

HTAPC Newsletter

Issue 17, June 2025



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Accomplished Activities of Hub of Talents on Air Pollution and Climate (HTAPC)

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Consultative Meetings on “Psychiatric Patient Care and Referral System” and “Guidelines for Sustainable Livelihood and Income Generation”

On June 4–5, 2025, HTAPC convened consultative meetings on the topic of **“Psychiatric Patient Care and Referral System for Individuals with Behaviors or Histories Related to Forest Burning in Lamphun Province”** at Li Hospital, Li Subdistrict, Li District, Lamphun Province, on June 4, 2025. Another meeting was held on **“Guidelines for Sustainable Livelihood and Income Generation”** at Ko Subdistrict Municipality, Li District, Lamphun Province, and at the Lamphun Provincial Office of Natural Resources and Environment on June 5, 2025.



Meeting on “Psychiatric Patient Care and Referral System” at Li Hospital



Meeting on “Guidelines for Sustainable Livelihood and Income Generation” at Ko Subdistrict Municipality



Meeting on “Guidelines for Sustainable Livelihood and Income Generation” at Lamphun Provincial Office of Natural Resources and Environment

The objectives of these meetings were to discuss the development of a systematic, community-based psychiatric care and referral system, ensure continuous treatment follow-up, and promote vocational training for psychiatric patients. These efforts aim to support their reintegration into society and improve their quality of life, while also contributing to the mitigation of forest burning and the promotion of long-term environmental rehabilitation. The meetings were held in collaboration with agencies including Suan Prung Hospital, Li Hospital, Ko Subdistrict Health Promoting Hospital, Mae Ping National Park, Ko Subdistrict Municipality, the Lamphun Chamber of Commerce, the Lamphun Provincial Office of Social Development and Human Security, and the Lamphun Provincial Office of Natural Resources and Environment.

The meetings were supported through funding, equipment, and local market linkages under the collaboration of all participating agencies. A key conclusion drawn from the discussions was that forest burning and PM_{2.5} should not be addressed in isolation from mental health challenges, poverty, and the lack of economic opportunities among local communities. Emphasis was placed on the importance of establishing a comprehensive psychiatric care system and promoting sustainable livelihoods—enabling individuals to live with dignity, reduce dependency on forests, avoid risky behaviors, and strengthen long-term social and environmental resilience.

Dust Detective - The Series: Urban Dust War “Episode 1 Urban Dust”



On June 24, 2025, HTAPC participated in the first event of the series titled **“Dust Detective – The Series: Urban Dust War”**, under the theme **“Urban Dust: A Broader Perspective”**. The event was held at the Rattanakosin Room, Bangkok Metropolitan Administration (Sao Chingcha), as part of the BMA’s Action Plan for Preventing and Mitigating PM_{2.5}.

The **“Dust Detective – The Series: Urban Dust War”** is a component of the BMA’s comprehensive action plan addressing PM_{2.5}, initiated in 2022. The **“Dust Detective – The Series: Urban Dust War”** comprises six distinct episodes as follows: **Episode 1: Where does Bangkok’s dust come from?**, **Episode 2: Reducing Dust at Its Source**, **Episode 3: Dust Knows No Boundaries**, **Episode 4: Tracing the Dust**, **Episode 5: Understanding Dust, Understanding the City** and **Episode 6: Towards a Breathable City**. The primary objectives of this initiative include fostering collaboration among educational institutions, research organizations, and civil society groups at both national and international levels to study dust composition, facilitate knowledge and technology exchange, and develop effective measures to prevent and mitigate health impacts on the population. The BMA serves as the main organizer, with support from collaborating agencies such as the National Research Council of Thailand (NRCT), the Thai Health Promotion Foundation (ThaiHealth), the Academic Center for Air Pollution Prevention and Control (CAPPC), and the Bangkok Breath Council. Additionally, this event provided a platform for public and stakeholder participation to share opinions and insights.

