

# How to Advance Regional Action in IGP-HF: Findings from Malé Declaration Scoping Study

**Vanisa Surapipith, Ph.D.**

Head of Air Pollution Cluster, Regional Resource Centre for Asia and the Pacific at Asian Institute of Technology (AIT RRC.AP)

March 12, 2026 | United National Conference Centre (UNCC), Bangkok

This is not an ADB material. The views expressed in this document are the views of the author/s and/or their organizations and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy and/or completeness of the material's contents, and accepts no responsibility for any direct or indirect consequence of their use or reliance, whether wholly or partially. Please feel free to contact the authors directly should you have queries.





# Background of the Malé Declaration

- A round-table policy dialogue was held by UNEP and SEI in March 1998 in AIT, Bangkok. Representatives of the Ministry of Environment from South Asian countries participated in the meeting.
- 7<sup>th</sup> Governing Council of SACEP, held in Male' in April 1998, adopted the declaration and named it as the Malé Declaration on Control and Prevention of Air Pollution and its likely Transboundary Effects for South Asia (Malé Declaration).
- Activities of the Malé Declaration has been implemented in Phases.

## National Focal Points (NFPs) and National Implementation Agencies (NIAs)

### Bangladesh

NFP:  
Ministry of Environment  
Forest and  
Climate Change  
NIA:  
Department of  
Environment,  
Dhaka

### Bhutan

NFP and NIA:  
Department of  
Environment &  
Climate Change,  
Ministry of Energy  
and Natural  
Resources

### India

NFP:  
Ministry of  
Environment  
Forest and  
Climate Change  
NIA:  
Central  
Pollution  
Control  
Board,  
New Delhi

### Iran

NFP and NIA:  
Department of  
the Environment,  
Tehran

### Maldives

NFP: Ministry of  
Tourism and  
Environment  
NIA: Environmental  
Management and  
Conservation  
Department

### Nepal

NFP: Ministry of  
Forests and  
Environment  
NIA:  
Department  
of Environment

### Pakistan

NFP: Ministry of  
Climate Change  
& Environmental  
Coordination  
NIA: Pakistan  
Environment  
Protection  
Agency (EPA)

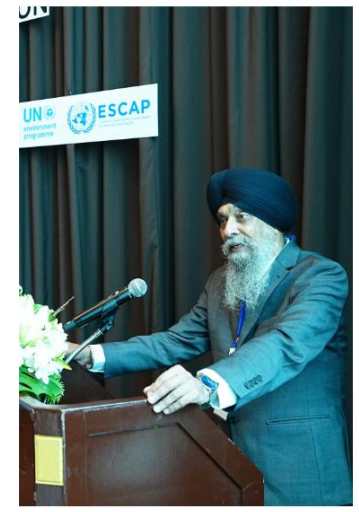
### Sri Lanka

NFP: Ministry of  
Environment  
NIA: Central  
Environmental  
Authority  
(CEA)



