5) Nearly every piece of plastic ever made still exists toper day
- 6) A plastic milk jug takes 1 million years to decompose
- 7) The global fishing industry dumps an estimated 150,000 tons of plastic into the ocean each year, including packaging, plastic nets, lines and buoys
- 8) Americans generate 10.5 million tons of plastic waste a year but recycle only 1 to 2% of it

**PART 2 - GIVEN FINANCIAL DEMAND TO WASTE PLASTIC**

Every government in the world wants cline our country but plastic pollution is large. And that can't be stopped, plastic now part of requirement. Here given some solution, and why they can't possible.

S.No.	Present solutions	Problem
1	Stop use of plastic bags	Plastic is part of requirement
2	Outright ban of the distribution of plastic	Plastic is part of requirement
3	Voluntary arrange programs to which reduce using plastic material.	No reaction on mind of people
4	To strict implement right of sell plastic materials.	Plastic is part of requirement
5	Maximum try to recycling the plastic material.	Recycling cost of plastic material is more

A material found in earth/nature in the form of wastage and that stay long time without bacterial decomposition. If we are given financial demand of that material, then poor people can be complete basic needs. Also they can be involved in Swachh Bharat Abhiyan. Inside this concept not limit of age, not issue of poor or rich, here issue of country also environment. In this paper explain concept to solve plastic pollution problem. Here explained structure of financial rate, that's not final, it can be increase or decrease as per impotency of requirement.

**Concept of financial demand given to waste plastic material:-**

We know that, plastic is requirement and we can't stopped. But other side pollution of waste plastic material is increasing. So if want control plastic pollution then must be given financial rate of waste plastic is Rs. 10 /1kg. According to this rate, every day approximately Rs. 6-10 crore rupees and every year approximately Rs. 2000-3000 Crore rupees can be go's to word the poor people in India, That's reason waste plastic become source of finance and complete basic needs of poor peoples. Children who want to education, also they can be going in school and work as earn and learn. So India/world become cline because if unsynchronized items become less then synchronized item use in fertilizer. And this is first step to word the cline India/world.

S/ no.	Place	Total Quantity of waste plastic	Waste plastic Status	Waste plastic and Effect of financial demand	Information by
1.	Sixty cities in India.	Waste plastic generated :- <b>15,342 tons/per day</b>	Recycle :- <b>9,205 tons/per day</b>	Uncollected and littered:- <b>6,137 tons/per day</b>  According to this concept 6,137 x 1000 x 10= <b>6,13,70,000 crores /per day</b> goes toward the poor people in 60 cities.	Information by Environment Minister Prakash Javadedar (TOI-30 Apl 2015)
2.	Suppose in India	Uncollected and littered 10,000 tons	10,000 x 1000x 10 =10,00,00,000	So in all over India <b>10,00,00,000 crores /per day</b> goes toward the poor	-
3.	Ocean	<b>8 Million tons</b> plastic dumped in ocean per year	8 x 10,00,00,000 x 1000 x 10	8,00,000 crore/year	National geographic 13 Feb 2015
4.	India	13 Pounds (5.8967 kg.) person / day  Now approx <b>6 kg. person /day</b>	6 x10	Rs.60 Person / day	CPHEEO- 03 Aug 2009 (Central Public Health & Environmental Engineering Organization)

5.	Mumbai	408.3 tons/ day	163.2 tons/ day	Rs. 16,32,000/ day	RHIMRJ, Vol-1, Issue-4, Nov-2014
6.	Delhi	689.5 tons/ day	275.6 tons/ day	Rs. 27,56,000/ day	
7.	Chennai	429.4 tons/ day	171.6 Tons/ day	Rs. 17,16,000/ day	
8.	Kolkata	425.7 tons/ day	170.0 tons/ day	Rs. 17,00,000/ day	

**Part 3 - Role of Bharat Swachhata Kendra in Swachh Bharat Abhiyan.**

In this part explained every stage in society/state/country, how to work and directly involved in Swachh Bharat Abhiyan,

**Role of every person :-**

'Bharat Swachhata Kendra' through possible financial demand to waste plastic, which available in public place, in river, in ocean etc. So, every person in team India remembers in mind, I am given help to create clean India. "Every man use left side pocket of pant and women use one compartment of purse to this waste plastic, which is create from himself and after it throughout authorized places". And Bharat Swachhata Kendra through earn money as Rs. 10/1 Kg. Now in India, many children which can't get education due to problem of money so he will be work in unauthorized places. Also many families which has away from basic needs. so now given financial demand to the waste plastic garbage, that is best option to the earn money and learn, also complete basic needs of poor peoples.

**Role of every family:-**

A waste plastic create from home/family that gathered in one bucket and after earn money as per Rs. 10/kg through Bharat Swachhata Kendra. When concept start on ground in India, then money option is creating about gathered waste plastic because financial demand of such material.

**Role of every village to country:-**

Place	Handling	Role
Village	Grampanchayat	1) Accept waste plastic and stored in authorized place 2) Financial rate given to waste plastic as Rs. 10/1 kg. 3) Decided plastic dam on natural water sources. 4) Structure to employs which is poor people's or under poverty line people. 5) Arranged educational programs and given information about this concept.
Tehsil	Panchayat samiti	
Dist	Mahanagar palika	
State	Rajya sarkar	
Country	Kendra sarkar	

**Bharat Swachhata Kendra :-**

Bharat Swachhata Kendra is a new concept and in feature create new branch, under Swachh Bharat Abhiyan .Inside select student/person, which under poverty line, and that job has part time in earn and learn scheme. Any person in India can be involved in Swachh Bharat Abhiyan .Bharat swachata Kendra give rate only for unsynchronized garbage like plastic material ,polythine etc. Rate of unsynchronized garbage material is standard Rs 10 /1 Kg (± Rs 5). and every year rate increase as Rs 1/Year.

