

PRESS RELEASE

Title 1: Air without borders: Think tank recommends regional-scale air quality management for IGP and southern states

Title 2: Study proposes CAQM-like body for southern states

For Immediate Release

Key highlights (Governance Framework for Airshed-Level Air Quality Management in South India)

- Pollution originating from the South Indian states is the lowest in Telangana (38%), followed by Andhra Pradesh (44%) and Karnataka (47%), whereas Kerala (65%) has the highest, followed by Tamil Nadu (61%).
- Tamil Nadu and Andhra Pradesh are net contributors, exporting more to neighbouring states than they receive.
- Kerala and Telangana are net receivers, receiving more pollution than they export.
- Karnataka receives and exports moderate amounts of pollution owing to its central location within South India.

Key highlights (Beyond State Boundaries: Quantifying Interstate Air Pollution Transport and Sectoral Solutions in the Indo-Gangetic Plain)

- About one-third of PM_{2.5} pollution in the National Capital Region originates from other states in the Indo-Gangetic plain (IGP).
- Local emissions in the IGP are driven primarily by residential activities, followed by industry, agriculture, and transport.

Bengaluru, 19 August 2026: Air pollution episodes are not confined to administrative boundaries. The National Clean Air Programme (NCAP), driven by city-centric initiatives, insufficiently addresses the regional nature of the problem. Tackling air pollution efficiently requires an airshed-based framework that enables coordinated action across multiple jurisdictions, as envisaged through institutions such as the Commission for Air Quality Management in the National Capital Region and Adjoining Areas (CAQM). This finding stems from the studies conducted by the Center for Study of Science, Technology and Policy (CSTEP), a research-based think tank. The studies were released at the India Clean Air Summit (ICAS) 2026—with the theme ‘Air Without Borders: Scaling Air Quality Action Across Cities, States, and Regions’—in Bengaluru on Wednesday.

The study titled ‘Governance Framework for Airshed-Level Air Quality Management in South India’ quantifies the contribution of the five South Indian states to each other's pollution levels. As per the Central Pollution Control Board (CPCB) data, major urban regions in South India exceed the recommended annual

average particulate matter (PM_{10}). Recognising this, NCAP classifies 25 cities in South India as non-attainment cities (cities that fail to meet the official national ambient air quality standards for PM).

The study found that 38%–65% of the annual average pollution in each of these states originates locally from South Indian states. Pollution originating from the South Indian states is the lowest in Telangana (38%), followed by Andhra Pradesh (44%) and Karnataka (47%), whereas Kerala (65%) has the highest local pollution, followed by Tamil Nadu (61%).

Unlike the Indo-Gangetic plain (IGP), state contributions to air pollution in South India vary with prevailing meteorological conditions and geography. As per the study, Tamil Nadu and Andhra Pradesh are net contributors, exporting more pollution to neighbouring states than they receive. On the other hand, Kerala and Telangana are net receivers, receiving more pollution than they export, whereas Karnataka both receives and exports moderate amounts of pollution owing to its central location within the region.

Domestic, industrial, and open burning sources are the three largest local sources of pollution across all five states. Domestic, energy, and industrial sources are the three largest sources of transported $PM_{2.5}$. Unlike the Delhi airshed (a geographic region where air flows freely and shares common weather and pollution patterns), South India has no pollution hotspot.

For better air quality management in South India, the study proposes the establishment of a body similar to the CAQM. It also sets out a phased pathway for the five states to work together, incorporating a shared inventory, monitoring, and financing arrangements.

The study recommends an approved fuel framework, which none of the five states has yet notified. It also seeks uniform targets for electric vehicle adoption and phasing of older vehicles. The funds under NCAP and state action plans can be utilised for implementing these measures, as per the study.

The other report titled 'Beyond State Boundaries: Quantifying Interstate Air Pollution Transport and Sectoral Solutions in the Indo-Gangetic Plain' identifies the major sources of air pollution across the IGP, the regions from which they originate, and measures to manage air quality at a regional scale.

The study observes that local sources account for approximately 28% of the total $PM_{2.5}$ emissions in the National Capital Region (NCR), driven primarily by residential activities, followed by industry, agriculture, and transport. About one-third each of $PM_{2.5}$ pollution in the NCR originates from other states in the IGP and the neighbouring countries.

The analysis shows that standalone state- or sector-specific interventions yield limited gains. In contrast, combined reductions across residential, industrial, energy, transport, and agricultural waste-burning sources deliver substantially

higher annual and seasonal benefits, underscoring the need for a common framework aligned with state-level action.

The recommendations include developing a periodically updated, high-resolution national emission inventory with a city-level layer, integrating crop residue management monitoring with real-time satellite-based fire detection, adopting a common approved clean fuel list across the IGP, and expanding continuous emission monitoring system coverage to include medium-scale industries.

Read the full report 'Governance Framework for Airshed-Level Air Quality Management in South India' [here](#).

Read the full report 'Beyond State Boundaries: Quantifying Interstate Air Pollution Transport and Sectoral Solutions in the Indo-Gangetic Plain' [here](#).

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About CSTEP: The Center for Study of Science, Technology and Policy ([CSTEP](#)) is a science and technology-based think tank with a mission to enrich policymaking using innovative approaches for a sustainable, secure, and inclusive society. Our interdisciplinary research cuts across energy, air quality, climate, development, and technology. CSTEP provides policy recommendations to governments, industries, and not-for-profit organisations for informed decision-making. We actively participate in government committees and collaborate with national and international research institutions to create a comprehensive understanding of policy challenges and solutions for India's sustainable development.

About Air Quality Sector: The Air Quality Sector at CSTEP supports government bodies in science-based air quality management at the city, state, and regional levels. We apply a wide range of advanced measurement and modelling tools to inform air pollution mitigation strategies.

About ICAS: The India Clean Air Summit (ICAS) is CSTEP's flagship event on improving air quality in India. Every year, ICAS brings together researchers, policymakers, practitioners, and academics from across the globe to discuss the air we breathe.