# MALÉ DECLARATION AMBITION TO ACTION

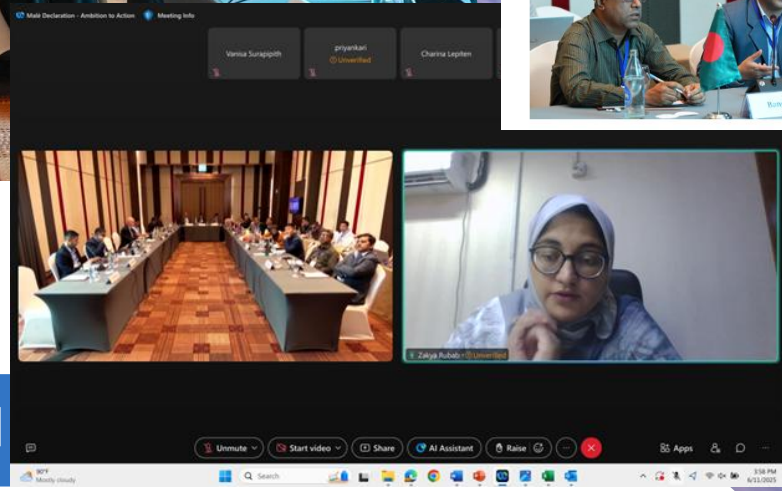
11-12 June 2025  
Bangkok, Thailand



The two-day workshop gathered government representatives officially nominated by member countries in Maldives, Nepal, Pakistan and Sri Lanka, core team, and international partners. Key discussions included the Work Programme for the Next Phase, and, in particular, the Scoping Study commissioned by SACEP to sup



The workshop has seen lively interaction between the key organizations with and etc., while pathway of communication to synchronize activities has been



