

Comments on the National Clean Air Programme

- SHIBANI GHOSH, Fellow, Centre for Policy Research (CPR); DR. NAVROZ K DUBASH, Senior Fellow, CPR; KANCHI KOHLI, Legal Research Director, CPR-Namati Environment Justice Program; MANJU MENON, Senior Fellow and Director, CPR-Namati Environment Justice Program; DR. PARTHA MUKHPADHYAY, Senior Fellow, CPR; MUKTA NAIK, Senior Researcher, CPR; DR. LAVANYA RAJAMANI, Professor, CPR; ARKAJA SINGH, Fellow, CPR; MANISH, Research Associate, CPR; ANKIT BHARDWAJ, Research Associate, CPR; PARTH BHATIA, Research Associate, CPR; and DISHA SHARMA, Consultant, CPR*

The National Clean Air Programme (NCAP) India released by the Ministry of Environment, Forest and Climate Change (MoEFCC) last month is the government's first action plan to address the national crisis of air pollution. Given the magnitude and urgency of this issue, the government's initiative to prepare an action plan with nation-wide applicability is timely. We welcome the government's acknowledgment that air pollution is not an urban-centric problem, and that it requires multi-scalar and cross-sectoral coordination across government institutions. We also support the move towards augmenting the air quality measurement and monitoring network.

However, an analysis of the NCAP reveals that the proposed actions do not adequately respond to the enormity and urgency of the challenge that air pollution poses to our country. Nor does it engage with the underlying causes that led to the failure of the current regulatory regime. It disproportionately focusses on only a part of the problem – lack of measurement and monitoring, but ignores a gamut of other problems: unregulated growth of pollution sources, non-compliance of existing standards, lack of enforcement actions against identified polluters, lack of inter-agency coordination and cooperation, etc.

Given the knowledge and data that we presently have on sources and impacts of air pollution, the government needs to move on war-footing, and the NCAP could potentially provide the necessary inflection point. But for it to succeed in any significant manner, it has to address the issue of air pollution in a much more comprehensive manner than it currently does. At the outset, we believe there is a need to acknowledge the following facts – we have limited institutional capacity, we do not have unlimited resources, and we are running out of time. In such a scenario, it is incumbent on the government to aggressively prioritise its actions and allocate resources based on criteria such as impact on air quality, health benefits, resource requirements, feasibility etc., and justify its policy decisions with cogent reasoning. We identify three major areas of concern which we believe require serious consideration before finalising the NCAP:

- I. Balancing the need for knowledge and data creation, with other, more immediate, measures for pollution abatement
- II. A focus on effective implementation of pollution prevention and mitigation measures

* These comments are drafted based on internal discussion at the Centre for Policy Research. They should not be considered an institutional position, as CPR does not take institutional positions on issues. Rather, they reflect the result of internal deliberations, aimed at understanding and reflecting on the NCAP, with the aim of constructive feedback to MoEFCC.

III. Strengthening the existing regulatory framework governing air quality

We elaborate on these areas below and look forward to constructively engaging with this process further.

I. Balancing the need for knowledge and data creation, with other, more immediate, measures for pollution abatement

Several measures proposed in the NCAP are focused on better measurement of emissions, inventorising emissions, data analysis, assessment and dissemination and certifying monitoring systems. All these measures, if implemented successfully, will certainly make the case for taking action more robust and provide direction for future policy making. However, based on the knowledge and data that we presently have, there is no doubt that a majority of Indians are exposed to severely hazardous quality of air. Even discounting for certain variations and biases in methodology, there is more than sufficient information to spur the government into immediate action. More data points and more accurate data is always welcome, but the NCAP appears to sequence actions in a way that prioritizes additional data collection, and completion of studies over taking concrete actions to ameliorate the situation as it exists now.

While studies are being finalised to decide future course of action, the problem at the ground-level will continue to aggravate. There are cities and regions in the country where the main sources of air pollution are easily identifiable. For instance, in certain critically polluted areas, power plants, industries, opencast mining, open fly ash dumping, brick kilns, etc. are significant polluters, and most are in clear violation of existing environmental standards. In such situations, the government needs to take immediate measures to stop or regulate these sources of pollution. But the NCAP does not touch on the need to intensify (or initiate) such regulatory measures.

Even accepting NCAP's focus on improved monitoring and measurement, its solution – creating a new institution that will be the certifying authority for instruments to be set up in two years' time – hardly reflects the urgency in ensuring that the data collected is accurate.

Furthermore, knowledge creation delinked from the policy and regulatory context is of limited use. Information must contribute to effective action. For instance, the NCAP lists 'Source Apportionment Studies' as a government initiative and refers to such studies being undertaken in six cities. It suggests that similar studies be commissioned in all 94 non-attainment cities in the next two years in a phased manner and allocates 100 crores for this exercise. Source apportionment studies could certainly be useful guides for policy making. But it is unclear how the six earlier studies, submitted in 2010-2011, were relied on, if at all, while designing or introducing targeted air pollution control measures in these six cities. While proposing such a massive roll-out of source apportionment studies, the NCAP should identify a clear pathway by which results from such studies can influence policy-making.

