





### <u>National Policy Workshop Webinar Series</u> <u>On</u> <u>Countermeasures for Riverine and Marine Plastic Litter in India</u> <u>12-22 May 2020</u>

Session 5: Impact of COVID-19 on plastic waste generation (used PPEs and wastes from HCFs) and upcoming challenges

Covid 19 - Impact on Plastics recycling industry





### पर्यावरण के लिए खतरा बताए गए प्लास्टिक ने Coronavirus से बचाई करोड़ों जानें

जरा सोचिए कि अगर हमादे पास प्लास्टिक से बनी कोई वस्तु मौजूद नहीं होती, तो क्या हम सभी कोविड-19 के घातक हमले से जिंदा बच पाते? आज तक कोरोना वायरस से जिंदगी बचाने वाली कोई भी दवा उपलब्ध नहीं हो पाई है।

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Workers preparing the PPE suits at a private manufacturing unit amid the ungoing nations ide lockdosen, to curb the special of corone vines, in V jayawada. (ANI)

#### Single-use plastic turns out to be an unlikely hero in corona battle

Love read. Updated: 13 Apr 2020, 02:37 AM RT Ratpurs Patrick

 Polypropylene, a non-woven material that can be used only once, is largely used in making PPE



**Plastics Save Lives** 



## Plastic ban in secretariat removed

The Uttarakhand government has stalled its previous order, which banned the use of plastic products such as plastic water bottles in meeting and workshops inside the secretariat due to the need of personal hygiene in the fight against COVID-19. A letter in this regard written by chief secretary Utpal Kumar Singh was circulated last week. In August last year, additional chief secretary Radha Raturi had passed directions, through a circular, to all senior officials that no plastic products should be used inside the secretariat. But now, the state government decided that the order will be put on hold for the time being.



**Plastics are Useful** 



# Why virus may bring plastic back in favour People Worried About Germs May Be Tempted To Trade Their Reusable Mugs And Bags For Single-Use Plastics

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**Plastics Protect** 



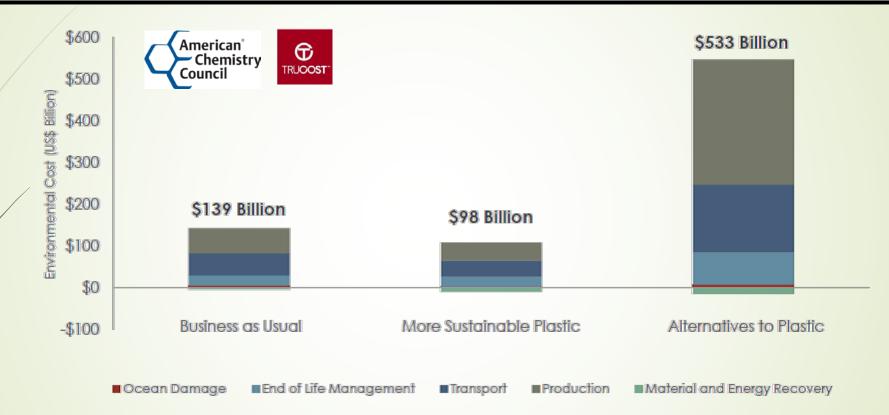
# Plastics Improve Quality of Life : Plastics ensure food security, safety, hygiene with lower Carbon footprints

Properties	Advantages	Industries & Applications
<ol> <li>Light weight</li> <li>Food Grade</li> <li>Durable</li> <li>Easy processing ability</li> <li>Cost effective</li> <li>Recyclable</li> <li>Low carbon footprint</li> <li>In end of life plastics can be used as source of energy</li> </ol>	<ol> <li>Provide Hygienic Packaging</li> <li>Saves Product Contamination</li> <li>Protects goods from Adulteration</li> <li>Ensure Right Quantities</li> <li>Provides Moisture Barriers</li> <li>Increases shelf life for products</li> <li>Packages &amp; transport more product per unit weight of packaging</li> </ol>	<ol> <li>FMCG : Packaging</li> <li>Agriculture : Pipes , Crop covers, greenhouse, mulch films etc</li> <li>Infrastructure : Pipes, temporary cladding, doors , windows furniture</li> <li>Automobile and Appliances – Components, protection</li> <li>Industrial goods : Packaging</li> <li>Medical : Syringes, , Gloves, Blood Bags, Apron etc.</li> </ol>