## 11-12 June 2025 | Bangkok, Thailand





# South Asia Co-operative Environment Programme

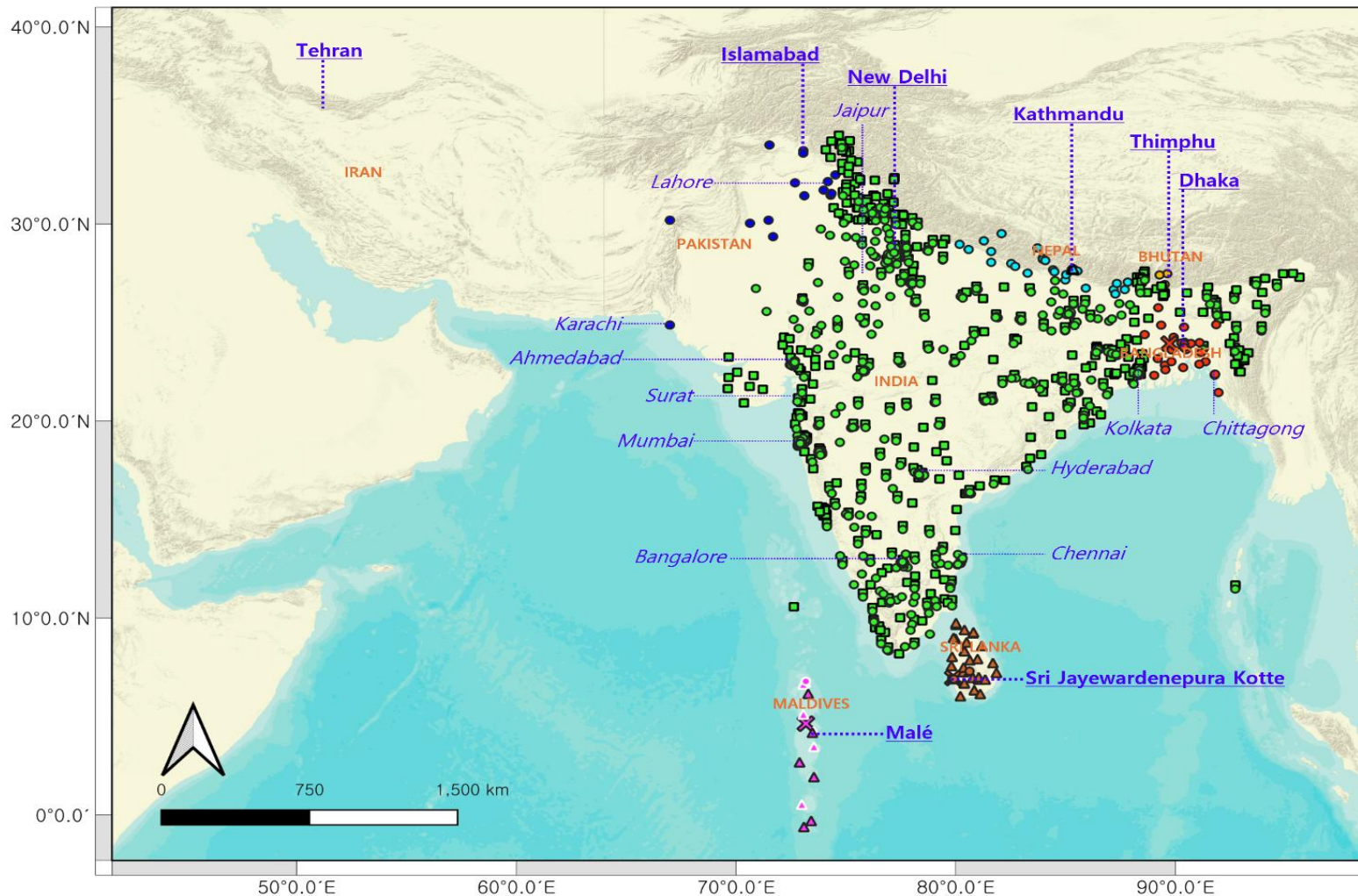


# RRC.AP

Regional Resource Centre for Asia and the Pacific



# Air Quality Monitoring Stations Across Malé Declaration Member Countries



**LEGEND**

- Regulatory Stations
- Non - Regulatory Stations
- Continuous Ambient Air Quality Monitoring Stations
- Manual Ambient Air Quality Monitoring stations
- Low-Cost Sensors
- Mobile Stations

- Bangladesh
- Bhutan
- India
- Maldives
- Nepal
- Sri Lanka
- Pakistan



Copyright: AIT RRC.AP (2025)

3/26/2026

# Various Air Quality Management Tools in each member country of Malé Declaration

## India

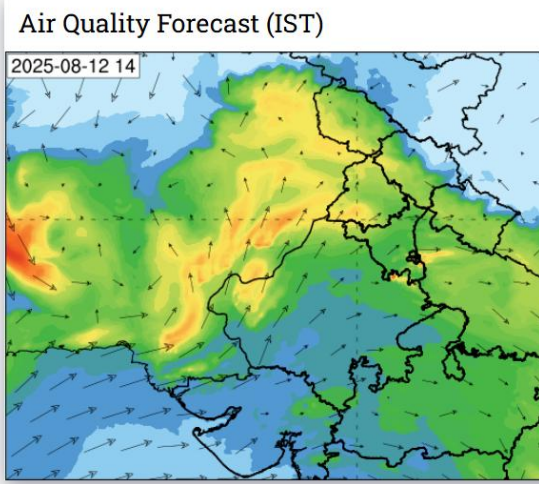
https://ews.tropmet.res.in

**AIR QUALITY EARLY WARNING SYSTEM FOR DELHI**  
 MINISTRY OF EARTH SCIENCES, GOVT. OF INDIA  
 पृथ्वी विज्ञान मंत्रालय, भारत सरकार

Thursday 21st Aug 2025

**AIR QUALITY FORECAST**    **FOG FORECAST (WiFEx)**



### Bulletin & Message

**Air Quality and Weather Bulletin for Delhi (20.08.2025)**  
 दिल्लीकेलिएवायुगुणवत्ताऔरमौसमबुलेटिन (20.08.2025)

1. Past Weather and Air Quality Observation:  
 Delhi's air quality was in the Satisfactory category

## Nepal

Government of Nepal  
 Ministry of Forests and Environment  
**Department of Environment**  
 Babarmahal, Kathmandu, Nepal

### Air Quality Watch

Nepali  English

Recent    Archive    Forecast    Emission    RGB

#### Map Controls

Select By: Parameter

Pollutants: PM / Ground Observation-PM2.5

Select Stations:

- Ratnapark
- Shankapark
- Bhaktapur
- Surkhet

compute

#### Layer Control

- Country Outline
- Province
- District
- Gaunpalika/Nagarpalika
- Ground Observation-PM2.5
- TerraModis-TrueColor (2025-11-19) 50%

