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

Session 5: Impact of COVID-19 on plastics consumption, innovation, logistics and waste generation (including PPEs and wastes from Health Care Facilities) and related challenges

Management of Bio Medical Plastic Waste

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POWERING PROGRESS THROUGH PLASTICS

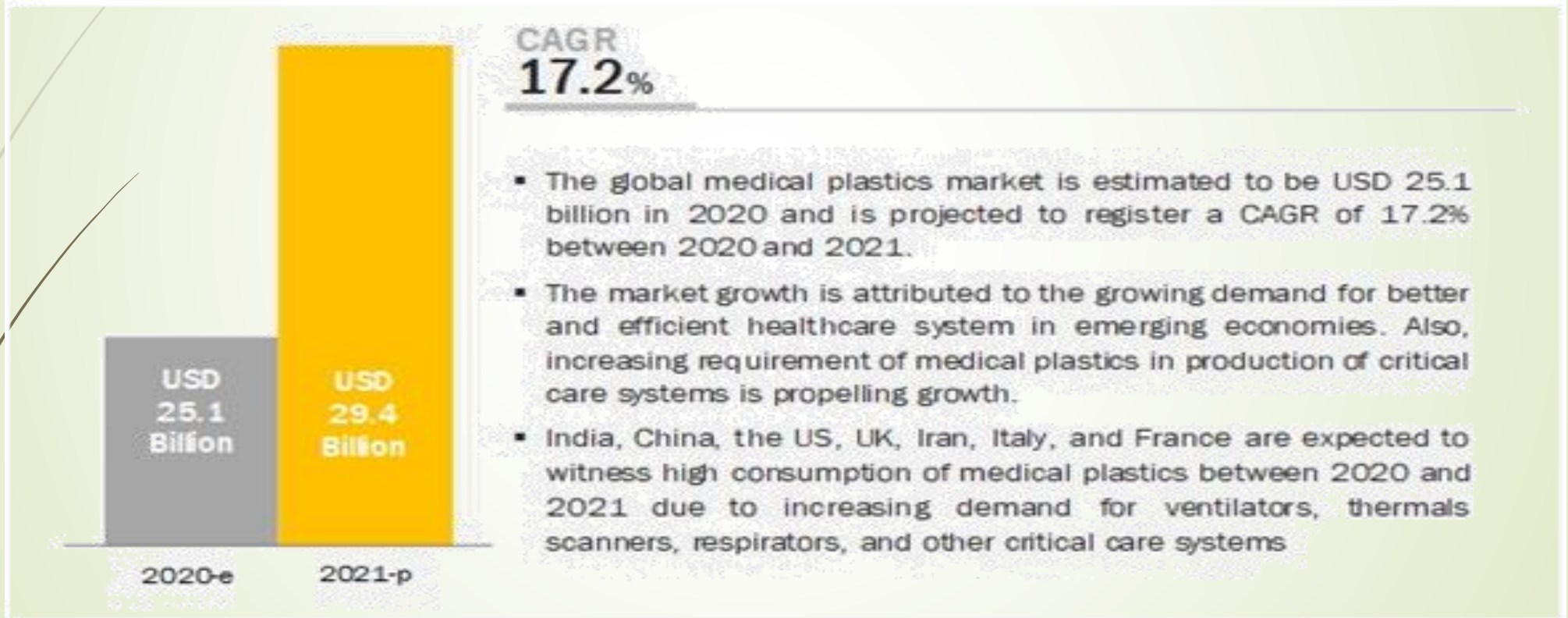
Covid 19 and Pandemics - The Impact on Health Sector & Implications on plastic material consumption

- Covid 19 and Pandemic has affected almost all the Industries.
- The Medical fraternity is the most affected as it had to be quickly geared to fight this Pandemic.
- Plastics played a key role in protecting people, especially frontline workers, during the COVID-19 pandemic.
- The Maximum needed products were Masks, PPE's, Gloves, Shields, Hair Covers, Shoe Covers, Thermo guns, Oximeters, Ventilators, Kits for Ventilators, Goggles, Single Use Disposable Food Containers, etc.
- Health sector was given the highest priority with yielding results.
- Plastic helps mitigate threat of further aggravation of the situation.
- Plastics Also Provides Safety – Protect healthcare equipment's as they need to be delivered in sterilized condition.
- Plastics also Provide Hygiene - The packaging material used for essential items like food etc., have proven its significance at these times to mitigate contamination threat.