Recommendations:

- Adopt a *parallel approach*: augment capacity to measure and gather data, while simultaneously initiating (or intensifying) actions against known sources of pollution such as power plants, industries, opencast mining, open fly ash dumping, brick kilns, etc.
- Review how existing source apportionment studies have informed policy; and strategize on effective use of future studies.
- Facilitate effective public communication and outreach of important information relating to air pollutants, exposure and health impacts in accessible formats.

II. A focus on steps to ensure effective implementation of pollution prevention and mitigation measures

The NCAP proposes certain measures to reduce air pollution, but there is limited discussion on how the government will ensure that these measures will effectively reduce air pollution in the immediate future. For instance, an extensive plantation drive of plants with high pollutant absorbing capacity has been proposed to purify the air. On which land will this plantation drive take place and by whom? This proposal has been made without any reference to existing policies on forests and tree plantation, such as the government's policy on development of green corridors along National Highways, diversion of forest land under the Forest (Conservation) Act 1980, and the use of monies collected in lieu of compensatory afforestation. Similarly, while it identifies management of dust to be an important issue, the NCAP only proposes to formulate a notification to address the issue in the future.

The NCAP identifies coordination between relevant Central Ministries, State Governments and local bodies as its approach, but the action points do not illustrate how that may be achieved. There is a passing reference to committees that will be set-up, but no discussion on their mandate and how they will interface with the existing regulatory system. For instance, to comprehensively curb indoor air pollution, considerable coordination is required between various ministries and departments across different levels of government. But the NCAP proposes to address this critical problem through 'Guidelines and Protocols on indoor air pollution'.

There have been several government initiatives to address air pollution in the past (most are listed in the NCAP). Evidently these initiatives have either been unsuccessful or were insufficient to match the scale of air pollution experienced in India. These initiatives could therefore provide significant insights on what are the drivers for effective implementation, and what are the challenges. However, the NCAP does not analyse these initiatives either for their contribution to preventing, controlling or mitigating air pollution, or from the perspective of improving the regulatory system. For example:

1. The NCAP refers to the Central Pollution Control Board's 'forty-two action points' – a list of directions issued by the CPCB under the Air (Prevention and Control of Pollution) Act 1981 (the Air Act) to State Pollution Control Boards (SPCBs) in the National Capital Region in December 2015, which were then issued to SPCBs of states

with other non-attainment cities. Many of the actions points in the December 2015 directions were to be implemented ‘immediately’, or within 30 – 90 days period. Given the timelines indicated, many of the actions points should have either been implemented, or been in the process of implementation by now; each would have met with varying degree of success, but the NCAP does not examine the success rate of these action points. Many of these were impractical, unlikely to be implemented, or generally aspirational (e.g. ‘consider introducing plan for flexi/staggered timing to minimize peak movement of vehicles’ immediately, take steps for installation of remote sensor based PUC system in 90 days, promote battery operated vehicles in 90 days, setting up of bio-mass based power generation units in 1 year) – but the NCAP does not assess their feasibility.

2. As the NCAP mentions, continuous emissions monitoring systems (CEMS) are already mandated for seventeen highly polluting industries in the country. However, there is poor quality control of the CEMS data, and it is unclear how many enforcement actions have been initiated based on analysis of CEMS data.

The overall budget for the NCAP is estimated to be 637 crores, not including implementation of city-specific action plans (that will have to be borne by the States). This amount is nothing compared to what is actually required. For instance, of the 637 crores, 150 crores have been allocated towards capacity building of CPCB and SPCBs. The SPCBs are the frontline regulators for pollution control in the country and several studies have shown that they are in desperate need for capacity building. According to a 2010 estimate of the CPCB, Rs. 1145.4892 crores would be required for laboratories, computerization and infrastructure up-gradation in the SPCBs. Successful implementation of many of the measures proposed in the NCAP will depend on the CPCB and the SPCBs having the capacity to perform their functions effectively. In comparison, the Cabinet Committee on Economic Affairs sanctioned 1152.8 crores for 2018-2020 for one issue: to subsidize machinery for in-situ management of crop residue in three states. While this is an important component, the relative balance of budgetary allocation across issues and for the problem as a whole needs to be more reasoned and grounded in implementation needs.

The crisis of air pollution is not a problem *likely* to arise in the future; it is a reality that we are currently living in. The government has to initiate actions now and ensure that these are backed with sufficient regulatory and enforcement heft, so that they are implemented. Language such as ‘it is proposed to formulate’ (in context of dust management regulation) or ‘existing standards need to be strengthened periodically’ is aspirational. It needs to be replaced with strict targets and timetables that are designed keeping in mind the current institutional and resource constraints.

