Review of: "[Commentary] India’s steps towards carbon dioxide monitoring in public assembly spaces for ventilation measurement for airborne infection control and other factors"

Manikanda Bharath K

Potential competing interests: No potential competing interests to declare.

India has already started to monitor carbon and green gas emissions. There are more than 230 monitoring stations in the Expression of Interest pilot research project in various domains like urban and rural environmental samples such as air, soil, and water. Satellite and ground-based integrated approaches to spatial carbon stock and the carbon potential of different land uses There is a growing ambition across many cities to mitigate their greenhouse gas emissions, due to carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and fluorinated gases. Since the majority of anthropogenic emissions originate in urban areas, this is a key component of national and international mitigation efforts. Currently, cities rely on inventory-based methods to evaluate their emissions, typically estimating total city-wide CO2 emissions for each source sector on an annual basis.

Satellites produce high-resolution global observations of the Earth’s surface and atmosphere that provide information about greenhouse gas emissions. In particular, satellites are used to measure atmospheric concentrations of carbon dioxide and methane. Satellite observations of the Earth’s surface provide data on land cover, fires, human population and infrastructure, and the biomass and biological activity of vegetation. These data are used to quantify greenhouse gas emissions from land use change and biomass burning, estimate the spatial distribution of fossil fuel combustion, and determine flows of greenhouse gases from terrestrial and marine ecosystems.

Manikanda Bharath K