MARCH 16- 17, 2023

CLEAN AIR COLLECTIVE ANNUAL CONVENING

LEARNINGS & CHALLENGES ON THE IMPLEMENTATION OF CLEAN AIR ACTION PLANS; AND THE ROLE OF CIVIL SOCIETY TO ENSURE ITS TIMELY IMPLEMENTATION

02

UNPACKING THE COMPLEXITIES OF THE AIR POLLUTION PROBLEM

Moderator - Tanushree Ganguly, Program Lead, Council on Energy, Environment and Water

In order to inform the conversations later in the convening, we bring to the fore the different aspects of the issue at hand. An experienced panel will set the 'State of Play' from the lens of the sectors, the policy approach, the science and data needs and the significant changes in this ecosystem over the last few years.

PANELLISTS

- Anumita Roy Chowdhury, Executive Director- Research & Advocacy, Centre for Science and Environment - Challenges on implementation
- Anirban Banerjee, Senior Associate, Center for Study of Science, Technology and Policy - Emission inventories
- Amit Bhatt, India Managing Director, International Council on Clean Transportation - Transport
- Bhargav Krishna, Fellow, Center for Policy Research - Policy
- Nalini Sekhar, Co-Founder, Hasiru Dala - Waste Management
- Palwinder Singh, Mausam Da Doctor, Progressive Farmer, Punjab - Crop Residue
- Polash Mukerjee, Lead, Air Quality, Natural Resources Defense Council - Construction and Demolition
- Dr Poornima Prabhakaran, Director, Centre for Environment and Health, Public Health Foundation of India - Health and AQ
- Sunil Dahiya, Analyst, Centre for Research on Energy and Clean Air - Power plants

03

- NCAP created the opportunity for convergence between State and Central plans.
- Implementation of the plans is a major challenge.
- Strong interface between state and central level policies is needed.
- Capacity building is key to enhance the knowledge of the ULBs.
- SPCBs don't have sufficient human resources. Vacancy levels are up to 40-60%. Restrictions on what you can spend money on.
- ULBs have minimal focus on capacity building.
- Clear protocol for data reporting and proper indicators for defining the SOP, good MIS, smart monitoring and digitization will be critical.
- Significant regulatory shifts are on the anvil, these could have implications for the funds available to states to address air quality issues.

- NCAP provides funds to fight air pollution – this is significant. Funding now is tied to performance. Overall 40+ cities have ensured 100% allocation while 34 cities have lost funds.
- Effective funding and implementation requires clarity on metrics of measurement in order to ensure that the focus is on the right kind of actions.
- Considering the CAPs are multisector plans - we find an asymmetry in action. Funds are heavily biased to dust control, road sweeping, road construction, etc.
- Sectors that contribute to air pollution from combustion (Energy Transition, Mobility Transition, Fuel Transition, proper translation of smart mobility strategies) are hugely neglected under NCAP funding. These are sectors with climate co-benefits as well and should receive greater priority.
- Incidental funding is being reported from different schemes and not just as a part of NCAP.

03

- Major shifts from 1980 to 2021 - 40 National level inventories; 92 inventories for cities
- Emission inventories categorisation has been difficult. Emission inventories made without ground truthing.
- Distributed sources/ Dispersed sources are huge contributor to air pollution. Spatially distributed data is needed - ward/ city/ region specific data. Though aerosol monitoring is the focus.
- Definition of the airshed unclear. Regulation at the airshed level is missing.
- Major challenge for city/airshed/region - data availability and reliability of sector specific data. Issues with data accuracy observed - spraying water near the air quality monitors, representing air quality in areas where there are no sources.
- Inventories at regional levels is relevant now.
- Hotspots need to be identified
- Development of an open source database is necessary.
- PRANA portal is not entirely accessible to the public.

- Health is completely missing from this policy framework. Increase the conversation on health narrative across all policies.
- Policy uptake on the issue still persists. How do we integrate health into decision making standards. Develop and integrate targets through health (short, medium and long term).
- No contextualised evidence on health effects - we need data in India on conditions specific to our context. Most of the evidence comes from the studies in developed countries.
- Easy access to local public data is key
- There is now a growing body of research and evidence for India by India – beyond respiratory illness. Example: research from Delhi and Chennai - every 25 microgram increase in PM2.5 increased by 3-5 blood pressure (levels). More funding available for this research.
- Growing awareness on health specialists about this issue.

