Reduction of air pollution in three Indian cities

INDIA

Background

Increasing air pollution has become a serious threat to human health and the environment in many Indian cities. The exposure to air pollution leads to ailments such as strokes, heart diseases, lung cancer, chronic obstructive pulmonary diseases and respiratory infections, including pneumonia. The main sources of air pollution in Indian cities include vehicle exhaust, industrial and construction emissions, waste burning, crop residue burning and road dust. In 122 Indian cities, air pollution levels have exceeded air quality standards continuously over the last five years and are therefore declared as non-attainment cities[1].

There is a need for technically sound and feasible solutions related to emission inventories, air quality monitoring in Indian cities, control of emissions in relevant sectors, including transport, waste, industry, as well as on legal, regulatory and capacity building aspects. The Indian government has launched the National Clean Air Programme (NCAP) through its Ministry of Environment, Forest and Climate Change (MoEFCC) as a national level strategy to prepare clean air action plans in 122 cities to reduce 20-30% of particular matter fine particles (PM2.5) and coarse particles (PM10) pollution concentration by 2024 as compared to 2017 . The Climate Smart City Assessment Framework launched by the Ministry of Housing and Urban Affairs (Mo-HUA) is expected to be a guiding framework for Indian cities to become greener, more resilient and less vulnerable to the impacts of climate change. The assessment is a step for cities to adopt and implement best practices in five areas: energy and green buildings, urban planning, green cover and biodiversity, mobility and air quality, water management and waste management [1].

Aim of the cooperation

The aim is to strengthen the capacities of authorities in three selected cities to ensure the effective implementation of India's National Clear 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
2 National Institute of Urban Affairs (NIUA). 2019. Climate Smart Cities 2.0., https: www.niua.org/csc/index.html

Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

What we do

- **City Air Action Plans:** We support the implementation of City Air Action Plans to reduce air pollution.

- **Sound Technologies for Air Quality Monitoring:** We support the implementation of City Air Action Plans to reduce air pollution.
- **Sound Technologies for Air Quality Monitoring:** We identify and support the installation of suitable sensor-based air quality monitoring technologies.
- **Solutions for Vehicle Fitness Certification and Urban Infra-structure:** We develop and implement technically sound and financially viable solutions for vehicle fitness certification and urban traffic and transport infrastructure.
- **Solutions for Waste Management:** We identify suitable decentralised waste management solutions and implement pilot projects.
- **Modernisation of the Brick Kiln Industry:** We identify appropriate solutions for the modernisation of the brick kiln industry.

- **Awareness Raising:** We raise awareness and promote the exchange of experiences among the three selected cities and replication of activities in other cities.
- **Capacity Development:** We conduct trainings to strengthen the capacity of government officials and other stakeholders.
- **Knowledge Management:** We launch webinars to foster an exchange of experiences among India, Germany, and other GIZ-projects in Mexico and Vietnam on lessons learned in air quality management. Furthermore, the webinars strengthen the collaboration with various international organisations that support NCAP activities in different cities in India.
- **Knowledge Management:** We document the lessons learned and identify potential for replication.

Key results

- A concept for implementing the national air pollution control programme will be available in three cities for selected sectors (transport, waste management and brickworks).

Project partners

- Ministry of Environment, Forest and Climate Change
- Ministry of Housing and Urban Affairs