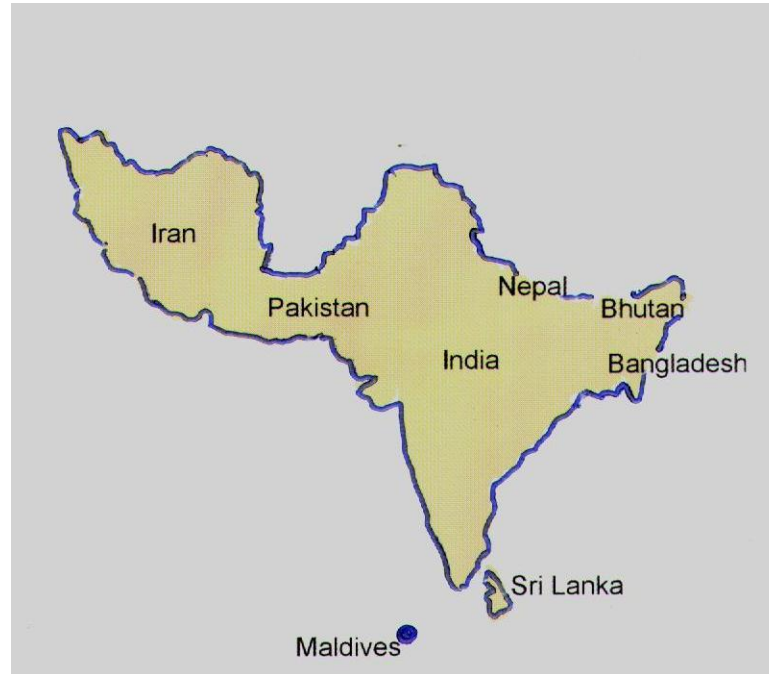
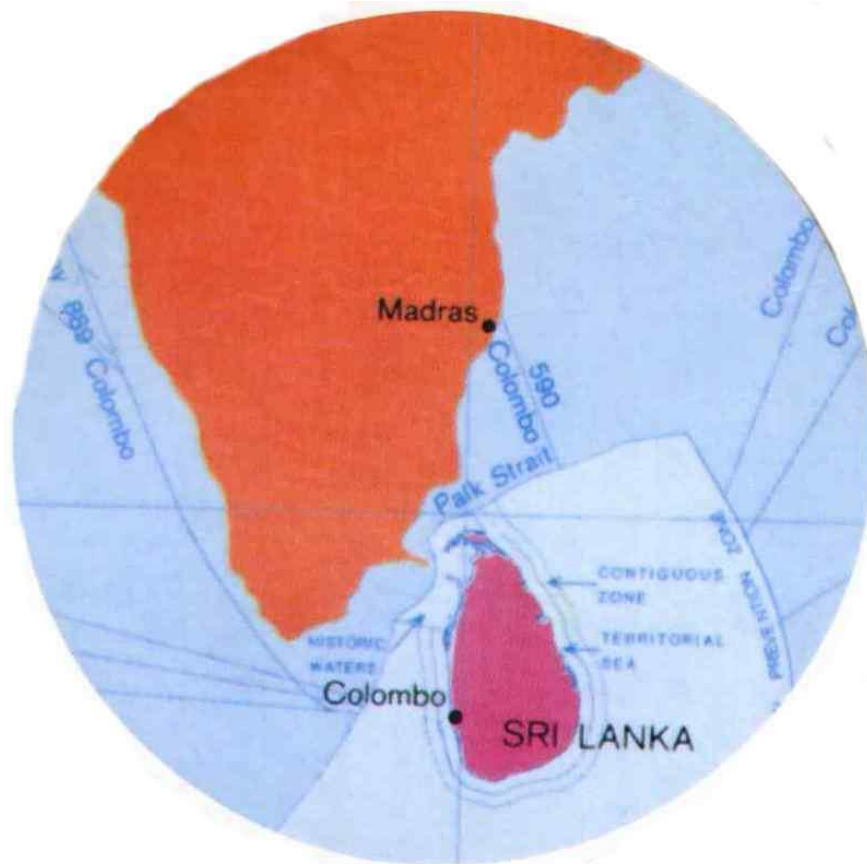