05

- Focus and accelerate the shift towards zero emission.
- Almost 74,000 lives lost due to vehicle exhaust emissions annually. Even as fleets change to electric, it is not clear as to what rate of reduction of emissions this will result in at the tailpipe. This will be important to understand the gains from electrification.
- Current PUC regime does not capture Particulate Matter and NOX emissions. Real time assessment needed.
- Pilot project in Delhi and Gurgaon - captured real time emissions from 100,000 vehicles across 15 locations.
- Analyse impact of emission from age, fuel type- BSII, III, IV; personal used vehicle vs commercial, geography where these vehicles are registered.
- False solutions like smog towers, smog guns, sprinklers, etc. are being promoted.

- Power plants/ power sector is ignored in the clean air action plans.
- Power plants contribute to air pollution by 7-20% depending on the part of the country. Power sector over the last 8 years has managed to retrofit by just 4%
- Power plants are owned by certain number of companies. Change can be brought about very fast.
- Cost that can go into retrofitting - can reduce the health cost at a large scale. The fine currently imposed is 10 paise per unit which may not serve as a deterrent.
- Successive relaxations have built the burden of air pollution across urban centres.

06

- Current capacity for recycling construction and demolition waste is less than 4 million tonnes.
- Localised processes spread across various sectors contribute to the issue of C&D waste.
- Redevelopment projects playing a major role in pushing the sector and further aggravating pollution.
- Improvement in C&D material collection and recycling needed. C&D material supply chain yet to be developed. Sensor based monitoring needed to revolutionise C&D monitoring.
- Real time monitoring and evaluation needed - specifically on health impacts. Institutional capacity for compliance at different working levels needed.
- Creating capacities for ULBs/ industry association needed in C&D in the next 3 to 5 years.

- Link between SWM and air pollution is not very clear.
- Citizen engagement and citizen demand is critical.
- There is no dearth of money for managing solid waste. Though funds is being transferred to apps/ digitisation is not helpful. Start-ups getting involved though with minimal knowledge. Better tech is required for informal and formal sector.
- Trend is to focus on centralised waste management. Need is decentralisation of waste management. Segregation at source - domestic and commercial waste.
- Indore cannot be replicated everywhere -customisation is needed where on ground work is happening.

- The in-situ and ex-situ solutions exist.
- Farmers are willing to shift practices provided the incentives align.
- Challenge is finances for farmers.
- Need for greater awareness amongst the farming community.

07

MEDIA AND AQ

Moderator - Gunjan Jain, Engagement Lead, Climate Trends
Regional media discourse to address the AQ complexity - what are the challenges, what are some of the steps that have been taken to address those challenges, and what are the opportunities.

PANELLISTS

- Aniruddha Sharma - Chief Reporter, Dainik Bhaskar
- Divya Goel- Principal Correspondent, The Indian Express
- Krishnendu Bandyopadhyay - Senior Assistant Editor, Bennett Coleman and Co. Ltd. (Times Group)
- Mohammad Sartaj Alam - Independent Journalist
- Sachin Lungse - Senior Reporter, Lokmat Media Ltd

08

- In English, a lot of resources are already available, not the case with the regional languages.
- Reports are being read though the way they are reported is key. To put it together in simple language is needed, information in complex scientific language makes it difficult.
- 10 years back there was hardly any reporting on air pollution, today there has been an increase in writing/ reporting in even Marathi.
- Images have a huge impact, and social media needs to be leveraged.
- Environment reporting is currently weaved from the perspective of politics/ Bollywood/ crime.
- Until there is a political push and pull, the impact of any story is not visible. Example - stubble burning is heavily reported on since it's now a political issue
- The 'wow' factor needs to be there for people to want to read about the issue. Unfortunately, sensational stories get greater attention.
- Readership is very low on environmental issues. People normalise the health angles, and adapt to live with it.
- Method of reporting needs to be reinvented. Consistent and persistent coverage will make everyone notice.