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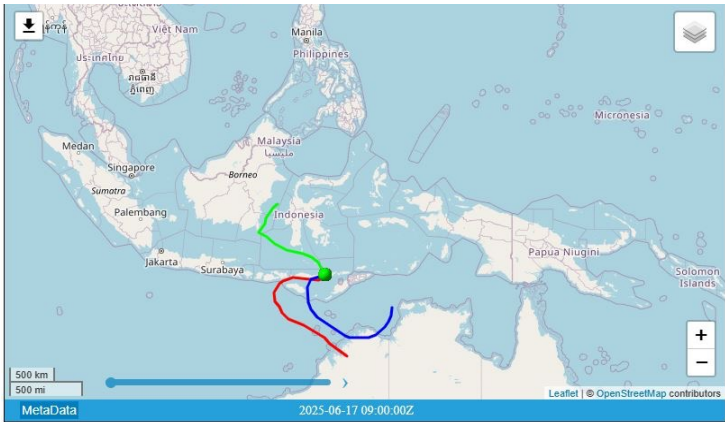
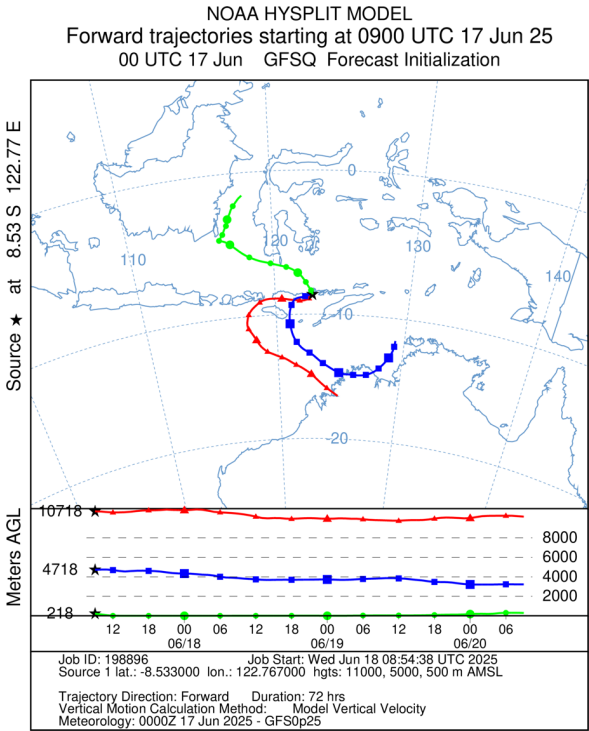
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Analysis of Air Mass Movement Using HYSPLIT: Eruption of Lewotobi Laki-Laki Volcano, Indonesia

On June 17, 2025, at approximately 17:35 local time (09:35 UTC), a powerful eruption occurred at Lewotobi Laki-Laki Volcano on Flores Island, Indonesia. The volcanic ash plume rose to an altitude of approximately 11,000 meters above mean sea level (AMSL), prompting Indonesian authorities to raise the volcanic alert level to its highest status.

Analysis of Air Mass Movement Using HYSPLIT Trajectory



Results from the NOAA HYSPLIT model simulation indicate the trajectories of volcanic ash dispersal at different altitudes (11,000 meters, 5,000 meters, and 500 meters AMSL) over a period of 72 hours following the eruption:

- The high-level ash plume (11,000 meters – red line) and mid-level ash plume (5,000 meters – blue line) are transported by prevailing winds toward the southeast and south of Flores Island, moving away from the Southeast Asia region.
- The low-level ash plume (500 meters – green line) initially moves toward the northwest before shifting northeastward. Given its low altitude (500 meters AMSL), this ash plume is unlikely to affect Thailand.

Precautions and Recommendations

- Residents in areas near the volcano should closely monitor official announcements and strictly adhere to instructions provided by authorities.
- High-altitude volcanic ash clouds may potentially impact aviation operations within the region.
- For Thailand, current analysis indicates no potential impacts from volcanic ash associated with this eruption event.