MALÉ DECLARATION ON CONTROL AND PREVENTION OF AIR POLLUTION AND ITS LIKELY TRANSBOUNDARY EFFECTS FOR SOUTH ASIA



**OVER VIEW OF NATIONAL LEVEL IMPLEMENTATION
BY
C.K.AMARATUNGA
DIRECTOR (LABORATORY SERVICES)
CENTRAL ENVIRONMENTAL AUTHORITY
NIA-SRILANKA**

PHASE II IMPLEMENTATION OF MALÈ DECLARATION IN SRL LANKA



Monitoring Activities Under Malé Declaration Phase II

- CEA started monitoring of Sulphure Dioxide, Nitrogen Dioxide at the selected monitoring site at Dutuwewa, Galenbindunuwewa in August 2003 and Wet Deposition monitoring started in the latter part of November 2003. Sulphure Dioxide and Nitrogen Dioxide monitoring using passive samplers is carried out monthly and wet deposition monitoring is carried out weekly.



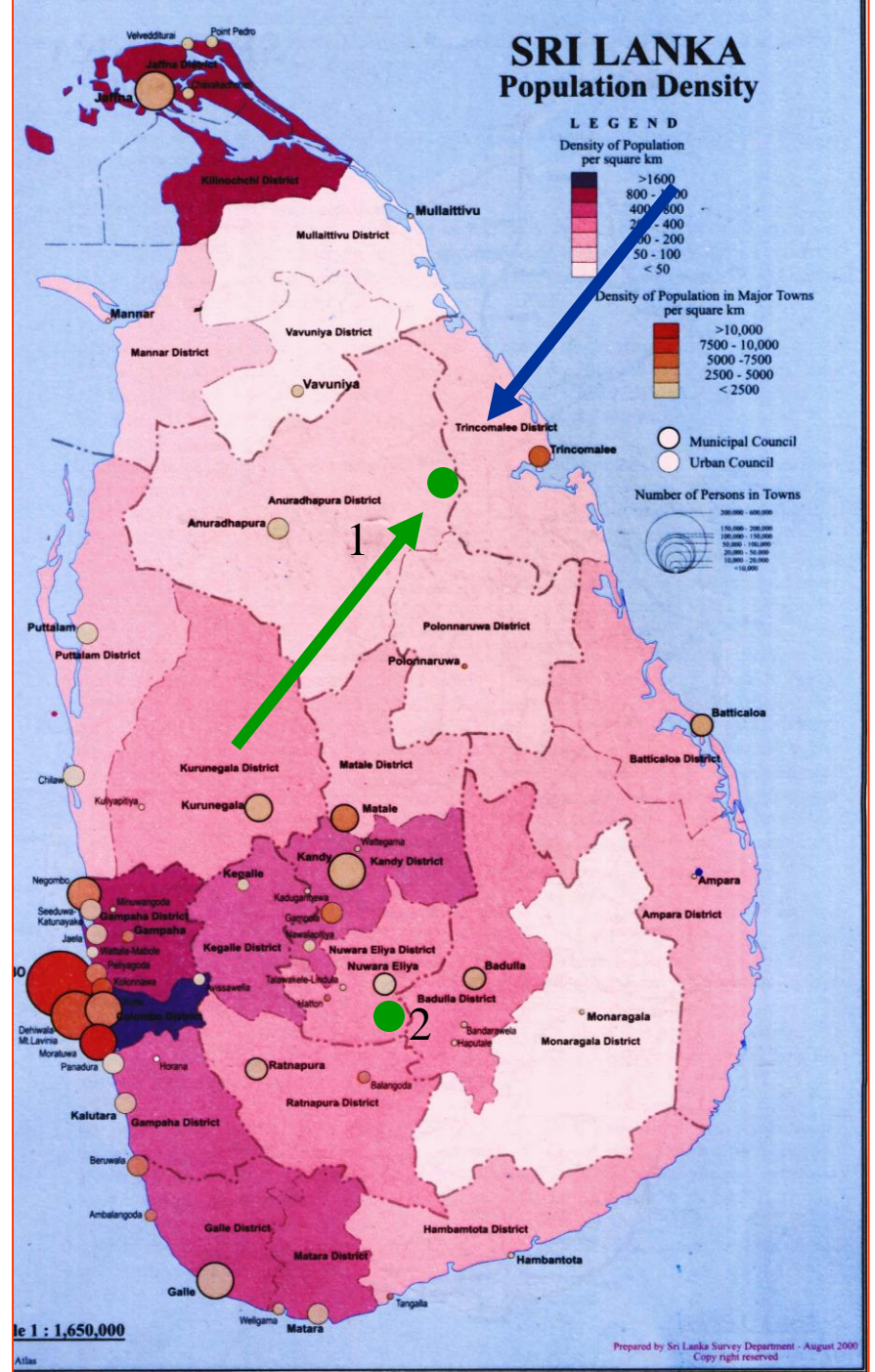
SOUTH- WEST (MAY-SEP)



