



POST-EVENT REPORT

Interactive Session on

"Covid 19: Challenges and Opportunities associated with Waste Management in India"

Tuesday 2nd June 2020 at 3.00 pm







ABOUT PHDCCI

PHD Chamber of Commerce and Industry (PHDCCI) has been working for the promotion of Indian industry, trade and entrepreneurship as a catalyst for the past 114 years and is a forward looking, proactive and dynamic pan-India apex organization present in 23 states and 2 Union Territories. As a partner in progress with industry and government, PHDCCI with a special focus on MSMEs works at the grass roots level, with strong national and international linkages for propelling progress, harmony and integrated development of the Indian economy.

INTRODUCTION

PHD Chamber of Commerce and Industry in partnership with the India Office of the Konrad-Adenauer-Stiftung (KAS) organised, given the current context, a very important Interactive Session on "Covid 19: Challenges and Opportunities associated with Waste Management in India" on 2nd June 2020.

The session included the following eminent speakers:

- Dr. D K Aggarwal, President, PHDCCI
- Mr. Peter Rimmele, Resident Representative to India of Konrad-Adenauer-Stiftung
- Mr. Vikram Singh Mehta, Chairman, Water & Solid Waste Management Committee, PHDCCI
- Mr. Durga Shankar Mishra, Secretary, Ministry of Housing and Urban Affairs, Government of India
- Prof. Maria Lozidou, Professor, National Technical University of Athens in the School of Chemical Engineering and Head of the Unit of Environmental Science & Technology Greece
- Dr.PrashantGargava, Member Secretary, Central Pollution Control Board, Government of India
- Mr Prasad Modak, Executive President, Environmental Management Centre, LLP & Director, Ekonnect Knowledge Foundation
- Ms. P. Bineesha, Executive Director, International Institute of Waste Management
- Mr. Manoj Sahu, Founder & CEO, R Planet Integrated Solution Pvt. Ltd









Interactive Session on

Covid 19: Challenges and Opportunities associated with Waste Management in India

Tuesday, 2nd June 2020, 3pm onwards



CHIEF GUEST



Shri Durga Shankar Mishra Secretary Ministry of Housing and Urban Affairs Government of India

GUEST OF HONOUR —



Dr. Prashant Gargava Member Secretary Central Pollution Control Board (CPCB)

SPEAKERS



Prof. Maria Lozidou
Professor, National Technical
University of Athens in the School of
Chemical Engineering and
Head of the Unit of Environmental
Science & TechnologyGreece



Dr. Prasad Moddak
Executive President,
Environmental Management Centre,
LLP & Director,
Ekonnect Knowledge Foundation



Ms P. Bineesha
Executive Director
International Institute of
Waste Management
(IIWM)



Mr. Manoj Sahu Founder & CEO R Planet Integrated Solution Pvt. Ltd

KAS LEADERSHIP



Mr Peter Rimmele
Representative of
Konrad Adenauer Stiftung
KAS in India

PHDCCI LEADERSHIP



Dr D K Aggarwal
President, PHDCCI



Mr Sanjay Aggarwal Sr. Vice President, PHDCCI



Mr Pradeep Multani Vice President, PHDCCI





The proceedings of the Session are as follows:

Dr. D K Aggarwal, President, PHDCCI in his Opening Address welcomed the dignitaries and apprised them of the activities of the Chamber particularly during these pandemic times. He appreciated the efforts of the sanitation workers as they are fighting the coronavirus pandemic and handling garbage at homes and hospitals. Indian hospitals are overstretched with rising Covid-19 cases, and the government has allowed patients with mild symptoms to stay and be treated at home. Hundreds of thousands of migrant workers, students and pilgrims have also returned to home quarantine. He apprised that India has specific rules to deal with biomedical waste, but the Covid-19 presented a unique challenge before the country where it has currently to deal with an un-estimated but definitely substantial amount of Bio-Medical-Waste (BMW) exclusively from dedicated Covid hospitals, quarantine centres and home quarantine facilities in cities/towns and districts/blocks. The task has become all the more difficult as many states lack strict monitoring mechanism.

