



Reduction of Air Pollution in Three Indian Cities (Surat, Nagpur, Pune)



Background

Increasing air pollution is becoming a serious threat to human health and the environment in many Indian cities. In 124 Indian cities, air pollution levels have exceeded air quality standards continuously over the last five years and are therefore declared as non-attainment cities. The main sources of air pollution in Indian cities include vehicle exhaust, industrial and construction emissions, waste burning, crop residue burning and road dust.

The Indian government launched the National Clean Air Programme (NCAP) in January 2019 through its Ministry of Environment, Forest and Climate Change (MoEFCC) as a national level strategy to reduce in the identified 124 cities 20-30% of particular matter fine particles (PM_{2.5}) and coarse particles (PM₁₀) pollution concentration by 2024 as compared to 2017¹.

Aim of the cooperation

The aim is to strengthen the capacities of authorities in three selected Indian cities to ensure effective implementation of India's National Clean Air Programme. The implemented measures in this module support the initiatives of the Indian government and contribute to the UN Sustainable Development Goals on fostering good health and well-being (SDG 3), making cities and human settlements inclusive, safe, resilient and sustainable (SDG 11) and on taking urgent action to combat climate change and its impacts (SDG 13).

¹ National Clean Air Programme (NCAP). 2019. Central Pollution Control Board. Ministry of Environmental Forests and Climate Change, The Government of India



What we do

- **Portal for Regulation of Air pollution in Non-Attainment cities (PRANA²):** We support and develop a national portal for programme management and monitoring of the National Clean Air Programme for MoEFCC and the Central Pollution Control Board (CPCB), which helps the tracking of the physical as well as the financial status of preparation and implementation of the clean air action plans through a robust intranet and dashboards, besides disseminating up-to-date information to the public.
- **Methods and guidelines:** We support the development of methods, guidelines and reference documents for use by the authorities and stakeholders in dealing with air quality management.
 - **City Air Action Plans:** We support the review of the City Air Action Plans of the three selected cities (Surat, Nagpur, Pune) and suggest measures for improving the Action Plans to achieve the targeted air pollution reductions.
 - We develop a reference document on technologies and case examples for vehicle fitness certification.

² <https://prana.cpcb.gov.in/>

- We develop reference documents on technologies and case examples for brick kilns and for vehicle fitness certification
- **Environmental technologies for air pollution reduction:** We provide technically sound and financially viable solutions for:
 - Suitable sensors for air quality monitoring in cities and decision-support systems.
 - Urban traffic and transportation infrastructure, i.e., parking management, low emission zones etc.
 - Decentralised waste management solutions and implementation of pilot projects.
- **Awareness Raising and Capacity Development:** We undertake awareness programmes and promote the exchange of experiences among the three selected cities and replication of activities in other cities. We conduct training programmes to strengthen the capacity of government officials and other stakeholders. We document the lessons learned and identify potential for replication.
- **Foster International Cooperation:** We launch webinars to foster an exchange of experiences between India, Germany, and other GIZ-projects in Mexico and Vietnam around lessons learned in air quality management.

Key results

- Environmental technologies for selected sectors (waste, traffic and transportation, sensors for air quality measurements) and reference documents for planning air pollution control measures will be available for reduction of air pollution in the three selected Indian cities in support of the implementation of India's National Clean Air Programme.
- The Portal for Regulation of Air pollution in Non-Attainment cities (PRANA) has been developed to support tracking of physical as well as financial status of city air action plan implementation, and disseminate information on air quality management efforts under Government of India's National Clean Air Programme (NCAP).

Project partners

- Indian Ministry of Environment, Forest and Climate Change



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