Plastics Properties and Advantages makes it material of choice across Industries



Many studies indicate alternatives to plastics are at higher environmental costs – Plastics Waste Management is key solution



Source : Plastics and Sustainability: A Valuation of Environmental Benefits, Costs and Opportunities for Continuous Improvement, July 2016

6

Know Plastics - Manage Waste - Say No to Littering



#### **Covid 19 : Relief Material – Plastics played important role**



Plastics help in relief efforts



Plastics usage in health care has increased due to Covid 19 – Capacity augmentation required for managing waste



Covid 19 → 20 KTM in PPEs, Masks & Gowns – Production has increased to 1000 MTD

8



#### **Covid 19 - Waste management – Government is taking action**

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#### CPCB directs states to track Covid-19 waste lifecycle, avoid spillage

#### Updated: May 08, 2020 00:15 IST

By Badri Chatterjee

The Central Pollution Control Board (CPCB) has asked states to track Covid-19 waste disposal, check spillage and ensure proper segregation of the waste.

The CPCB has created a digital tracking system and will share the application with the states. The app can monitor the lifecycle of waste fron collection, segregation, transportation and incineration by geo-tagging each process and submitting details on a common platform. Details will be monitored by state pollution control boards, said CPCB, adding that the boards were informed on Wednesday.

"All waste generators, transporters, and those handling treatment facilities will be asked to register on the app," said Prashant Gargava, member secretary, CPCB. "Generators will have to key in location details from where the waste is collected and declare the number of yellow coloured bags (marked specifically for Covid-19 waste) and amount quantity handed over. Transporters will confirm how much quantity they have lifted, and the same procedure will be followed at the treatment facility," he added.

25<sup>th</sup> Mar 2020: CPCB Guidelines for Handling, Treatment and Disposal of Waste Generated during Treatment/ **Diagnosis/ Quarantine of COVID-19 Patients – Rev 1** 

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On April 21, the National Green Tribunal (NGT) had raised concerns about possible environmental hazards due to improper Covid-19 waste disposal and directed the CPCB to 'incorporate best practices through continuous supervision and monitoring'. Apart from creating awareness at the state and district level, CPCB was directed to develop a software to compile data in an online format by using a digital tracking system to log Covid-19 waste.

"We have also observed that out of 2.7 lakh health care facilities (HCFs) identified, only 1.1 lakh HCFs are authorised under the Biomedical Waste Management Rules, 2016 so far. There appears to be a need for further revision of guidelines to cover all aspects, not merely institutions but also individual households... any unmindful deep burial without adequate safeguards can adversely affect the groundwater and pose danger to health and safety of people," read the order passed by the NGT bench, headed by chairman Justice Adarsh Kumar Goel.

"Common treatment facilities are reporting that they are receiving mixed waste in yellow bags,

Digital tracking system for Covid 19 Waste

cities like Mumbai and Delhi," said B Vinod Babu, nodal officer, waste management, CPCB. "The biggest problem is segregation as waste segregators are afraid of catching the virus. We have already told states to conduct programmes, webinars and awareness drives at all levels. The same has been communicated to expert committee members as per NGT directions," he added.

HT had reported on April 8 that not more than 50% of total Covid-19 waste collected by workers was being segregated at source, as per Brihanmumbai Municipal Corporation (BMC) officials.