08

- Journalists are the bridge between the experts and the common public, and media and advocacy can go hand in hand.
- Editors are looking for new information. Big publications look for hyperlocal and real time data. Data which is slightly old is rejected. Content needs diverse experts who help establish the narrative in a holistic manner.
- Data analysis and accuracy are important aspects. Manipulation of information and data is an issue.
- The international studies/ reports are not seen as reflecting Indian reality and are often dismissed by authorities. Reports like AQLI or Lancet can't be reported because advertising revenue is impacted due to the government's stand on this.
- Indian perspective on the health impacts of air pollution is missing. Non-existence of methodological steps and SOP for estimating the air pollution health impacts.
- Need to identify the victims of air pollution to make a real impact on policy makers and policy.
- Environment issues can be better explained through case studies.
- Hard to find experts who can help explain particular issues of environmental pollution.
- Language gap is a problem while reporting on environmental issues. Vocabulary is not there.

07

BREAKOUT SESSIONS

The breakout sessions will be solutions focussed. To look at the topics with a lens of opportunities in order to ensure implementation of the clean air action plans.

BREAKOUT SESSION DETAILS

- Fighting false solutions (Dr Sarath Guttikunda, Founder/Director, Urban Emissions)
- Engaging with ULB's (Srinivas Alavilli, Fellow, Integrated Transport and Road Safety, World Resource Institute)
- Construction and Demolition Waste (Polash Mukerjee, Lead, Air Quality, Natural Resources Defense Council)
- Solid Waste Management (Sobia Rafiq, Co-Founder, Sensing Local)
- Transport (Ranjit Gadgil, Program Director, Parisar)
- Awareness building and public engagement (Mallika Arya, Senior Campaigner, Purpose)

Fighting False Solutions

There are two types of False Solutions- Intervention Form, Manipulation Form
Make sure experts talk about these issues and how these are not working, on a regular basis.
First step is to identify if the manipulation is happening (put sensors, crowdsource evidence)
Analyse and report on effectiveness of smog towers.
Creation of infographic comparisons
While boycotting the false solutions, we need to come up with some true solutions.
Indicators should be not in terms of money spent instead in terms of actual emission reduction achieved on a sectoral basis (long-term solution)
Stakeholder training- health professionals, media, common, NGOs, vulnerable groups.
Engage with the politicians -the willing ones- political education.

Engaging with ULB's

ULBs are effective in implementing clean air action plan
Citizen Participation is needed
Identifying people at the ward level – identify the ward level nodal officer for NCAP
Bottom up approach - Ward as unit of governance - local level organisations - volunteer network.
Case studies presenting to the UDD (SOPs)- Before/ after examples showing what is happening – examples of successes are important
What is the data that is required to map the need and interest (Continuous data management system).
Celebrate ward level success stories.
Dispelling false understanding.

Construction and demolition waste

C&D waste is estimated to be 150 million tons.
Pollution is caused by both debris and construction.
Active engagement on C&D
Guidelines need to be amplified.
No comprehensive list of various things to follow on the site, and the majority of them are advisories that are not supported by law.
Real-time inventory
Public access to information on C&D and awareness building can be beneficial.
Highlight the effects on health
Health of occupational workers on construction sites should be monitored
A list of contractors should be created
Collaboration needed with the builders for compliance
lawyers who have experience in the NGT as well as the High and Supreme Courts.
Investigate what is most difficult for day to day monitoring and compliance mechanism
Narrative on the quantum of the problem needed.
A single platform with all of the information available can be a useful resource.

Solid Waste Management

Establishing the interlinkage between solid waste burning and air pollution (AQ monitoring)
There is a huge gap between the amount of waste generated and disposal facilities available across the country
Behavioural change, proper training of sanitation workers, proper disposal facilities needed
Ward level engagement to promote decentralised waste management practices & community led scaling up on solutions is required.
Manuals for making Zero Waste City
Influencing the city's master plan, so that the master plan has dedicated land for decentralized waste management
Generating evidence and data for the health aspects of bad Solid Waste Management Practices.

