Shudh Vayu Sampark (SuVaS)

A Network of Institutions working in the field of Air Pollution

राष्ट्रीय राजधानी क्षेत्र और निकटवर्ती क्षेत्र
वायु गुणवत्ता प्रबंधन आयोग
Commission for Air Quality Management in
National Capital Region and
Adjoining Areas

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1.0 Provision under CAQM Act

As per sub-section 6 (c) (v) Section–12 of the CAQM Act, the Commission is "**to provide an effective framework and platform in the NCR and Adjoining areas for building a network between technical institutions working or researching in the field of air pollution".**

2.0 Background and Rationale

Air pollution is one of the biggest challenges that India, one of the fastest growing economies in the world, is facing today. According to studies, around seven million people worldwide die from air pollution every year, a large proportion of which is due to particulates matter pollution. In India, air pollution is worst in the Indo-Gangetic Plains, where New Delhi and many of the most polluted cities are located.

Due to the increase in air pollution-related health problems and the growing importance of environmental science studies, many research institutions, universities, NGOs, etc. have now concentrated their work and prioritized their research in this area. Many institutions are researching and working on the sources contributing to Air pollution (vehicle pollution, industrial pollution, dust pollution, crop-residue burning, biomass burning etc.) and towards its control and prevention.

It is important to facilitate the exchange of knowledge and ideas between such institutions, for a solution-based approach and to improve access to information and facts about the causes and control of air pollution. Therefore, it is important to have a network of such universities, research institutes, NGOs, etc., that can help in addressing the issue of air pollution in NCR and adjoining areas.

Also, CAQM formulated the NCR Air Pollution Control Policy after extensive consultation with all stakeholders, in addition to various Directions/ Advisories/

Orders. To further facilitate stakeholders in this direction, it is desirable to have a network of technical/ research institutions with the following objectives:

i. Identification and adoption of Innovative technologies for addressing air pollution in NCR and adjoining areas
ii. Identification and Optimum utilization of established air pollution control practices
iii. Building on the existing networks & platforms.
iv. Evolving a mechanism for involvement of community/ major stakeholders for various air pollution abatement measures.

3.0 Existing Networks engaged in Air pollution in India and need for SuVaS.

National Knowledge Network (NKN) is one such network, created with the aim of building technical capacity to create a large institutional support structure by connecting knowledge institutions across the country through a communication network to promote resource sharing and collaborative research.

While, NKN is envisaged to provide scientific & technical support for 131 non-attainment cities (cities exceeding National Ambient Air Quality Standards (NAAQS), consecutively for five years) across India in terms of air pollution, it is important to have a specific platform and network for addressing the grave issue of air pollution in the entire airshed National Capital Region and Adjoining areas owing to the magnitude of air pollution in the region, presence of various contributing sources, varying meteorological conditions, topography that together makes it a peculiar case.

Therefore, a dedicated network titled “Shudh Vayu Sampark (SuVaS)” has been constituted to address the issues of air pollution in National Capital Region and Adjoining Areas, owing to highly complex airshed scenario, having high level of pollution and serious health implications year on year. The network would serve as a platform for exchange of knowledge, innovation, ideas, information and solutions with regard to the Prevention and Control of Air Pollution in NCR & Adjoining areas.

The network will focus on collaborative paradigm to provide a solution-based approach in Delhi NCR. Shudh Vayu Sampark will facilitate the following:

i. Establishment of a network of knowledge institutions/NGOs (Scientific/ Technical/Research based), innovators working in the field of air pollution.
ii. Collaborative research, development, innovation and evaluation of air pollution control technologies to develop practical solutions to air pollution in Delhi NCR.
iii. Support to meet the policy objectives of CAQM and air quality management.
iv. Peer-to-Peer learning, assisting in developing solutions and mobilize expert resources.

4.0 Key sectors for the SuVaS to support CAQM policy initiatives.

- Strengthening of air quality monitoring, modelling and forecasting.
- Source apportionment and Emission Inventories.
- Abatement of air pollution from
  - Industrial pollution
  - Diesel Generator (DG) sets
  - Vehicles and the transport sector
  - Municipal solid waste burning
  - Construction and Demolition (C&D) activities
  - Crop residue burning
  - Dust from roads and open areas
  - Domestic/ Residential sources
  - Dispersed sources
- Abating air pollution through increase in green cover and inventorisation of suitable plant species for Delhi-NCR.

5.0 Institutionalising the SuVaS

5.1 Constitution of steering Committee: A Steering Committee has been constituted with the approval of Chairperson, CAQM vide Order No. 20014/01/2023-MERD-8785-8801 dated 19.07.2024 for overall implementation of SuVaS. Steering Group may comprise members from CAQM, Pollution Control Boards, reputed Academic/ Research Institutes etc. The network will work under the leadership of nominated Chairman and core Committee members.