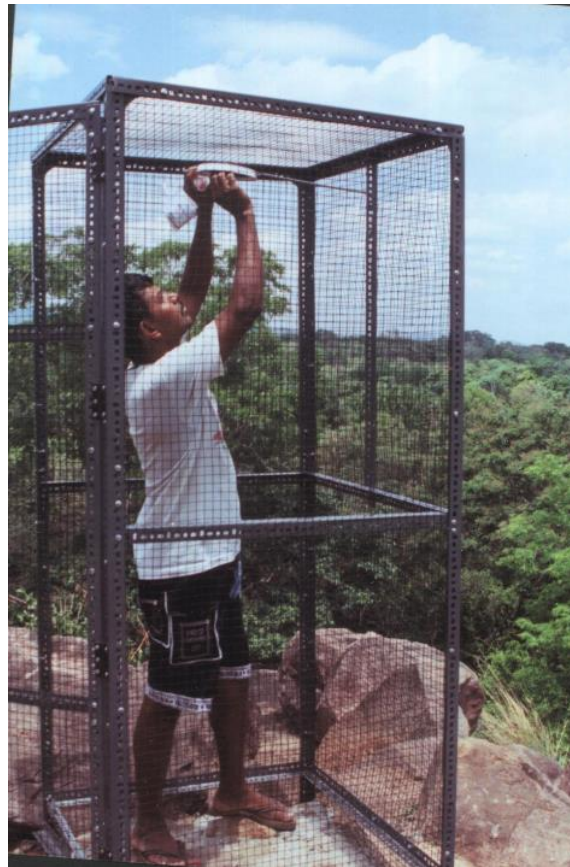
NORTH-EAST (DEC- FEB)

SITE 1- GALENBINDUNUWEWA

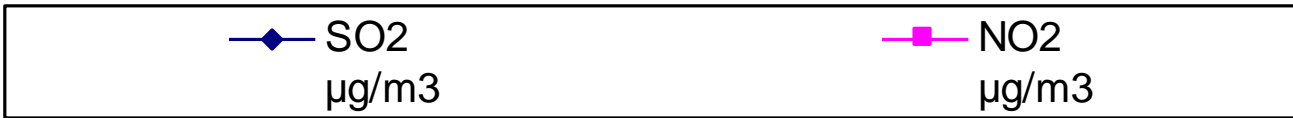
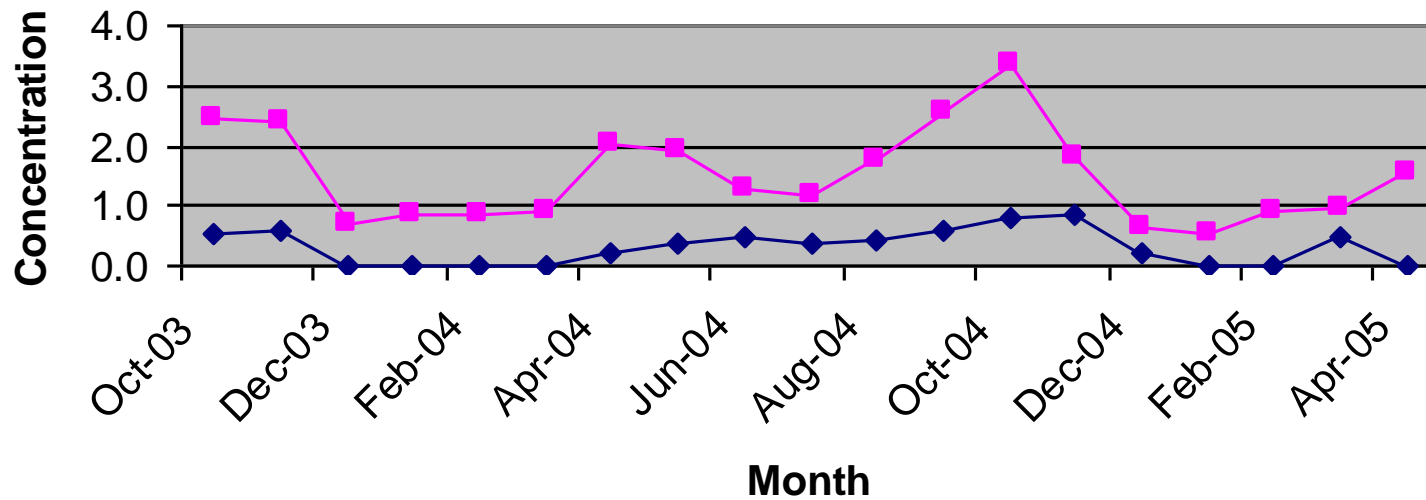
SITE 2- HORTAN PLAINS