Transport

Avoid non urban planning related interventions –this could include looking at policies that encourage remote working.
Improve phasing out of polluting (older) vehicles
Focus on electrification of public transport and shared transport (including autos, taxis etc.).
Improve Walking and cycling infrastructure, and public transport
Push for provision of public transport (buses) as an obligatory function of the city
Establish a "standard" such as X number of buses per Lakh population – may change depending on the size of the city
Continue to support local efforts to oppose large road infrastructure projects – link to air pollution
Pushback on CPCB guidelines that promote road-widening and flyovers as solutions to air pollution.
Push for Parking Reforms- Develop materials to oppose false solutions like multi-storey parking etc
Highlight the impact of air pollution from transport
Highlight and engage more with vulnerable stakeholders like street vendors (NHF, NASVI), waste pickers and traffic police.

Public Engagement and Awareness

Invest time in the community, celebrate work by citizens and organisations.
Media need regular media workshops
Create a space for journalists to access data/experts easily to enable public engagement with the help of media/journalists
More IEC content:
Identify reference networks (the person one listens to) instead of targeting the general audience
Create counter-narratives
Inculcate air pollution curriculum in schools as well as medical institutions
Incorporate Symbols, Traditions & Customs

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KEYNOTE SPEAKERS

Hitesh Vaidya, Director, National Institute of Urban Affairs, India
We are in March and still talking about clean air. The story of air pollution is a constant one. We need consistent deliberations/ discussions.
Data, granularity, and challenges need to be the main focus.
The G20 and U20 framework could be an opportunity
Air pollution is a problem of cities, cities are the engines of growth, how do we equip cities on the solutions of the issue. Convene a city like a lab - onboard practitioners to discuss what is needed.
Create Master Plan - dynamic, strategic - build in regulatory frameworks. Broad project API based approach is needed.
Democratise knowledge. Information and knowledge must reach the frontline implementing agencies.
Empower ULB to take holistic action, ensure capacity building
Link everything to the health outcome
Air Pollution - goes outside the jurisdiction of city boundary, regional planning approach is also required

Mr Srinivasulu, IFS, Former Member Secretary, Karnataka State Pollution Control Board, Government of Karnataka
We need to ensure air quality is an issue that people take seriously. For this we need to make it simple and motivate them to act on it.
NCAP is a golden opportunity - there is definite budget, target, performance based funding, Institutes of Repute, philanthropies - all possible boxes for an effective program is checked - we just need to implement it. NCAP is not just concerned with air, it could address most issues from SWM to fuel adulteration. If we fail NCAP, it will be a multi-faceted failure and we will find ourselves in a situation where there will be no going back.
Efficient implementable solutions are needed for better synergy between the government and the environmentalist fraternity. To point to the problems alone creates friction.
Engage public, engage people, make them aware of the problem
It could become a mass mobilisation, mass awareness- the government will do what people demand them to do.
Ignite the spirit of competition for clean air.

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PLENARY ON IMPLEMENTATION

Moderator - Santosh Harish, Program Officer, Open Philanthropy
Implementation challenges for Urban Local Bodies and the role citizens and CSO's can play to support the efforts.

Dr Harshal Salve, Additional Professor, Public Health Professional and Faculty at All India Institute of Medical Sciences (AIIMS), New Delhi
How do we integrate AQ and health. Make it a health agenda. Health unites - is a priority for everyone. Measure impact of air quality on health. Identify and map vulnerable populations. Measure impact of air quality on health. Identify and map vulnerable populations.
Air Pollution is sort of a movement. Engage, collaborate with all stakeholders - people, community leaders, policy makers.
Science has advanced in terms of measurements and actions have increased
NCAP/ ULB actions should involve the health impacts and mitigation measures
Generate more action-oriented science-driven local evidence
Communicate solutions to the policy makers, to the communities.