#### Ratnapark (Last 24 hours)

source: DoEnv, Government of Nepal

#### Shankapark (Last 24 hours)

source: DoEnv, Government of Nepal

#### Bhaktapur (Last 24 hours)

source: DoEnv, Government of Nepal

#### Surkhet (Last 24 hours)

source: DoEnv, Government of Nepal

# Key Findings and Recommendations

- **Develop a regional emission inventory and data-sharing platform** (ICIMOD has covered 5 member countries only – need to combine with 2 more), i.e. Maldives and Sri Lanka.
- **Strengthen technical and institutional capacity for modeling & long-term monitoring** (Model-Intercomparison Study in Asia – MICS-Asia existing in East & Southeast Asia, like CAS/ACAP's EANET, should be explored).
- **Integrate air quality goals with climate and health policies** (Co-benefits with identifying Super Pollutants, formerly SLCP, working with CCAC).

# Key Findings and Recommendations

- **Establish financing mechanisms for clean technology adoption.** (World Bank and ADB in IGP-HF projects have supported Bangladesh, India, Nepal and Pakistan (and probably Bhutan)...Can Malé Declaration gain support also from ADB&World Bank, or philanthropy like CAF on BC & O<sub>3</sub>(?)
- **Promote joint action plan under the Malé Declaration framework for sustainable regional cooperation towards Net Zero.**

**Through coordinated commitment,  
South Asia can achieve measurable improvements in  
air quality, public health, and environmental sustainability.**

# Activity Plan of the Malé Declaration in 2026

1) Better Air Quality (BAQ) 2026 conference during March 9-13th in Bangkok, Thailand;

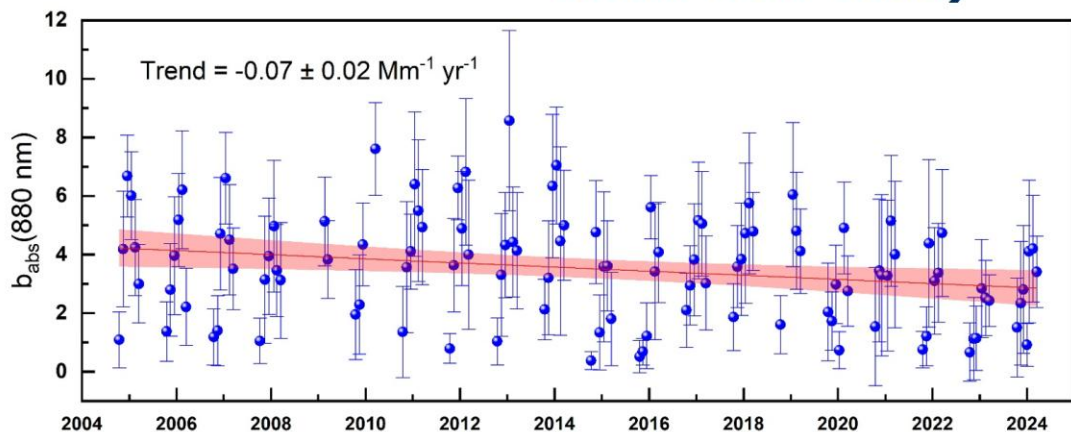
## 20-years of BC research at MCOH: Receptor observatory for South Asia

Wintertime BC trend (-2%/yr; small decrease)



2) The Seventeenth (17<sup>th</sup>) Session of the Intergovernmental Meeting of the Malé Declaration on Control and Prevention of Air Pollution and its Likely Transboundary Effect for South Asia (MD/IG17) tentatively in May 2026 back2back with SACEP's GC meeting...