Monitoring of SO₂ & NO₂ using Passive Sampling



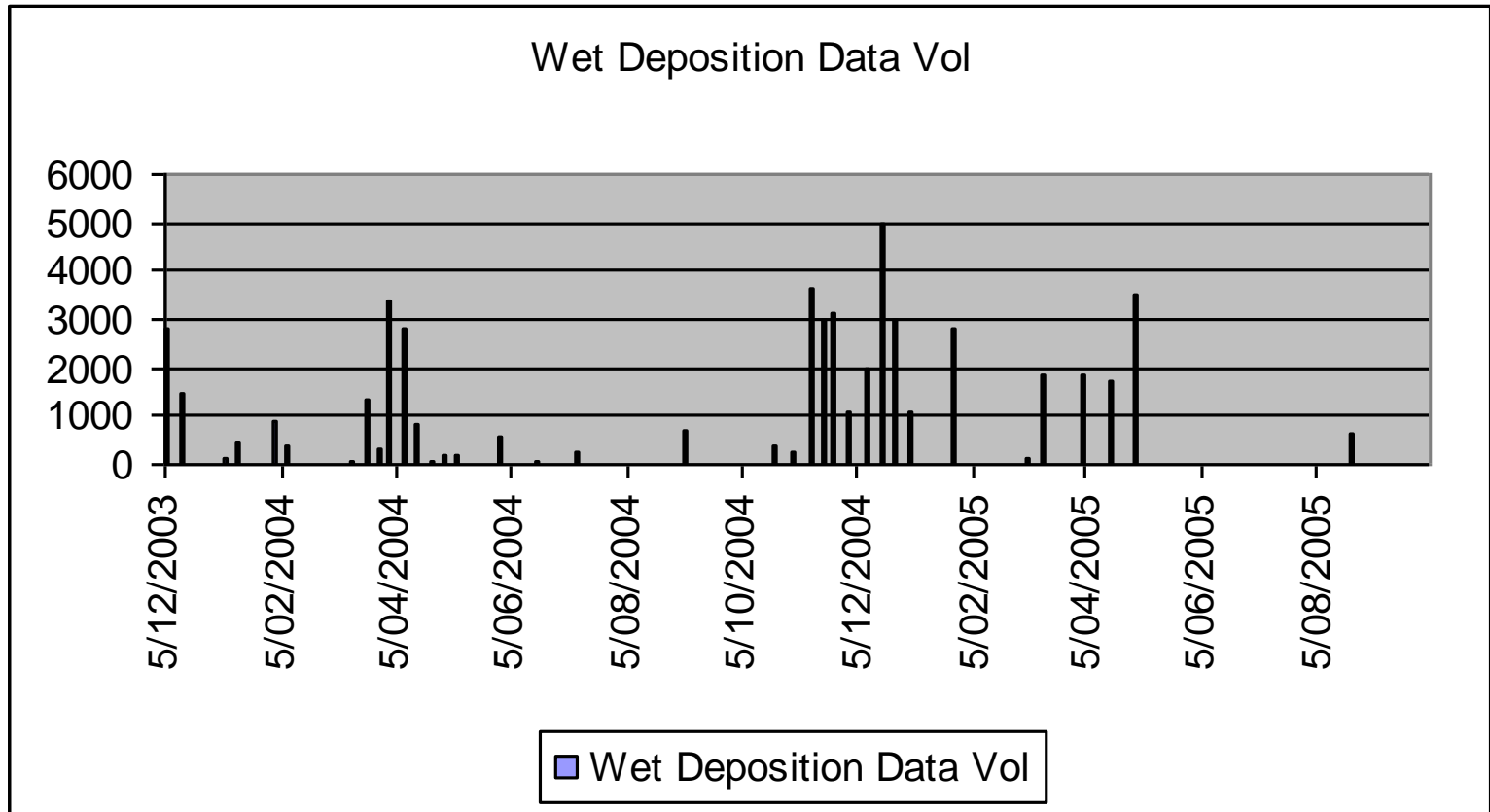
Diffusive Sampler Results



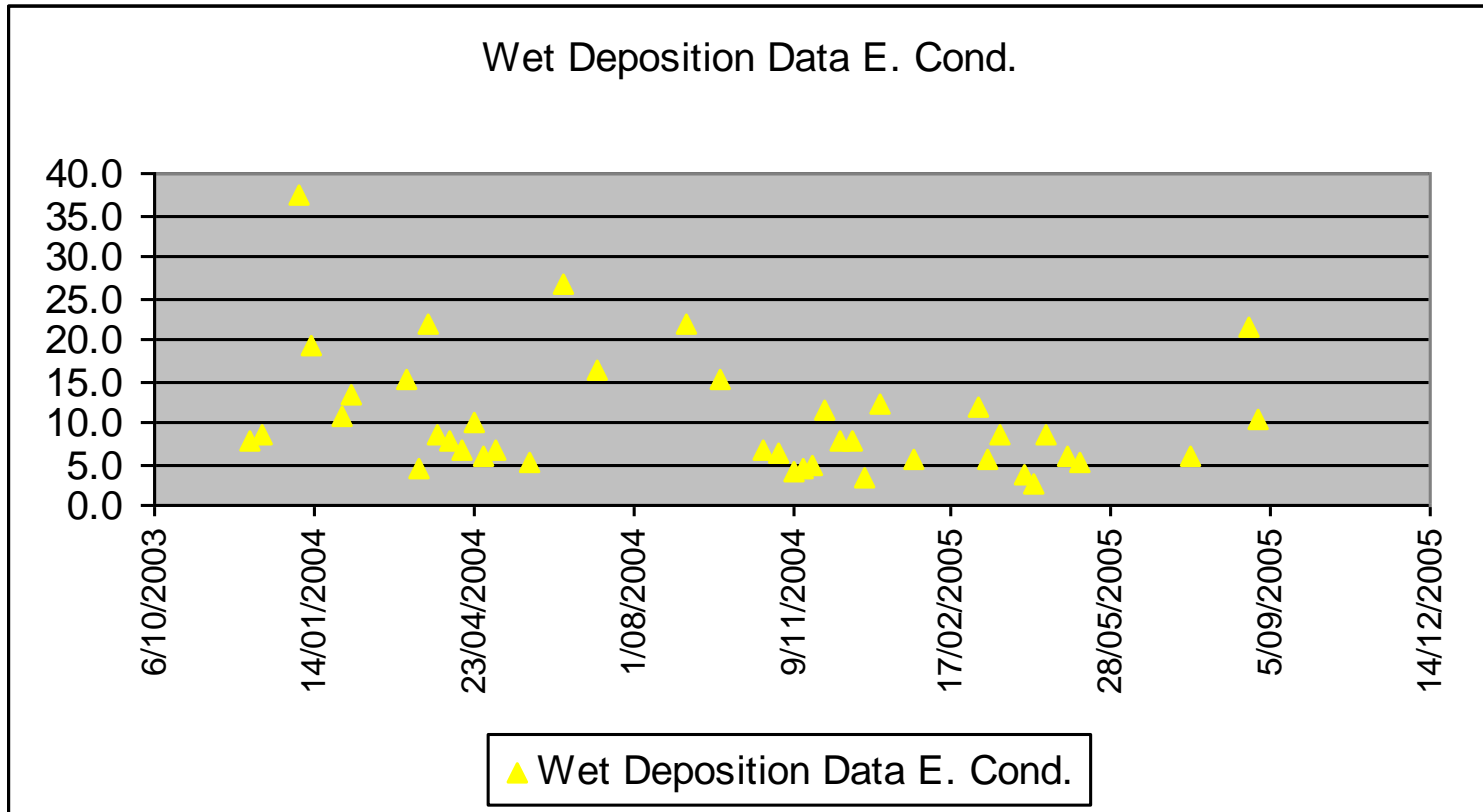
Wet Deposition Monitoring at Dutuwewa