**Structure of Bharat Swachhata Kendra**

S/No	Place	Under	Vacancy	Selection	Payment	Time
01	Village	Talati	1-2	Student Which Under Poverty Line	Rs. 3000 To 5000.	4 Hours Compulsory
02	Tehsil	Tahsildar	10-20	Student Which Under Poverty Line	Rs. 5000 To 7000 .	5 Hours Compulsory
03	Distinct	Collector	100-200	Student Which Under Poverty Line	Rs. 7000 To 10000.	6 Hours Compulsory
04	State	Environment Minister	1000 To 2000	Student Which Under Poverty Line	Rs. 10000 To 15000.	8 Hours Compulsory

**Work structure of Bharat Swachhta Kendra members-**

- This members work as, receive of waste plastic and given money to that person as Rs. 10 / kg.
  - Making product through gathered plastic. Compressed plastic bricks, use in storage of rain water. (Shri ram plastic dam construction)
  - Handling of waste plastic product machine and create plastic bricks also other products.
- Concept of shri ram plastic dam and waste plastic product machine explained as bellow-

**1) Shri ram plastic dam-**

This concept work on small water sources, as small river, ode, nale etc. with compressed plastic bag or bricks makes structure of this dam. Front side of water and back side, cover with plastic plates. Which is making through waste plastic product machine and between them all compressed plastic brick set with stones, soil and other environmental things etc. So waste plastic become media to stop rain water and plastic is unsynchronized so life is long.

Its effect, water level increased so water problem of farmer controlled and drinking water can be available. This technique is patent registered so I can't give more information.



**Model 1:-** Shri ram plastic dam

**2) Waste plastic product machine**

In daily life, plastic pollution increasing and that not controlled with recent solutions .The waste plastic product machine has capability to solved India's/ world plastic problem . Because it work on heat principal and waste plastic in any size that can be utilize by the purpose of making products.

This machine products use in road divider, foot path, waste plastic plates use in small plastic dam etc.



**Mode 2:-** Waste plastic product machine



**Theory :- Golden theory of waste plastic material :-**

Machine small in size or large size doesn't matter, also how many creating heat doesn't matter. But waste plastic must be take a required heat and it convert its original solid stage in to liquid stage but not become liquid. It stage in between solid and liquid stage. In this period can be given required shape of waste plastic and properties of created products use in our normal life. This theory called golden theory of waste plastic material.

**Description** - This machine designed, purpose to solve plastic pollution problem. Present solutions i.e. ban on plastic, many rights and acts against the usage of plastic, didn't create an awareness on mind of people. Because the plastic is requirement of people. So this machine waste plastic can be converted into a product ,then it can be used in daily life.

**Melting points of plastics:-**

Different types of plastic, different melting points because chemical compounds of every product are different.

For example,

- PVC melts at approximately 175 degrees Celsius (347 degrees Fahrenheit).
- Different types of HDPE have a melting point range between 130 and 146 degrees Celsius (266 and 295 degrees Fahrenheit).
- Different types of polypropylene, melt between 160 and 208 degrees Celsius (320 and 406 degrees Fahrenheit).
- That's mean required heat for melting of plastic created in waste plastic production machine.

**Salient Features.**

- 1) This machine makes plastic products with the help of waste plastic materials.
- 2) This machine convert plastic into require form help of heat treatment.
- 3) This machine works in heat treatment so pollution probability is less.
- 4) Compressive strength of products more so it can be used confidently
- 5) This machine can make plastic bricks.
- 6) Less environmental effects.
- 7) Save environment from plastic pollution because plastic is melt here not burn.

**PART 4 – EFFECT OF WASTE PLASTIC PRODUCT**

**Needs to creation:-**

Waste plastic is now one of the most pollution problems in the world. so every country try to stop to it. So ban, right and violently program, as like so many ways adopted. Plastic is requirement, so it can't be stopped but this machine can be created required products with the help of waste plastic and plastic dam to set waste plastic in right place. It uses purpose of stop rain water. This concept creating solution of combination of problems in India.

**Advantage of Shri Ram Plastic Dam Technique**

- 1) Controlled India / world from plastic pollution
- 2) Waste plastic, become source of finance, poor people can be completed basic needs.
- 3) Occurs financial demand to waste plastic i.e. Rs. 10/1 Kg.(increase Rs 1/ 1year) so every year goes minimum 2160 crore rupees to words poor people in India.
- 4) Water level of earth is increase, so solve water problem of farmers, also drinking water.
- 5) Child labors can be manage education and financial need easily. (this concept mostly effected to the education of poor children, which is now doing hard work in unaccepted places.
- 6) Automatically world become cline and green.
- 7) Waste plastic material use in making shri ram plastic damp .
- 8) Damp is creating in minimum financial estimate.
- 9) One branch open in damp contraction department.
- 10) Solved water problem
- 11) Save animals form plastic pollution.
- 12) India goes one step to word the Powerful Country (Target 2020)

**\*\*\* Remember that Clean India is neither need of me nor you that are our need \*\*\***

## **II. CONCLUSION**

The need of this concept to set pollution, problems of poor peoples and environment with the help of their requirement. So problems can be controlled and in future this technique becomes one of the powerful techniques in the world. I hope that one day world must be accept this technique because this is need of us.

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