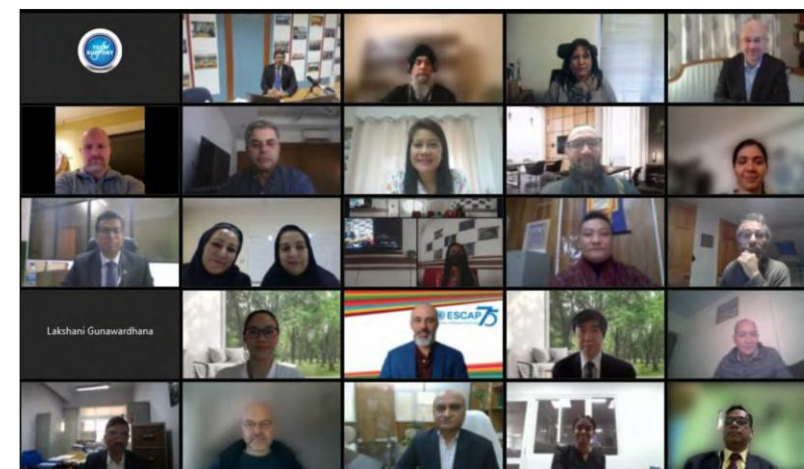
[...likely to highlight pathway to October event: Hanimaadhoo Summit: "Celebrating 20 Years of the Maldives Climate Observatory - and the Road to Climate-Resilient Futures"];



- Is India bending the BC curve?

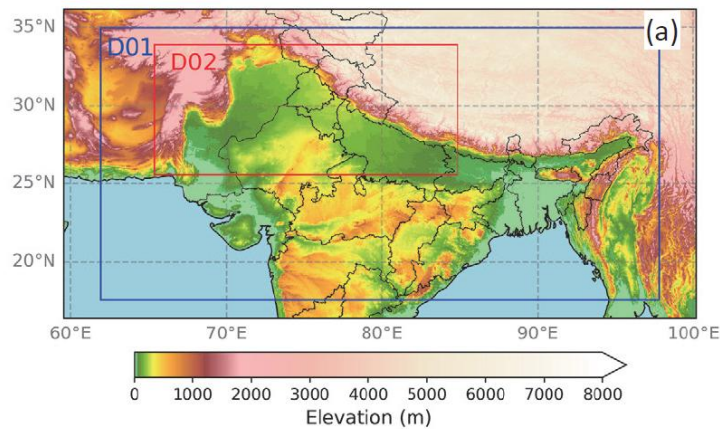
- Source?

(ms finally in prep...)



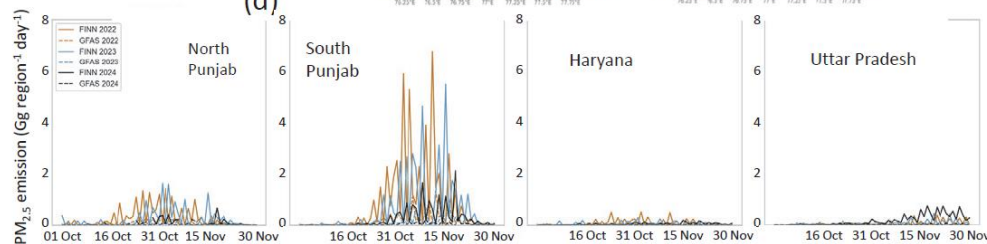
Screenshot of participants taken during the MD/IG16

## WRF-Chem model setup and regional emission characteristics



(b)

Horizontal grid: 27×27 km<sup>2</sup> (D01), 9×9 km<sup>2</sup> (D02)  
 Chem\_Opt: 301, GOCART coupled to RACM-KPP  
 Meteorology: driven by ERA5 (0.25×0.25 deg)  
 PBL: Shinhong PBL Scheme (bl\_pbl\_physics=11)  
 Anthropogenic emission: EDGAR-v6.1  
 Biomass burning: FINN V2.5-MODIS  
 Biogenic emis.: MEGAN; DMS emis.: GOCART  
 Duration: 01-OCT to 30-NOV (2022,2023,2024)



## Activity Plan of the Malé Declaration in 2026 (cont.)

**3) Study Visit for executives of Malé Declaration member countries to Indo-Gangetic Plain-Himalayan Foothill (IGP-HF) sites of implementing the World Bank supported projects and Central Pollution Control Board, New Delhi, tentatively during August 2026;**