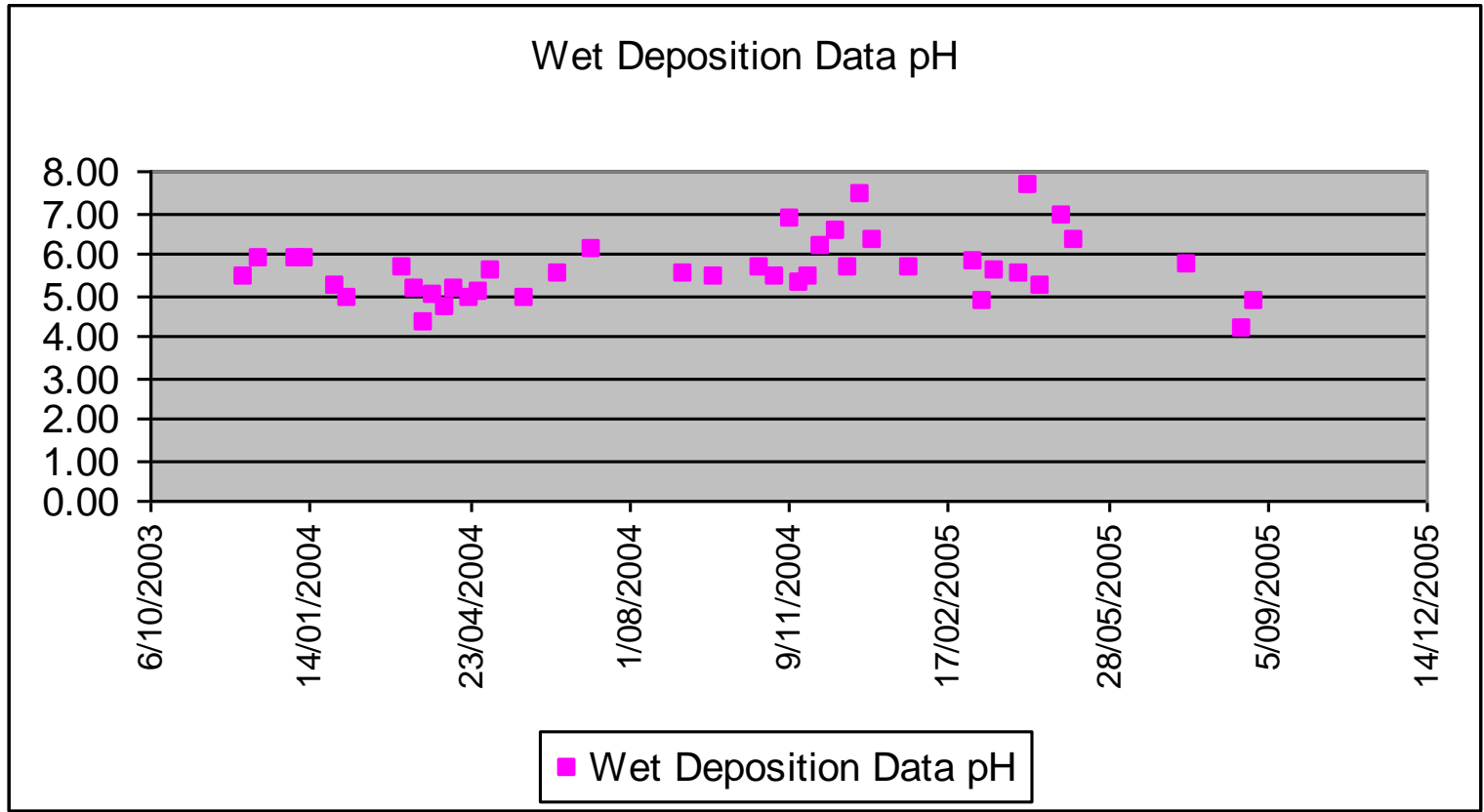
WET DEPOSITION DATA



Cont.



Cont.



Ambient Air Quality

- Ambient Air Quality at Dutuwewa was monitored using Automated Monitoring Equipment also from 22nd July 2004 to 29th July 2004 (During the South West Monsoon) and from 23rd Jan. 2005 to 30th Jan. 2005 (During the North East Monsoon).
- Selected monitoring site for Automated Monitoring is situated 1-1.5 km East from the Malé Monitoring Site at Dutuwewa..