Recommendations:

- Review past actions, such as Source Apportionment Studies and mandatory installation of CEMS, based on their impacts as well as drivers for, and challenges in, implementation.

- Prioritise actions based on science, impacts on air quality, health benefits, resource requirements, feasibility etc. and adopt immediate actions with focus on effective implementation.
- Allocate realistic budgets to specific actions that are tied to strict targets and timelines that are designed keeping in mind the current institutional and resource constraints.

III. Strengthening the existing regulatory framework governing air quality

The Air Act has been in place for over three and half decades. The principal objective of this law is ‘the preservation of the quality of air and control of air pollution’, and to that end it empowers the government – both at the Central and State-level, as well as the Central and State Pollution Control Boards to take a variety of preventive, regulatory and mitigative measures. The law originally provided for only criminal prosecution, perceived as a strong tool for deterrence, but was later amended to give Boards additional enforcement powers. The Act also introduced an approval granting mechanism, which technically placed most significant sources of air pollutants within regulatory supervision. The Air Act is reinforced by other legal instruments such as the EIA Notification 2006, Waste Management Rules, fuel quality and vehicular engine norms, etc. Despite all this – we have deteriorated to the present state of air quality because the regulatory system has failed.

The NCAP continues to rely on this failed system, without adequate measures to fix it. There are many underlying causes for this failure: poor institutional capacity to perform regulatory tasks; poorly designed, outdated or lenient environmental standards; lax monitoring and enforcement allowing violations to go unchecked; lack of coordination across agencies and levels of government; prioritisation of other ‘development’ goals at the cost of the environment, etc. Each of these causes is complex, requires a concerted effort on part of several stakeholders to address, and may not lend itself to quick resolution. But as a necessary starting point, the government has to acknowledge them, and then start engaging with each of them. The three stated objectives of the NCAP do not reflect on these causes, instead the NCAP proposes ‘management plans’ as new regulatory tools.

The NCAP’s focus on augmenting the knowledge base, although welcome, begs two questions: who will act based on the superior quality data collected (as a result of these proposed measures), and what enforcement action will that actor take? Enforcement has always been a weak link in the chain, and unless that problem can be addressed, improved measurement of air quality will be useful, but only in a limited way. The multi-scalar and cross-sectoral approach that the NCAP appears to support needs to be reflected in specific prevention and mitigation strategies. Implementation capacity of various government actors, and not just the environment departments and environmental regulators, at the central, state, district and city-level has to be built to enable them to implement, and enforce, actions based on air quality data received. An issue like pollution from landfill sites and bio-mass burning cannot be addressed unless urban local bodies have the necessary capacity, while controlling pollution from power plants and industries requires cooperation between actors like the Ministry of Environment, Forest and Climate Change, Central Electricity Authority, Ministry of Power, Ministry of Coal and state-owned utilities.

One of the key factors contributing to poor enforcement of pollution control laws in the country is the inability of the SPCBs to comprehensively inspect all regulated entities and monitor their emissions effectively. The NCAP proposes a ‘three-tier system’ which appears to rely on ‘third party verifiers’ and ‘companies specialized in data analytics’ who will work in close coordination with the SPCBs. The proposed system is expected to have an ‘action trigger system’ that will have a predefined action based on the status of the data and will have minimal human interface. It appears from the skeletal description that the Ministry plans to outsource a part of the SPCBs’ basic statutory functions – i.e. to analyse data on compliance and take appropriate enforcement action in accordance with law. Apart from the fact that such actions may not be in consonance with current law (the Air Act), no justification has been provided for allowing third party intervention. Instead, the NCAP should initiate measures to strengthen SPCBs so as to resolve the problem of poor monitoring and inspection capacity internally, that would yield significant benefits for air quality regulation in the medium to long term.

The NCAP acknowledges air pollution to be a regional problem (for instance, the Indo-Gangetic plains are identified as particularly polluted). But it does not propose any action or measure that would address pollution at an air-shed level. Inter-state and inter-agency institutional mechanisms need to be set-up that will facilitate state governments and SPCBs of states in the same air-shed to act in a comprehensive and coordinated manner. These mechanisms cannot be mere recommendatory bodies but should enjoy sufficient regulatory powers.

Recommendations:

- Review environmental standards to ensure comprehensive coverage of all sources of pollution and types of pollutants, and make them stricter to improve air quality.
- Include clear recommendations on building implementation capacity across central, state, district and city-level agencies to tackle sources of air pollution.
- Focus on enhancing capacity in CPCB and SPCBs rather than outsourcing their responsibilities.
- Facilitate inter-state and inter-agency coordination for air quality management at air shed-level.