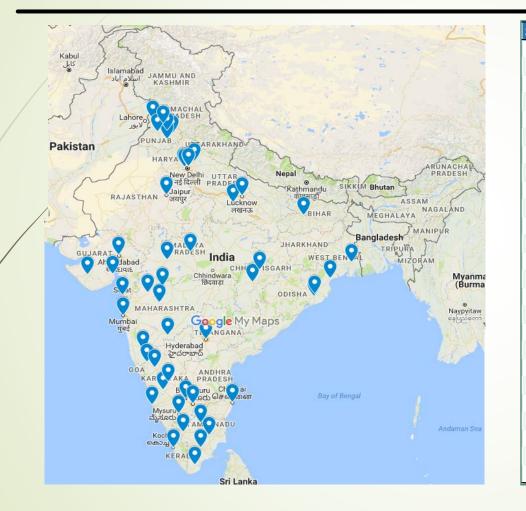


# Post Consumer Plastics Recycling Value Chain : Un-organized system to capture value from waste





#### Plastics Recycling hubs are spread across India



S.No	State	Location	S.No	State	Location
1	Bihar	Patna	26	Maharashtra	Aurangabad
2	Chattisgarh	Raipur	27	Maharashtra	Solapur
3	Chattisgarh	Bilaspur	28	Maharashtra	Kolhapur
4	Daman	Daman	29	Odisha	Bhubaneswar
5	Delhi	Tikri Kalan	30	Odisha	Cuttack
6	Delhi	Kamruddin Nagar	31	Odisha	Balasore
7	Delhi	Vishwas Nagar	32	Punjab	Amritsar
8	Delhi	Shahdara	33	Punjab	Khanna
9	Gujarat	Dhoraji	34	Punjab	Dhuri
10	Gujarat	Ahmedabad	35	Punjab	Ludhiana
11	Gujarat	Bhavnagar	36	Punjab	Moga
12	Karnataka	Belgaum	37	Punjab	Jalandhar
13	Karnataka	Dharwad	38	Rajasthan	Jaipur
14	Karnataka	Shivamogga	39	Tamilnadu	Chennai
15	Karnataka	Mangaluru	40	Tamilnadu	Coimbatore
16	Karnataka	Davanagere	41	Tamilnadu	Madurai
17	Karnataka	Tumakuru	42	Tamilnadu	Tiruchirappalli
18	Karnataka	Bengaluru	43	Tamilnadu	Tirunelveli
19	Karnataka	Mysuru	44	Tamilnadu	Salem
20	Kerala	Kochi	45	Telangana	Hyderabad
21	Madhya Pradesh	Indore	46	Uttarpradesh	Kanpur
22	Madhya Pradesh	Bhopal	47	Uttarpradesh	Meerut
23	Maharashtra	Dharavi	48	Uttarpradesh	Lucknow
24	Maharashtra	Malegaon	49	West Bengal	Kolkata
25	Maharashtra	Jalgaon			

Hub near every Major City

11



#### **Plastic Recyling in India**



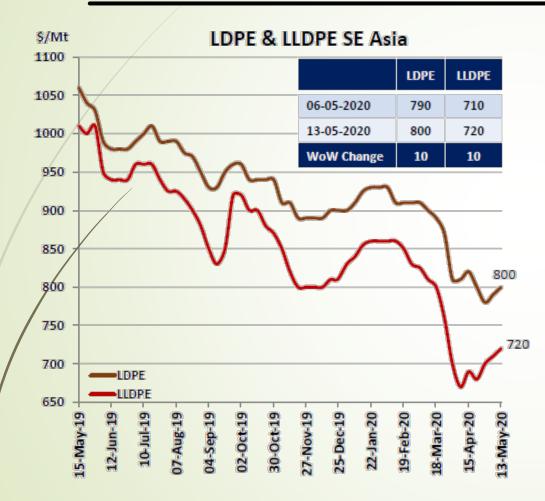
Illustrative - Non Exhaustive

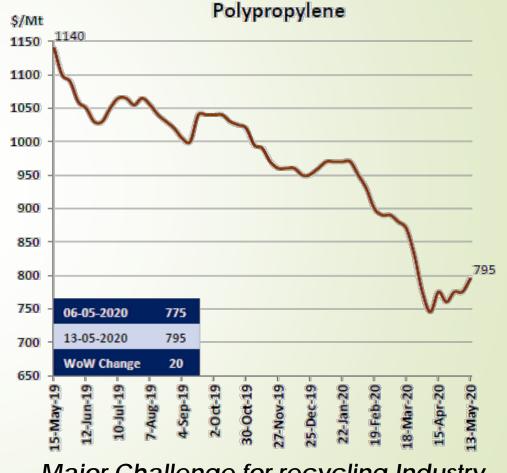
Major Usage is in mixing with Virgin Plastics for reducing cost