Dr Nitin Goyal, Principal Scientist and Head, Research and Innovation Centre, CSIR-NEERI
Lack of continuity of people at the government agencies. There is no ownership of the issue; permanence is needed
There is not enough support for the IORs- they lack capacity to support the ULBs properly.
Micro level emission inventory is needed to manage AQ at a local level, high resolution inventories is needed. Holistic approach has to be taken to understand the sources.
The science is very unclear even within the scientific community

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Shri Prakash Kumar, Assistant Municipal Commissioner, Dhanbad Municipal Corporation
From DMC- some success stories are increasing the greenery, paving work
8 monitoring stations to be built- 2 stations are in place
Support from civil societies is needed on awareness programs.
Implementation challenges- Dhanbad is a very prominent coal mining area. The issue is complex, because of the city being a mining area.

Vikas Dinkar Samant, Civil Engineer (Environment and Solid Waste Management), Brihanmumbai Municipal Corporation
The biggest problem in Mumbai is the garbage disposal.
The solid waste generated every day is a problem
Achievements: Gorai dumping ground, Mulund dumping ground closed
Partially closed Kasurbai dumping ground
A long term Waste to Energy plan at Deonar Dumping ground
BMC is going to install its own CAAQMS at 5 very polluted locations.
Arranging meetings with all the stakeholders, for the best utilisation of funds.

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SHARING SUCCESSES AND LEARNINGS FROM THE GROUND

Dr Abhijit Chatterjee, Assistant Professor, Department of Environmental Science, Bose Institute - Successfully stalling smog towers in Kolkata

Central PCB was launched 50 years back with the sole objective to control pollution. So why is there is a need to launch a new program 50 years later

Now how can PCBs blame the ULBs when they themselves failed in their sole purpose

Better coordination needed between the ULBs and the PCBs.

The biggest challenge for the ULBs is the lack of manpower.

Micro level studies are important

Ward level monitoring to start soon

Make it competitive between councillors for better air quality for every ward

Need to generate a good database

Studies/ expertise on air quality - needs to be linked to health

On smog towers

The only way is to curb the pollutants at the source, and smog towers can never be an effective solution to implement at scale. It's a waste of public money.

ULBs need to consult with experts before investing in things like smog towers.

Scientific community needs to assess more thoroughly these types of solutions, and unequivocally refute them.

A knowledgeable AQ monitoring committee has to be set up- to fill the knowledge gap.

Attributing % of pollution to the sources is needed

Worked with the Kolkata Municipality - wrote the technicalities which they accepted.

Ambrish Kumar Chandan, Technical Advisor, Vital Strategies- Learnings from their work on health and AQ

Strengthening the Public Health System is needed- data intelligence, institutional strengthening, strategic communications and advocacy.

Clinical solutions are very limited. There are large preventive health measures.

Communication of risk is important The medical fraternity needs to get involved,

Doctors need to sensitise people regarding the probable role of air pollution in the health problems they are facing

Training programmes for ASHA workers could be conducted.

Convergence is needed within the departments.

Need to integrate health programs with the ongoing government programs.

Integration of air pollution messaging in the ongoing programs.

While involving the communities -consider incentivisation.

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SHARING SUCCESSES AND LEARNINGS FROM THE GROUND

Ankita Jyoti, Senior Consultant, Asar
Engagement with Jharkhand municipalities has led to accounting, monitoring and supporting the Dhanbad municipality on the clean air action plan work
Also identifying and filling gaps.

Siddharth Srivastava, Sr. Associate, Clean Air Project, Policy Engagements Team, Swaniti
- Engaging parliamentarians on the issue of air quality
Incorporation of NCAP in Disha committee.
Raised questions on NCAP and utilisation of funds in the Parliament.
Local innovation systems - deployment of low-cost sensors, and digital boards.

Preeti Sunderajan, Co-founder, Citizens for Sankey
Flyovers are not a sustainable way of infrastructure development.
A technology-centric and not a people-centric approach.
Data is not present.
Need to make the public aware about the problem because we need their support.
Got experts, analysts and lawyers on board – to understand the issue in depth, the loopholes
Small achievements help boost the motivation of the people
Concerned political figures were engaged -time consuming process
Lack of transparency and coordination between government agencies.
Consistent media support was critical.