Plastics Are Indispensable, Especially During A Pandemic.

Demand analysis, Supply & Coordination of delivery of Plastics and PPE's

- The World Health Organization (WHO) estimates that some 89 million medical masks, 76 million examination gloves and 1.6 million goggles will be needed for the COVID-19 response every month while the pandemic lasts. (Source: The Hindu- Business line News article).



Source : https://www.marketsandmarkets.com/Market-Reports/covid-19-impact-on-medical-plastics-market-131817177.html

Note: e-estimated, p-projected

Demand analysis, Supply & Coordination of delivery of Plastics and PPE's

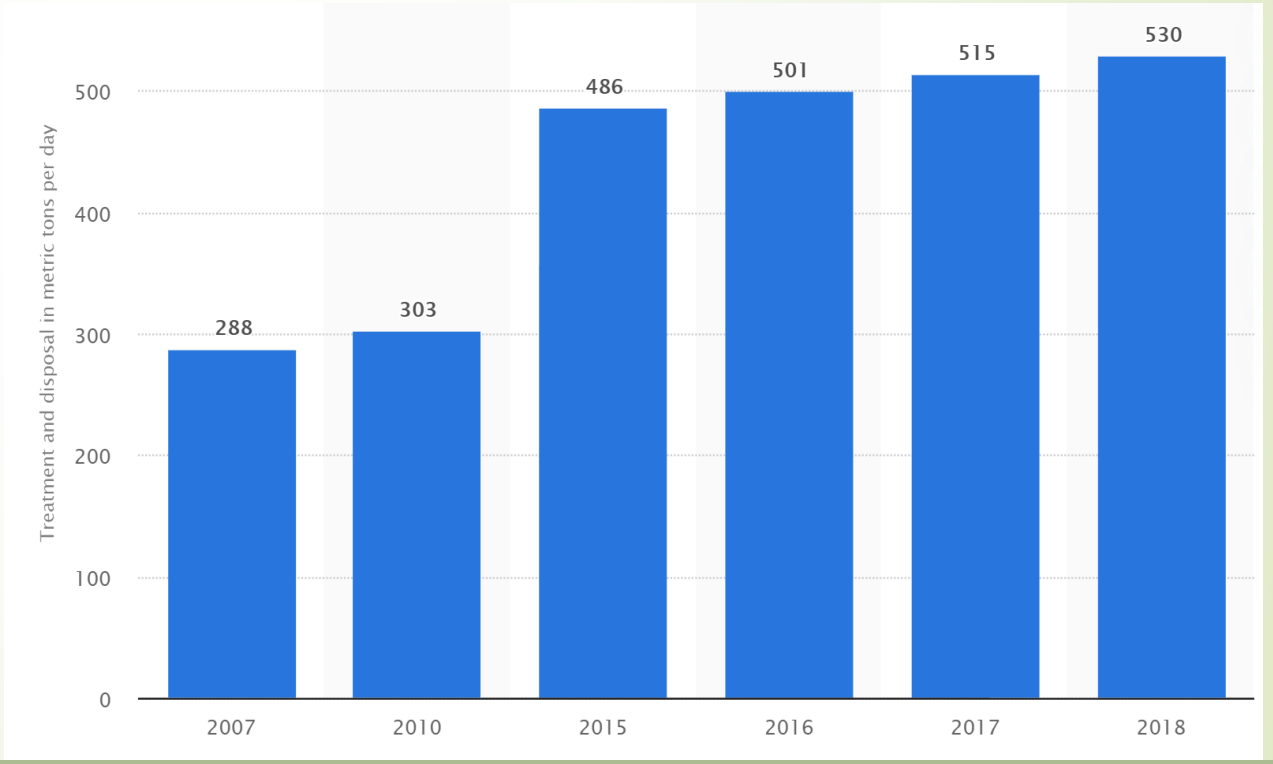
- As per Government Sources:
  - Around 1.70 Lakh Units of PPE were imported in India from China, Japan & Korea.
  - Of these around 50,000 Units Fail Test.
  - India required around 1.00 Lakh PPE Kits per day during this Covid 19.
- Countries reduced exports as they also needed the products for themselves.
- Huge shortage led Indian producers to increase their capacities.
- India produces today around 1.30 Lakh Kits per day to match the demand and also support Exports where required.
- Currently the Industry does not look forward to any Innovations for plastics and polymer usage when it comes to PPEs and Medical equipment.