12



#### **Covid 19 - Recycling Viability in view of Crashing Virgin prices**



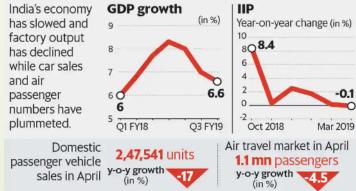


Major Challenge for recycling Industry



#### **Covid 19 : Policy Reponses**









#### Limited response on plastics regulations



#### Labor shortages & HSE issues



#### Operating cost for Recyclers to go up

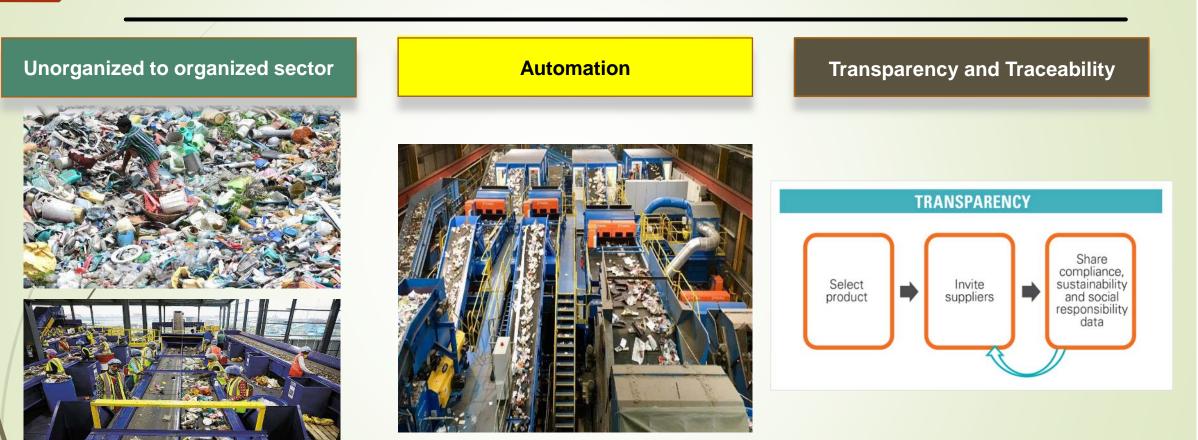


#### **Covid 19 - Plastics Collection Challenges**





#### **Covid 19 : Medium term Impact on Recycling**



Positive changes in recycling industry – Policy support can help



#### Versova Transformation : Plastics Waste Can be Managed



#### **Right Solutions Supports Transformations**

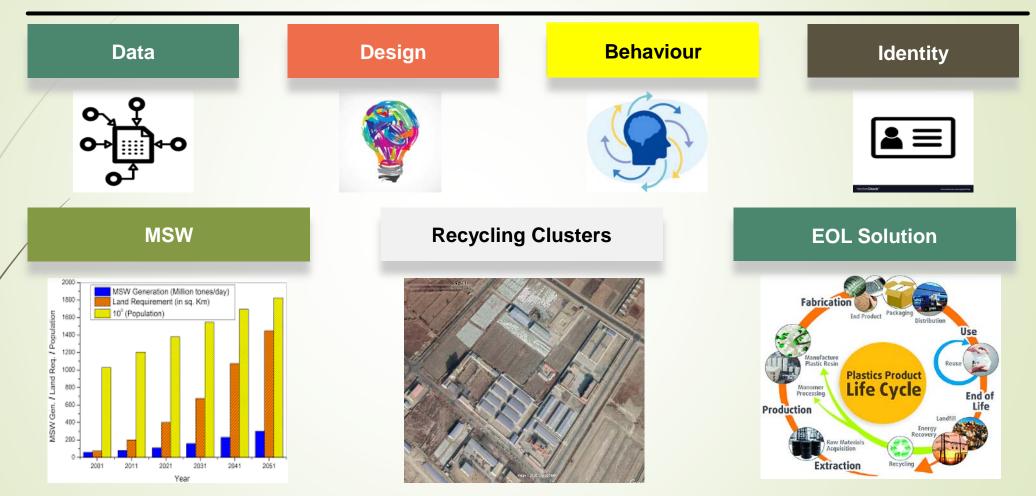
#### 18



### **#VERSOVA BEACH CLEANUP**



#### **Suggestions**, Recommendations and Discussion



With Right Focus, all kinds of Plastics Waste can be Managed



#### Thank You

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