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SHARING SUCCESSES AND LEARNINGS FROM THE GROUND

Supreet Kaur, President, EcoSikh - Establishing narrative of air pollution in Punjab
Punjab suffers heavily from air pollution all year round.
There is a lack of awareness on the issue.
There is now an air pollution narrative building
Regular engagement with schools and colleges to raise awareness on the issue.
Convenings/ interactions were tailor made for different cities. Both issues and actions are discussed in these sessions.

Swagata Dey, Technical Advisor, Environmental Defense Fund - Successful work carried out by EDF in Dewas and Patna
There are capacity issues with ULBs though work cannot stop
ULBs have responsibility, power and money.
Important to work with both PCBs and SPCBs.
The higher ranking officers change often though lower ranking ones don't hence its important to engage with them.
Continuous engagement is a key.
Creating synergies between departments despite the differences is required
We need to be flexible and nimble while working with the government agencies.
Communicate simply- it's all about the co-benefits.
Use the driving force and external factors which differ with each city.
Use the media, provide support to them.

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COLLECTIVISE FOR IMPACT

Moderator – Brikesh Singh
How do we better collaborate and share learnings with each other, stay informed and engaged with each other's work – between cities and states?

Rajiv Khurana - Founder Trustee, Lung Care Foundation
Lung Care Foundation works neither with the government or against them.
Multiple partnerships with important sections of the society exist now, including government. Non monetised MoUs serve the purpose.
Youth and doctors need to be involved
Address pollution and health from an emotional point of view.
The strategy of remaining in the background and celebrating others' efforts.

Sayli Udas Mankikar, Head, City Climate Alliance, National Institute of Urban Affairs, Ministry of Housing and Urban Affairs
3 Cs formula- Connect (activists, organisations), Co-create (climate action), Collaborate (knowledge, funding, capacity building).
Always a collaborative effort- partners helped draft the framework as well.
Putting out the work done by the partners in an effective manner, such that it has a wide reach.
Formulated a group practices book- a handbook for people working towards a common goal
The U20 is an opportunity to address air pollution as well, through a collaborative approach.
Constituting a gender division at the NIUA as it is important to bring gender in the climate domain.
A good practice book on air is needed; also good quality IEC material for cities.
Would like more synergies between the Climate Alliance and the Clean Air Collective.

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Pradeep Sharma, Cross-functional Leader in Education, Sattva Consulting
Sattva has organised 3 different collaboratives on education.
One is centred around life skills. It was set up as a blueprint of implementation of life skills or measuring the life skills for children.
It grew from a knowledge network to a collaborative with a common mission- with common goals and strategies.
Systems thinking brings stakeholders together and prevents working in silos.
Collectivising has brought efficiencies and this led to cost reduction making the programme affordable for the masses.

Prabhakaran Veeraarasu, Climate Activist- Environmental Engineer, Poovulagin Nanbargal
Poovulagin Nanbargal is a collective of like-minded volunteers.
It's been successful for the last 25 years.
Known for their litigation work. Support activism through campaign and research.
Participate with the media, and engage with the youth.
Work with the government but also act against projects and policies that are anti-people, anti-environment.
Connect political parties with environmental issues
Engage mainly with political leaders - not with bureaucrats and diplomats.
Advocacy and campaign conducted on election manifesto - most of the political parties adopted the points in their own manifesto, including the ruling party (70%)

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INDIA CLEAN AIR COLLECTIVE DASHBOARD

Moderator - Ankita Jyoti
Presenting the ICAC dashboard followed by a panel discussion and brainstorming on how we can use the resource to its best potential.

Speakers
Ankit Bhargava, Co-Founder, Sensing Local
Pallavi Pant, Lead, Global Health program, Health Effects Institute
Paras Singh, Associate, India Climate Collaborative

Key Takeaways
To include into the dashboard:
10 Primers on major issues/ aspects of AQ,
A section for Parliamentary questions + Legal cases,
Map and depict what the government is doing,
A starter toolkit for new audiences,
Create use pathways for new engaged stakeholders,
A monthly newsletter could be considered.

THANK YOU