

CEPI Index

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Recently, researchers at Centre for Science and Environment (CSE) analysed the 2018 Comprehensive Environmental Pollution Index (CEPI) air assessment score that depicts the air quality in industrial regions.

Key findings

- As per the analysis of CSE, Uttar Pradesh and Maharashtra had the greatest number of 'critically polluted' industrial regions in India
- CSE researchers have found out that as many as 13 industrial areas in UP, seven in Maharashtra, eight in Gujarat and five in Rajasthan were still critically / severely polluted with respect to the 2009 air quality levels in these regions.
- Mathura, Bulandshahr, Firozabad, Moradabad in Uttar Pradesh; Chandrapur and Tarapur in Maharashtra; Vadodara and Ankleshwar in Gujarat; Jodhpur and Bhiwadi in Rajasthan were found to be the top critically polluted regions with a high CEPI air score.

States with a considerable number of critically / severely polluted air quality regions

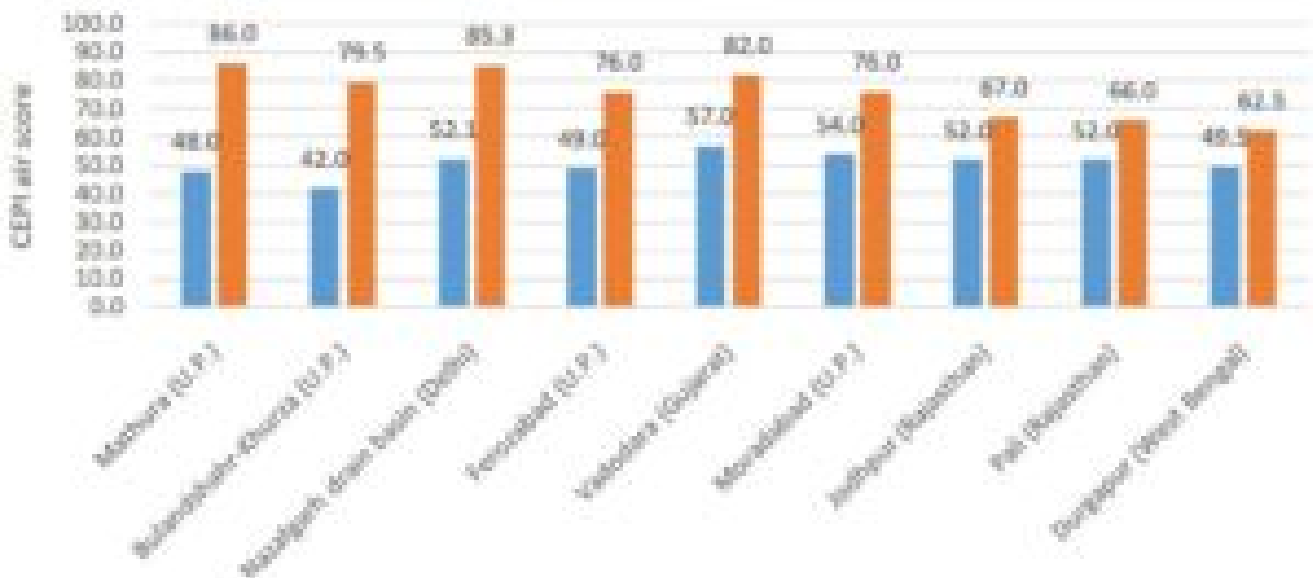
A CEPI air score of 60 and above denotes an industrial area to be 'critically polluted' and a score between 50-60 classifies it to be 'severely polluted'.

State	Number of industrial clusters identified as critically / severely polluted	Critically polluted (air quality)	Severely polluted (air quality)
		CEPI 2018 (air) score ≥ 60	CEPI 2018 (air) score: between 50-60
Uttar Pradesh	13	Mathura, Bulandshahr-Khurja, Ferozabad, Moradabad, Gajraula, Varanasi-Mirzapur, Kanpur, Agra	Noida, Ghaziabad, Aligarh, Meerut, Haridwar
Gujarat	8	Vadodara, Ankleshwar, Vapi, Bhavnagar	Vatva, Ahmedabad, Rajkot, Morbi
Maharashtra	7	Chandrapur, Tarapur, Dombivalli, Nashik, Navi-Mumbai, Chembur, Pimpri-Chinchwad	–
Rajasthan	5	Jodhpur, Bhiwadi, Pali, Sanganer Industrial Area, Jaipur	–
West Bengal	4	Howrah, Durgapur	Bandel, Asansol
Haryana	3	Gurugram, Panipat	Faridabad
Jharkhand	5	Hazaribagh	Saraikela, Ramgarh, Singhbhum-Wet, Bada Jamtara

Top regions with worsening air quality: A comparison of 2009 and 2018 CEPI air score

- **CSE also compared the latest 2018 assessment scores for air with the 2009 scores. They have found out that from the 2009 levels,** air quality had worsened in several industrial clusters.
- The majority of these industrial regions belong to Uttar Pradesh.
- A drastic increase in CEPI air scores was observed in Mathura, Bulandshahr, Moradabad and Firozabad in Uttar Pradesh, Najafgarh drain basin in Delhi comprising of Anand-Parvat, Naraina, Okhla and Wazirpur areas, Vadodara in Gujarat, Jodhpur and Pali in Rajasthan and Durgapur in West Bengal.

CEPI (air quality) assessment 2009 versus 2018



About CEPI Index

- It is a nationwide index that was developed to represent the quality of ambient air, surface water, groundwater and soil of a particular industrial region or cluster with a score.
- **Calculation of score:** The CEPI score was calculated based on the individual score assessment for air pollution, surface water pollution, groundwater and soil pollution in the identified cluster.
- **Classification of regions:** The regions were ranked as

'critically polluted area', 'severely polluted area' and 'other polluted areas', depending upon the CEPI scores of each of these industrial areas.

- A CEPI air score of 60 and above denotes an industrial area to be 'critically polluted' and a score between 50-60 classifies it to be 'severely polluted' with respect to air quality.
- **Previous assessment:** CEPI assessment was first carried out by CPCB in 2009-10 and has been done periodically since then in 2011, 2013 and 2018.
- **The aim of CEPI assessment** was to identify, declare and prioritize critically polluted and severely polluted regions in order to formulate comprehensive remedial action plans for pollution abatement in identified regions.
- The CEPI assessment reflects the current environmental quality of the region and also serves as a yardstick to assess the implementation of action plans.

The concept of Comprehensive Environmental Pollution Index (CEPI)

- It was evolved by Central Pollution Control Board (CPCB) during 2009-10 as a tool for comprehensive environmental assessment of prominent industrial clusters and formulation of remedial Action Plans for the identified critically polluted areas.
- CPCB has done a nation wide environmental assessment of Industrial Clusters based on CEPI and 43 such industrial clusters having CEPI greater than 70, on a scale of 0 to 100, has been identified as critically polluted.
- The data refers to the Comprehensive Environmental Pollution Index (CEPI) scores of the critically polluted industrial clusters/areas. The index captures the various dimensions of environment including air, water and land.
- CEPI which is a rational number to characterize the

environmental quality at a given location following the algorithm of source, pathway and receptor have been developed