Existing Bio Medical Waste Management system in India and the guidelines and initiatives

- CPCB has issued guidelines for handling, treatment and disposal of waste generated during Covid-19
- Then there is the Bio-Medical Waste Management Rules 2016 duly amended from time to time which specifies safe disposal of Waste.

India generate 530 tonnes in 2018 and expected to Genrated 775.5 tonnes of medical waste daily by 2020.

Source: https://www.statista.com/statistics/1050906/india-biomedical-waste-treatment-and-disposal/



Single Use Disposable Masks and Increasing Challenge on Waste Management

- The current pandemic of the novel coronavirus, COVID-19, brings challenges due to highly contagious nature of the waste.
- Larger than normal amount of waste generation will be generated from Healthcare facilities, quarantine camps, Quarantine Households.
- Large consumption of protection waste like masks and hand gloves used by the society, poses a potential hazard if not handled appropriately.
- Mixing of Biomedical and Infectious solid /plastic waste can exceptionally increase the burden on Biomedical Waste treatment facilities.

Recommendations by AIPMA for Handling, Treatment And Disposal Of Waste Generated During Covid-19

- Authorities should oversee the operational and financial obligations of certified waste disposal entities for smooth functioning.
- To break the chain of transmission of the virus, waste segregation at source should be emphasized to the best possible extent.
- A separate collection mechanism should be ensured to avoid the risk of community spread
- Civil society should also be made aware of this requirement so as to facilitate collection of segregated waste and avoid any unscrupulous reuse that can enhance the risk.
- A need to prepare infrastructure and operation modalities for fastest disposal and aggressive disinfestation during the holding period.
- Other locations such as stadiums, hotel rooms, marriage halls etc. should be made available exclusively for Corona patient treatment facility so that management of active Covid-19 waste from singular location can be made more efficiently.
- Higher degree of protection should be rendered to waste handlers as they may be prone to infection in view of their health security and to contain further possibilities of secondary infection.

Recommendations by AIPMA

- Based on best practices employed by other countries who have been affected by the pandemic, we would recommend the following:
- Time bound disposal of the waste with tightly controlled storage facilities that are periodically disinfected.
- Teams of human resources be trained and appropriately equipped to undertake the task at hand in a safe manner.
- Real time data of waste generation and disposal should be monitored to ensure that none of the infectious waste is left out undisposed. The reports to be filed on a daily basis by both healthcare facilities and waste collection Notified vendors.
- ULBs should chart out an action plan along with municipalities/ ward councillors and collate data for their respective ward comprising of places where people are quarantined.

WAY FORWARD

- Curbing plastic waste and littering
- Awareness creation
- Better and more harmonised separate collection and sorting system
- Driving innovation and investment towards circular solutions
- Design for Environment
- Design for Collectability
- Design for Recyclability

thank you!