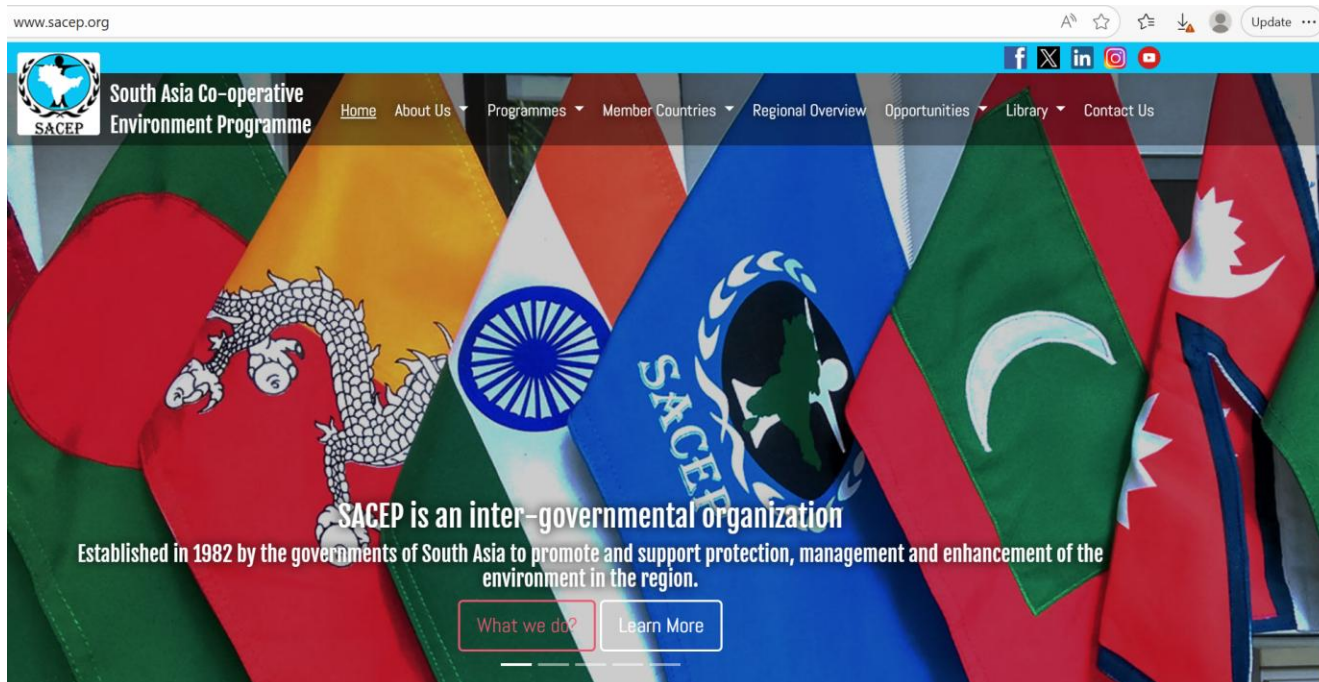
**4) Webinar series on “Air Quality Management – Science and Investment for Sustainable Development in Malé Declaration member countries” during March – December 2026;**

**Starting on March 30, 2026 on the topic of “Women Driving Changes in Air Quality Management for Better Air Quality in Malé Declaration Region”**



# Activity Plan of the Malé Declaration in 2026 (cont.)

5) Factsheets for Male' Declaration member countries (extract from Scoping Study report) are being distributed by scanning the QR code here, or download from websites of SACEP and AIT RRC.AP.



Use the QR code to access the Air Pollution Factsheet for Malé Declaration Member Countries



# BAQ 2026

BETTER AIR QUALITY  
CONFERENCE 11-13 MAR • BANGKOK



# Thank you very much! Kob Kun Kha 😊

More Information: [Vanisa.Surapipith@rrcap.ait.ac.th](mailto:Vanisa.Surapipith@rrcap.ait.ac.th)