On the Waste Management front, Dr. Aggarwal insisted that the measures that are in place today for the pandemic will go a long way in undoing years of neglect that sanitation workers have been reeling under. This new challenge is now of treating such waste as being generated due to the novel coronavirus which can potentially survive in the environment for several hours/days. The Central Pollution Control Board (CPCB) has issued guidelines for BMW management of Covid-19 treatment, diagnostics and quarantine, issued an advisory to Common Bio-medical Waste Treatment and Disposal Facilities to operate extra hours and asked for PPE kits for collection staff and vehicles. Yet, there is a need for immediate capacity building and guidance to manage municipal solid waste, especially household hazardous waste. For the waste management ecosystem to respond effectively, corporate social responsibility initiatives, non-governmental organizations and waste management players must come together. Collaboration will ensure that sanitation and on-ground health staff have access to PPE kits, and also help manage the flow of waste safely in this pandemic situation.

Mr. Peter Rimmele, Resident Representative to India of the Konrad-Adenauer-Stiftung in his address stressed upon the fact that Waste will remain an important issue the world over and in a worst case scenario it can be lethal like nuclear waste. He informed that in Germany in 2017, the government thought that the problem of waste management was solved with over 80% of the waste was recycled. Since early 90s, Germany has been following the system of separation between recycling and residual waste. The residual waste is a part of the citizen responsibility. The whole system is quite complicated which has become a source of concern to everyone. He cited various examples pertaining to Germany and wanted to know about the system of waste management in India.

Mr. Vikram Singh Mehta, Chairman, Water & Solid Waste Management Committee, PHDCCI welcomed the speakers and informed that problem of waste management in India is very severe, both, in long term and short term. He informed that over 50% of the solid waste in India goes untreated and is dumped into the landfills which will lead to other problems in times to come. As per him, the solution to these has to be economical in order to attract meaningful investment as it will have health repercussions. The government has come up with set ofguidelines to address the Municipal Solid Waste problem which is almost 75% of the total waste that is generated in India. He further informed that NTPC invited over 100 tenders for Waste to Energy Pollution free Plants across the country and it demonstrates the seriousness of the government to tackle the problem. India has the potential to generate over 3 giga watts of electricity from waste by 2050 as it is anticipated that India will have150 million tonnes of waste by that time period. This has led to the launch of Swachh Bharat Abhiyan which is to clean-up India in a meaningful way.





Mr. Durga Shankar Mishra, Secretary, Ministry of Housing and Urban Affairs, Government of India in his Guest Address informed that Covid19 is aglobal pandemic and has impacted all the countries in the world. India, through its government both at Center and States, through the local agencies and the individual citizens, has addressed the pandemic in a pertinent manner. The Janata Curfew imposed on 22nd March 2020 followed by complete lockdown of the country on 24thMarch till date has seen participation from each of the individual to curtail the spread of the pandemic which would have otherwise erupted significantly.

Today in the world over 6.4 million people are effected and death toll is approximately 378000, India is managing well even though when we started we did not have proper PPE and other necessary equipment to safeguard oneself from such a pandemic. India local authorities and community as a whole have joined hands to fight this unfortunate pandemic. Ministry Housing and Urban affairs had issued two guidelines for the effected and suspected individual of Covid 19.

In the last 6 years the solid waste management capacity as grown multifold. When we started in 2014 the capacity to process the waste was only 14% and gone up to 65% in the recent year. We are generating 1500,000 tons of municipal solid waste every day and around 950,000 is being processed every day. The waste was not being segregated initially but now it has become a practice to segregate the waste. In the last 6 years, the progress in waste management is phenomenal.

