Press Release

Official Data Misses Over 90% of Large Farm Fires as Farmers Shift Burning Timings; Burnt Area Down by 25–35% in Punjab and Haryana, reveals iFOREST's Stubble Burning Status Report 2025

New Delhi, December 8, 2025: A new report released today by the International Forum for Environment, Sustainability and Technology (iFOREST) reveals a critical blind spot in India's efforts to curb stubble burning. The *Stubble Burning Status Report 2025* shows that while official government data suggests a dramatic 90% decline in farm fires in Punjab and Haryana, this reduction is largely a result of limitations in the current monitoring system run by the Consortium for Research on Agroecosystem Monitoring and Modeling from Space (CREAMS) of the Indian Agricultural Research Institute (IARI).

The report presents India's first-ever multi-satellite, multi-sensor assessment, combining MODIS (Terra and Aqua satellites), VIIRS (Suomi-NPP satellite), Sentinel-2 Multispectral Instrument (MSI) burnt-area mapping, and 15-minute geostationary observations from the Spinning Enhanced Visible and Infrared Imager (SEVIRI) on Meteosat 8 and 9.

Released at a national webinar today, the report demonstrates that the CREAMS monitoring protocol—based primarily on polar-orbiting satellites (MODIS/VIIRS) that pass over India between 10:30 AM and 1:30 PM—misses the majority of large farm fires, which now occur later in the afternoon and evening.

Using SEVIRI's high-frequency observations, iFOREST found:

- In Punjab, over 90% of large fires in 2024 and 2025 occurred **after 3:00 PM**, compared to just 3% in 2021.
- In Haryana, most large fires have occurred **after 3:00 PM** since 2019, meaning undercounting has persisted for years.

The report warns that such data gaps are weakening the evidence base for air-quality policymaking.

Speaking at the webinar, Chandra Bhushan, CEO, iFOREST, said, "Our analysis provides incontrovertible evidence that India's current stubble-burning monitoring system is structurally misaligned with ground realities. Farmers have shifted burning to the late afternoon, while our monitoring relies on satellites that capture active fires only during a narrow time window—10:30 AM to 1:30 PM. The result is a massive underestimation of fires, emissions, and their contribution to air pollution in Delhi. We urgently need to overhaul the system."

At the same time, iFOREST's burnt-area analysis shows genuine progress in reducing stubble burning in Punjab and Haryana. Burnt-area mapping by Sentinel-2 satellite reveals:

- Punjab: Burnt area during the Kharif season has reduced from a peak of 31,447 km² in 2022 to about 20,000 km² in 2025—a 37% reduction.
- Haryana: Burnt area has declined from a peak of 11,633 km² in 2019 to 8,812 km² in 2025—a 25% reduction, although without a consistent downward trend.

Commenting on these findings, Bhushan added, "Burnt area provides a more reliable picture of stubble burning. Our analysis shows that Punjab and Haryana have reduced burnt area by 25–35%, which is good news and indicates that in-situ and ex-situ stubble-management practices are being adopted. But this is not the time to become complacent. Even in 2025, close to 30,000 km² of paddy fields were burnt in Punjab and Haryana, making them a major source of airquality degradation in Delhi-NCR and the wider Indo-Gangetic region."

The report calls for immediate corrective measures:

- **Revised Monitoring Protocols:** CREAMS should begin publishing burnt-area data, not just active fire counts, to provide an accurate national picture.
- Updated Air-Quality Forecasting Models: The Decision Support System (DSS) used by the Indian Institute of Tropical Meteorology (IITM) for Delhi's air-quality management must revise its methodology to correctly quantify the contribution of stubble burning.

On the policy road ahead, Ishaan Kochhar, Programme Lead, iFOREST stressed, "We cannot manage what we do not measure accurately. Policy decisions are currently being shaped by incomplete information. To solve the stubble-burning problem in the Indo-Gangetic Plain, the government must urgently reform the monitoring protocol to integrate burnt-area mapping and geostationary data. We also need to expand our focus beyond Punjab and Haryana to emerging hotspots in Uttar Pradesh and Madhya Pradesh."

For **media queries** contact:

Shriya Mohan

Communications Lead, iFOREST

+91 7042144726 | shriya@iforest.global