



# ENVIS-IITM NEWSLETTER

Indian Institute of Tropical Meteorology, Pune  
**Atmospheric Pollution & Climate Change**

(The project of Ministry of Environment, Forest & Climate Change, Govt. of India)



## School Flag Awareness Program on Air Quality - 2019

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### Editorial

Indian cities have some of the most polluted air in the world, according to most global air quality databases. A majority of cities, including both mega cities as well as smaller cities are emerging as pollution hotspots with common citizens facing severe health impacts. It is clear that public participation plays a key role in the successful implementation of air quality interventions. For this, it is necessary to get a sense of the priorities and current levels of awareness so that public engagement efforts can be better defined and implemented. Indian Institute of Tropical Meteorology, Pune has taken noble initiative to achieve this goal through SAFAR (System of Air Quality & weather forecasting and research) a flagship project & ENVIS (Environmental Information System). They have been working to enrich the citizens therefore they have covered most of the PMC and PCMC schools of Pune, so children who are the future of our nation will actively participate and spread awareness being a part of this School Flag Awareness Program on Air Quality. This program is a step taken towards mitigates air pollution and spreading awareness among people about day-to-day air quality and its effects along with health advisory. The quarterly newsletter will give a brief account of the ongoing School Flag Awareness Program on Air Quality at IITM, Pune.

- Dr. Gufran Beig

## 1. Air Pollution Scenario in Metro Cities of India

Air pollution is a major public health risk in cities across the world. It is one of the highest ranking environmental health challenges in the world. In recent years metropolitan cities of India are expanding with rapid growth in all sectors of life. As a result of rapid development these metropolitan cities are critically getting affected by air pollution, this problem of air pollution is directly related to human health and even damages crop yield and ecosystem. Pune is one of the second largest and fastest growing city in the Indian state of Maharashtra, after Mumbai. It is the ninth most populous city in the country with an estimated population of 3.13 million.



### Vehicular Emission in Pune City

The rapidly expanding city also has the highest number of two-wheelers in the country (estimated at 24 lakh) besides 10-14 lakh four-wheelers and other vehicles. “Vehicular emission and illicit burning of trash pose a major threat to the air quality. While Pune’s air quality index, especially during monsoon, is ‘good’ as the rains wash away pollutants, it is the winter season which is proving to be most devastating to the city’s inhabitants as the pollutants remain stuck in the lower atmosphere.” More than two lakh vehicles added on the city’s road each year and the city being projected as an ‘automotive’ hub, the air quality is bound to progressively deteriorate, For that reason it’s a urgent need to enhance awareness among people that air pollutants do not merely affect the eyes and lungs, but that certain pollutants move insidiously inside the body causing extensive damage to vital organs.”

## 2. Need of School Flag Awareness Program on Air Quality

In an effort to protect local communities from rising air Pollution level, SAFAR (System of Air Quality & Weather Forecasting and Research) a flagship project by Indian Institute of Tropical Meteorology, Pune has been working to enrich the citizens since 2010 towards Air Pollution information and its forecast for 1-3 days in advance, it provides air pollution information in terms of Air Quality Index with 6 different colors representing good to worst in terms which are easy to understand for all different age groups of people and ENVIS (Environmental Information System) program has been working towards spreading Air Pollution awareness. As it is said “half of the solution of any problem is understanding the problem itself by creating awareness.”



### School Flag Awareness Program on Air Quality

Children are the future pillars of our nation. Realizing the need for better future, we need to inculcate the feeling of belongingness towards nature and address the effect of air pollution the youth of our country needs to be educated about causes, effects, and quality of air we all are breathing in our day to day life. For spreading awareness to young minds SAFAR and ENVIS initiated School Flag Awareness Program on Air Quality in collaboration with PMC & PCMC. To connect AQI with Human Health, a new initiative called SAHAS (SAFAR Air Health Alert System) under SAFAR which has more close proximity with Society, initiated **SAFAR School Flag Awareness Program** to support schools to enhance awareness about air pollution, Health , advisory, precautions and actions to minimize adverse impact of air pollution on our health. In SAHAS , PMC PCMC NRDC IIPHG CEE & many educational and scientific organizations are joining hands & making it a joint project.

Under this program colored flags corresponding to Air quality index levels for each day will be hosted in school during morning assembly, and will kept for whole day , along with this Health advisory for the day will be displayed on their notice boards so that the children are reminded of the present air quality in Pune. SAFAR and ENVIS aims to covers more than 1000 schools and junior colleges and around 1 lakh students to spread mass awareness about Air quality of our city.