Mr. Mishra informed that when the Swachh Bharat Mission (SBM) was launched by the Hon'ble Prime Minister on 2ndOctober 2014, the MoHUA had brought out a set of guidelines to inform states and urban local bodies regarding various components of the Mission, including release and utilisation of funds, mission monitoring etc. In the last two and a half years that has lapsed and since then, the Ministry has had to issue numerous advisories and amendments to the guidelines from time to time, in response to evolving ground realities and changing expectations of various stakeholders. He further added that having crossed the midway mark of the Swachh Bharat Mission (Urban), it is now time to revise the guidelines so as to reflect these changed realities and norms.

Mr. Mishra further added that since the launch of the SBM in 2014, over 6 million household toiletshave been constructed along with over 0.5 million community and public toilet. Presently, over 147,000 metric tonnes of Total Waste is generated every day out of which more than 65% of the total waste is processed. 61 Mega Watt of Energy is currently being produced from Waste and over 3 million metric tonnes of waste is converted into Compost. He further added that there are more than 81,000 wards with 100% door to door collection and over 64,000 of these wards segregate the Waste at Source.

Mr. Mishra apprised the participants that India is moving towards Clean India and elaborated on the crucial component of the Mission, solid waste management (SWM). SWM saw slow progress initially, however, there is a tremendous improvement in the way waste is being collected, segregated and treated in urban India. Apart from Swachh Survekshan, innovative frameworks such as the Star Rating Protocol for Garbage Free Cities is enabling institutionalization of good practices such as source segregation, scientific processing of waste, dumpsite remediation, penalties & spot fines for littering, and compliance of bulk waste generators, amongst others. The Ministry is also fully committed to realizing the Honourable Prime Minister's vision of a single use plastic (SUP) free India by 2022. The Ministry will be focusing on 100% processing and safe disposal of solid waste, complete faecal sludge and sewage management and wastewater treatment and reuse.





Mr. Mishra informed that the SBM 2.0 will be launched soon with the main focus being on outcomes, going beyond municipals solid waste management to black water treatment to make cities better for ease of living and contribute to the Prime Minister mission of Atmanirbhar Bharat.

Prof. Maria Lozidou, Professor, National Technical University of Athens in the School of Chemical Engineering and Head of the Unit of Environmental Science & Technology, Greece in her address stressed upon the waste management in the context of circular economy & bio economy. She deliberated upon the European Union Legislation on Waste management and explained how the developing as well as developed economies are disrupting the Food Value Chain. Every step of food chain uses resources and generates more waste and pollution. Developing economies waste 40% of food during the 'first 2' steps of value chain (production and storage) whereas developed economies waste 40% of food during the last two steps (distribution and consumption). She also informed that millions of metric tonnes of food is wasted around the world. She informed about the future economic model of moving from linear to circular economy. The circular system and the linear system differ from each other in the way in which value is created or maintained. A linear economy traditionally follows the "take-make-dispose" step-by-step plan &a circular economy follows the 3R approach: reduce, reuse and recycle.

Prof. Maria informed that the proponents of the circular economy suggest that a sustainable world does not mean a drop in the quality of life for consumers and can be achieved without loss of revenue or extra costs for manufacturers. She discussed an ambitious package for circular economy in EU; It is estimated that there will be over 3.4 million new jobs in circular economy, in the field of repairing, waste management, recycling, renting and leasing in EU until 2030 with savings of up to EUR 600 billion, reduction of total annual emissions of greenhouse gases by 2-4% and safety and stability of the supply of clean energy.

Dr Prasad Modak, Executive President, Environmental Management Centre, LLP & Director, Ekonnect Knowledge Foundation, highlighted the importance of waste management in the Covid 19 times. He pointed to the impact on common biomedical waste treatment facilities during the pandemic. He also spoke about production of medical plastics. The global medical plastics market size during this pandemic is projected to grow from USD 25.1 billion in 2020 to USD 29.4 billion by 2021, at a compound annual growth rate (CAGR) of 17.2% during the forecast period. The major drivers for the medical plastic industry include the growing demand from OEMS and Medical devices/equipment manufactures for the production of critical care system. He insisted that there is a need to push sustainable packaging options that use less plastic and are reusable and we should have rounded approach looking at both upstream and downstream.

