Pre proposal round: Submission of 'New Idea'

Air Quality Index of Major Cities of India

Vision: Information related to the Air Quality Index of Major Cities in India is available in datasets and with Pollution Control Boards. It can help in reducing air pollution.

Mission: To make information available on Air Quality of major Indian Cities through different communication channels.

Background: With the emergence of industrial units in urban cities, more and more people are migrating for jobs and therefore it is increasing the number of vehicles on roads. Road Transport has added significant quantities of Green House Gases (GHGs) to the environment. The Quality of Air is deteriorating with the increased emission of gases like carbon-dioxide, nitrous oxide, sulphur-dioxide and Respirable suspended particulate matter (RSPM). In some cities the quality of air is highly toxic which, in turn is proving to be a major challenge to the environment and the health of people.

Solution: In last few years, the Indian Government has taken various measures in response to the United Nations Framework Convention on Climate Change (UNFCCC). 'National Action Plan on Climate Change' and 'Low Carbon Strategies for Inclusive Growth' have been initiated. The data-set provided by the Planning Commission on Carbon Dioxide Emissions from various Transport Modes in India can be used to build a GIS based map of Air Quality Index of cities. The data available with Indian Meteorological Department and Pollution Control Boards can be linked with the application to identify the areas in a city with higher concentration of GHGs. Once the areas with higher concentration of GHGs are identified, measures to control emissions can be taken. The data on the map should be searchable through a user-friendly interface by locating on map or by using the name of place or by using the pin-code. It should also be available through a single website/ URL and mobile app across the country. The user-interface linked to the data should be available on the World Wide Web (internet) and SMS facility and applications (apps) for mobile phones.

Potential uses: The application can be used by local administration for improving the Air Quality by taking measures like renewable energy installations, enhancing afforestation, limiting entry of commercial vehicles, limiting set up of more industrial units. The environmentalists can use it for conducting various studies. Rearchers can use it for calculating carbon footprints. The system can immensely support the initiatives taken by Indian Government for improving the National emission limits, carbon emission limits. It can also help in following the Clean Development Mechanism (CDM), provided under Article 12 of the Kyoto Protocol.

Bottlenecks: The dataset provides details on carbon-dioxide emissions only. It does not provide information for any specific place. The information with some Pollution Control Boards does not get updated on a daily basis.

Dataset: http://www.data.gov.in/dataset/carbon-dioxide-emissions-various-transport-modes-india

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Reference Urls:

http://www.imd.gov.in/section/nhac/dynamic/emrc/air_quality.htm **(air quality index of Delhi)**

http://mpcb.gov.in/envtdata/envtair.php (**Ambient Air Quality Monitoring Network in Maharashtra)**

http://www.tnpcb.gov.in/ambient_airquality.htm (**Ambient Air Quality Data of Chennai)**

http://planningcommission.nic.in/reports/genrep/Inter_Exp.pdf **(Interim Report of the Expert Group on Low Carbon Strategies for Inclusive Growth)**

http://pmindia.nic.in/climate_change_english.pdf **(National Action Plan on Climate Change)**

http://cpcb.nic.in/Trends.php **(Trends in annual average concentration of SO2, NO2, RSPM for residential areas of 16 cities)**

http://www.wbpcb.gov.in/html/airquality.php **(West Bengal Control Board Daily Ambient Air Quality Information Page)**

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