The Steering Committee shall map and onboard various Academic/Research institutions etc. across different sectors and further constitute a core technical group, which would be a pool of renowned Academicians/Researchers/Innovators working in the field of Air pollution, with Expert nomination from such institutes. The SuVaS core technical group shall interact through workshops/ seminars/meetings etc. Steering Committee would decide the roles and working of the technical group, as required from time to time. Tentative list of stakeholder institutes working in the field of air pollution, that could be the part of Technical groups, is at **Annexure-I.**

5.2 Role of the Steering Committee for SuVaS:

i. Overall coordination of the activities under the network.
ii. Map and onboard institutes working on air pollution across different sectors.
iii. Conduct periodic review meetings to check the progress of the network, to solve the challenges faced by participating institutes, set agenda for the network.
iv. Arrange meetings/discussions of the Technical Group.
v. Evaluate the progress on various initiatives/field projects/pilots etc. taken up under the program.
vi. Communicate the outcome/results of the collaborative work of the SuVaS to the regulators/policy makers for suitable policy advices.

5.3 Key Activities

i) Organizing brainstorming sessions, conferences, workshops and seminars on identified issues/gaps in the various intervention areas/contributory sectors of air pollution and innovative technologies.

ii) Organizing educational visits for stakeholders for cross learning on air pollution management.

iii) Compilation of sector/industry specific best practices and expansion of successful initiatives/practices.

iv) Engaging communities through outreach programs, awareness campaigns and participatory activities.

6.0 Expected Outcomes

i. Providing access to state-of-the-art Technical/Scientific knowledge and tools for air pollution management in Delhi NCR and beyond.

ii. Science based /Technologies based solution to identified issues in various contributing sectors.

iii. Innovative ideas/solutions for abatement of Air pollution in NCR.

iv. Expert advice on policy based issues

Annexure-I

Indicative list of institutes working in the field of Air Pollution and Associated Sectors

1. Central Pollution Control Board (CPCB), Delhi
2. Delhi Pollution Control Committee, Delhi
3. Haryana State Pollution Control Board
4. Uttar Pradesh Pollution Control Board
5. Rajasthan State Pollution Control Board
6. Department of Environment, Govt. of NCT of Delhi
7. Directorate of Environment & Climate Change, Govt. of Haryana
8. Directorate of Environment and Climate Change, Govt. of Rajasthan
9. Environment, Forest and Climate Change Department, Govt. of Uttar Pradesh
10. Indian Institute of Technology Delhi, Delhi
11. The Energy & Resource Institute (TERI), Delhi
12. National Environmental Engineering Research Institute, Nagpur/ Delhi
13. India Meteorological Department (IMD), Delhi
14. CSIR-National Physical Laboratory (CSIR-NPL), Delhi
15. Indian Agriculture Research Institute (ICAR-IARI), Delhi
16. CSIR-Central Road Research Institute (CSIR-CRRI), Delhi
17. Delhi University
18. Delhi Technological University, Delhi
19. All India Institute of Medical Sciences, New Delhi
20. Indian Council of Medical Research, New Delhi
21. International Centre for Automotive Technology (ICAT), Gurugram, Haryana
22. IP University Delhi

23. Jawaharlal Nehru University (JNU) Delhi
24. JC Bose University, Faridabad
25. Maharishi Dayanand University (MDU) Rohtak
26. Amity University, Noida
27. SGT University, Gurugram
28. Guru Jambhesawar University of Science and Technology, Hisar
29. Indian Association of Air Pollution Control
30. Council on Energy, Environment and Water (CEEW), New Delhi
31. Indian Institute of Technology Kanpur
32. Indian Institute of Technology Bombay
33. Automotive Research Association of India (ARAI), Pune
34. Indian Institute of Tropical Meteorology (IITM), Pune
35. Indian Institute of Remote Sensing (IIRS), Dehradun
36. Indian Institute of Science and Education Research (IISER) Mohali
37. PGIMER Chandigarh
38. SASTRA University, Thanjavur
39. Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Bhopal
40. Air Pollution Action Group
41. Forest Research Institute, Dehradaun
42. Indian pollution Control Association
43. Urban Emission Info.
44. Central University of Rajasthan , Kishangarh
45. Punjab University, Chandigarh
46. Indian Institute of Technology, Hyderabad
47. Indian Institute of Technology, Kharagpur
48. Center for Development of Advanced Computing (CDAC), Pune
49. VIBHA (Vijnana Bharati)
50. School of Planning and Architecture (SPA), New Delhi
51. Pollution Control Research Institute, Haridwar
52. Earthwatch Institute, Delhi