### 3. Implementation of Flagship Program in PMC & PCMC Schools, Pune

As part of Swachhata Pakhwada, IITM, Pune has announced a comprehensive school flag awareness programme on air quality for Pune city under SAFAR project to educate and protect students about the adverse health impacts of air pollution. This program is focuses to clean the air and has been launched by Honorable Mayor of Pune city Smt. Mukta Tilak, based HHCP High School and Junior College, Huzurpaga, Pune on 9th July 2019. Similarly, On 7th September,2019 SAFAR-School Flag Awareness Program on air quality for PCMC city is launched by Honorable Mayor of Pimpri-Chinchwad Mr. Rahul Jadhav, in a glittering function organized at SNBP School & Junior College, Pimpri in presence of Municipal commissioner, Mr. Hardikar, SAFAR-Project Director, Prof. Gufran Beig, Additions Commissioner, Mr. Patil among others.









**Launch of School Flag Awareness Program on Air Quality at Huzurpaga School, PMC, Pune**



## Launch of School Flag Awareness Program on Air Quality at SNBP School, PCMC, Pune

This new SAFAR initiative is a joint venture of IITM and PMC in collaboration with IIPHG, NRDC, CEE and CRF. This program is an ACTION based Early Warning System Translating Integrated Air Quality, Weather and Health Information into Advisory and ALERTS for ACTION on the ground. It will help schools to create awareness about air quality, advisory, precautions, alerts and actions to minimize adverse impact of air pollution.

AQI	Remark	Color Code	Possible Health Impacts
0-50	Good		Minimal impact
51-100	Satisfactory		Minor breathing discomfort to sensitive people
101-200	Moderate		Breathing discomfort to the people with lungs, asthma and heart diseases
201-300	Poor		Breathing discomfort to most people on prolonged exposure
301-400	Very Poor		Respiratory illness on prolonged exposure
401-500	Severe		Affects healthy people and seriously impacts those with existing diseases

### AQI (Air Quality Index) Guide

All PMC & PCMC schools as well as those schools who register for this program will get Air Quality information (Today and Tomorrow levels) with color code, advisory and

precautions through coordinators(CEE and PMC education and environment departments)every day. Those schools who will register will keep 6 colors of Flags representing 6 categories of Air Quality Index (AQI) which are GOOD, SATISFACTORY, MODERATE, POOR, VERY POOR, and SEVERE. School principal should ensure to announce TODAY and TOMORROW's AQI and raise related color Flag after morning assembly and display that color Flag at school. This initiative of SAFAR awareness drive by educating public, Medicos and Executives, prompting self-mitigation and to pave the path to develop mitigation strategies. The new initiative will help students to decide on which time of day the outdoor activities should be avoided. This initiative will make Pune city a leader in protecting public health.

The awareness about the SAFAR-Mobile-App (SAFAR-AIR) which is now available in voice enabled Marathi language also will be demonstrated to students to take maximum benefit of air quality information available in your locality.

#### **4. Outcomes of the Program**

1. Timely information can be a powerful tool to mitigate harmful effects of air pollution. SAFAR School Flag Awareness Program has provided a platform to reaches the different age groups of people for spreading awareness about air quality condition on day-to-day basis.

2. School Flag Awareness Program on Air Quality educates the school community about outdoor air quality and the associated potential health risks. Air quality varies daily based on environmental conditions. Implementing this action can help the school community stay attuned to outdoor air quality conditions and respond accordingly to unhealthy air quality days.

3. The School Flag Awareness Program on Air Quality is an outdoor air quality program designed to promote awareness of outdoor air quality and help schools take actions to protect students' health. The program gives directions to schools to raise a flag each day that corresponds to how clean or polluted the air is.

4. Pollutants like particulate matter and ozone can damage the lungs of children who work or play outside. Ground-level ozone can cause breathing difficulty and coughing, and it can aggravate existing lung conditions such as asthma. Particle pollution, which consists of a mixture of solid and liquid particles, can get deep into the lungs and cause coughing, wheezing, reduced lung function, and asthma attacks. Therefore, knowing which days may be dangerous to a child's respiratory health is an important step in planning alternate outdoor activities or sometimes moving indoors to mitigate the effects of poor outdoor air quality.

5.The implementation of this program is also a great opportunity to integrate lessons on air quality into classroom instruction.



## How to Register

Schools should register for AQI Flag Awareness Program at –

Environment Officer, Corporation, Pune; E-mail: [indradhanushya@punecorporation.org](mailto:indradhanushya@punecorporation.org)

Or Program Officer, CEE, Pune; E-mail: [ceegreenschools@ceeindia.org](mailto:ceegreenschools@ceeindia.org); Ph: 9284196615

Or SAFAR Secretariat, E-mail: [safar@tropmet.res.in](mailto:safar@tropmet.res.in); Ph: 020-25904451

**For Online Registration: <http://safar.tropmet.res.in/sahas-pune>**

All queries and feedback regarding this newsletter should be addressed to:

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