Ms. P. Bineesha, Executive Director, International Institute of WasteManagement talked about waste management sector, legal framework and data pertaining to waste management sector during Covid 19. She highlighted that there is currently no evidence to infer that standard waste management procedures are unsafe or insufficient in terms of the risk for COVID 19 infection or that waste (Excluding Bio-Medical waste) plays a role in the transmission of SARs-COV02 or other respiratory viruses. All personnel managing the wastewater facility should follow PPE precautions of COVID 19 high transmission protocol. She informed that the Indian waste management market's concept of circular economy will gain prominence - recycling sector will grow & the shift from informal to formal is expected. There will be an increase in industrial hazardous waste construction & demolition waste and non-hazardous industrial waste for the waste management sector. The COVID effect will also bring technology intervention in the waste management. She further added that maximum innovations and opportunities will be seen during COVID period. Currently only 70% of waste is being treated and disposed, hence, ample scope for entrepreneurship existed. Manpower deployment will be lower in technology dependent Technology. By 2025 waste management market





size in India is projected to be worth approximately US\$ 15 million and there is a huge opportunity for banks and venture capitalist to look at this sector more seriously.

Mr. Manoj Sahu, Founder & CEO, R Planet Integrated Solution Pvt. Ltd. in his address talked about challenges and supply chains in Covid 19. He talked about the government action plan and funding mechanism. He also informed about what we are looking at and where we are currently. He emphasized on the positives of a circular economy. According to him, development of any nation works hand in hand with its people and specially for such a subject, it becomes all the more important to have people and government collaboration. Future definitely seems to be in good hands he added and time will be a crucial factor in changing the current scenario. According to him, any wastage weather it is clinical or non-clinical needs attention as COVID-19 has thought the world the new normal of daily routine and also opened our eyes towards the essence of waste management.

The participants included Professors and Students from Indian Institute of Technology (IIT) along with senior Indian industry representative wanted to know about the way forward post Covid19 andon the measures to be taken to adopt to the European model of Waste Management. The panelists were candid in their response and accepted the fact that though the Government has taken a lot of initiatives to address the issues and problems, there is a lot that has to bedone.

Mr Pankaj Madan, Deputy Head India Office, KAS proposed the vote of thanks and appreciated the involvement of the esteemed audience in the webinar. The session was moderated by Dr Ranjeet Mehta, Principal Director, PHDCCI and was attended by 90 participants.

The Interactive Session was Organised by International Affairs & Trade Fars Division and Waste Management Committee of PHDCCI in partnership with India Office of Konrad-Adenauer-Stiftung (KAS).

The Interactive VC was followed by several questions from participants that were satisfactorily answered by all the speakers.





Interactive session was also actively promoted on social media platform like twitter through live tweets, LinkedIn, Instagram and Facebook

Twitter

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Glimpse



Mr. Durga Shankar Mishra, Secretary, Ministry of Housing and Urban Affairs, Government of India







Mr. Peter Rimmele, Resident Representative to India of Konrad-Adenauer-Stiftung



Prof. Maria Lozidou, Professor, National Technical University of Athens in the School of Chemical Engineering and Head of the Unit of Environmental Science & Technology Greece



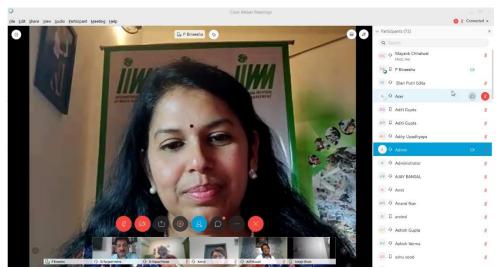
Dr. D K Aggarwal, President, PHDCCI







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"Towards Inclusive & Prosperous New India"

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