

SAFAR-India (MUMBAI)

Indian Institute of Tropical Meteorology, Pune
Ministry of Earth Sciences

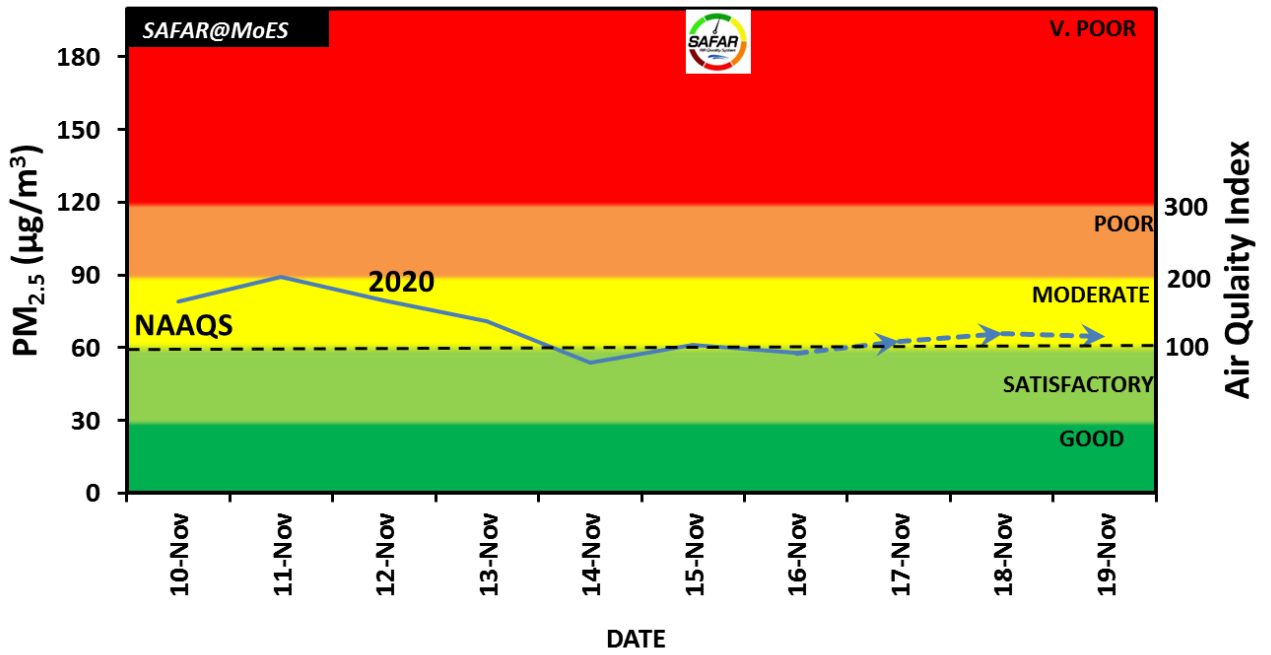
SAFAR Air Quality Report for Diwali-2020 FINAL REPORT (Issued on 16th November' 2020)

The year 2020 was one of the best during Diwali period for AQI in past 3 years. The AQI on Diwali day (14th Nov) in MUMBAI was in satisfactory category and it has just slipped to only MODERATE category, a day after Diwali 2020 period (15th Nov). This AQI level is less than the forecast made with 50% of averaged firecracker emissions of past years (Diwali-2016-2018 emissions). However, it is found to be close to 0% firecracker emission scenario. This tends to suggest that there was negligible impact of local additional fire emissions, if any. The sudden change in the weather conditions (winds from ocean side and relatively faster speed) and probably the negligible firecracker emissions in Mumbai region worked positively to keep air quality in check. This was one of the **best AQI** on post Diwali day in past 3 years if 2019 cyclone rainy year is excluded. The AQI as on 16th Nov further improved and slipped to Satisfactory category.

1. On Post Diwali day (15th Nov) the AQI level was unexpectedly in MODERATE category with PM2.5 concentration touching just 62 $\mu\text{g}/\text{m}^3$.
2. The AQI as on 16th Nov further improved and slipped to Satisfactory category.
3. In Mumbai the highest levels of PM2.5 was recorded between 11 pm to 4am on the night of 14-15 Nov.

| Diwali Period - 2020 | | | | | |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| DATE | 15 th Nov | 16 th Nov | 17 th Nov | 18 th Nov | 19 th Nov |
| PM 2.5 concentration($\mu\text{g}/\text{m}^3$) | 62 | 58 | 63 | 66 | 65 |
| AIR QUALITY INDEX (AQI) | 103 | 97 | 110 | 120 | 117 |

AIR QUALITY - MUMBAI



Mumbai PM_{2.5} Diwali Comparison (2017-2020)