HTAPC Supports Bangkok’s Clean Air Efforts through the Breathe Bangkok Project

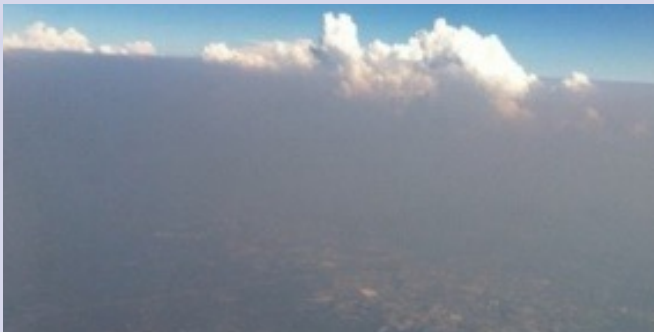


In April 2024, Bangkok joined the Breathe Bangkok initiative as part of Breathe Cities program led by C40 Cities, the Clean Air Fund (CAF), and Bloomberg Philanthropies. The initiative aims to reduce urban air pollution and carbon emissions, with a target of cutting air pollution by 30% by 2030 compared to 2019. Running from 2024 to 2026, Breathe Bangkok focuses on two key areas: the development of a long-term Clean Air Management Plan (CAMP) and the promotion of sustainable, environmentally friendly transport measures.

As part of this effort, the Hub of Talents on Air Pollution and Climate (HTAPC) has been commissioned by C40 Cities and CAF to lead the development of both a short-term ad hoc action plan and an inclusive long-term Clean Air Management Plan for Bangkok under the Breathe Bangkok project. These plans are designed to help the city effectively respond to severe haze episodes, particularly in early 2026, and to support long-term air quality management in line with the upcoming Clean Air Management Act, currently under review in the Thai Parliament. The ultimate goal is to reduce Bangkok’s annual average PM2.5 concentration from 23 $\mu\text{g}/\text{m}^3$ in 2022 to below Thailand’s national standard of 15 $\mu\text{g}/\text{m}^3$ and ultimately meet the World Health Organization (WHO) guideline of 5 $\mu\text{g}/\text{m}^3$.

This work is being carried out with strong collaboration from leading national air pollution experts, including Dr. Supat Wangwongwatana (director of HTAPC and project lead), Assoc. Prof. Dr. Sawitree Kareewat (King Mongkut’s University of Technology Thonburi), Assoc. Prof. Surat Bualert (Kasetsart University), Assoc. Prof. Dr. Nares Cheeseman (Suranaree University of Technology), Assoc. Prof. Dr. Ekbordin Winijkul (Asian Institute of Technology), Assoc. Prof. Dr. Thongchai Khanabkaew (Thammasat University). These experts bring decades of experience and deep knowledge of air quality issues and have contributed significantly to improving Bangkok’s air pollution management to date. Through this collaboration, HTAPC is committed to supporting the development of a comprehensive, modern, and participatory air quality management plan, helping pave the way for a cleaner, healthier, and more sustainable Bangkok in the years ahead.

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We cordially invite you to join us

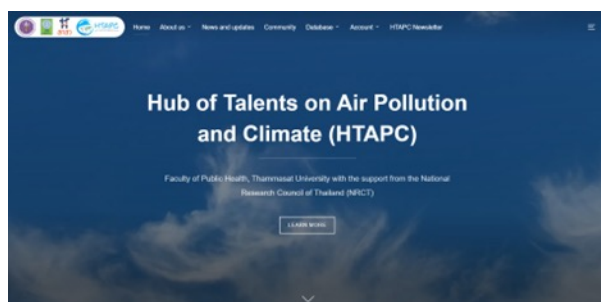
Hub of Talents on Air Pollution and Climate

HTAPC Membership Form for Experts



Official website of Hub of Talents on Air Pollution and Climate (HTAPC)

<https://www.htapc.info>



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