Automated Air Quality Monitoring at Dutuwewa





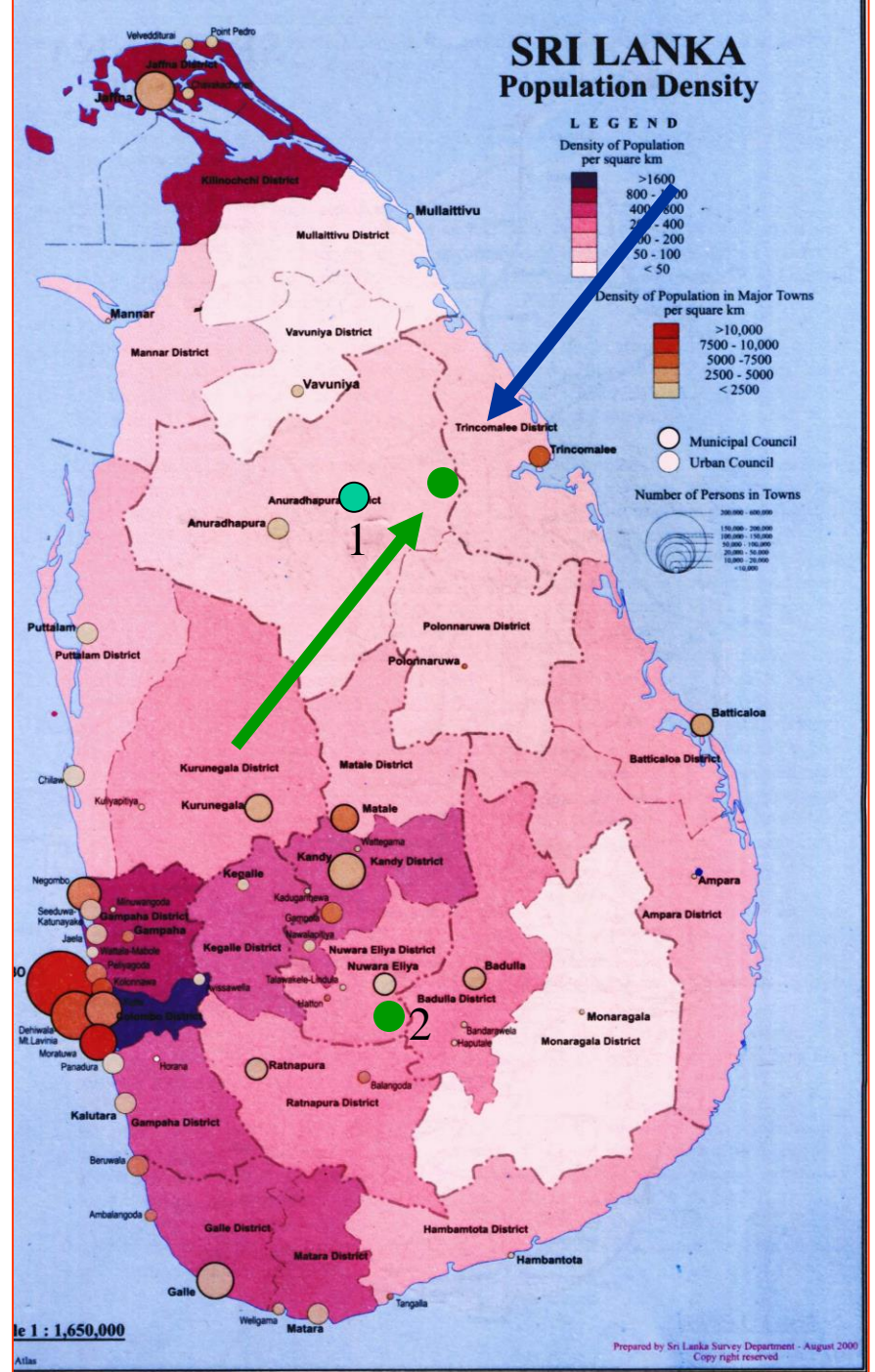
SOUTH- WEST (MAY-SEP)



NORTH-EAST (DEC- FEB)

SITE 1- GALENBINDUNUWEWA

SITE 2- HORTAN PLAINS



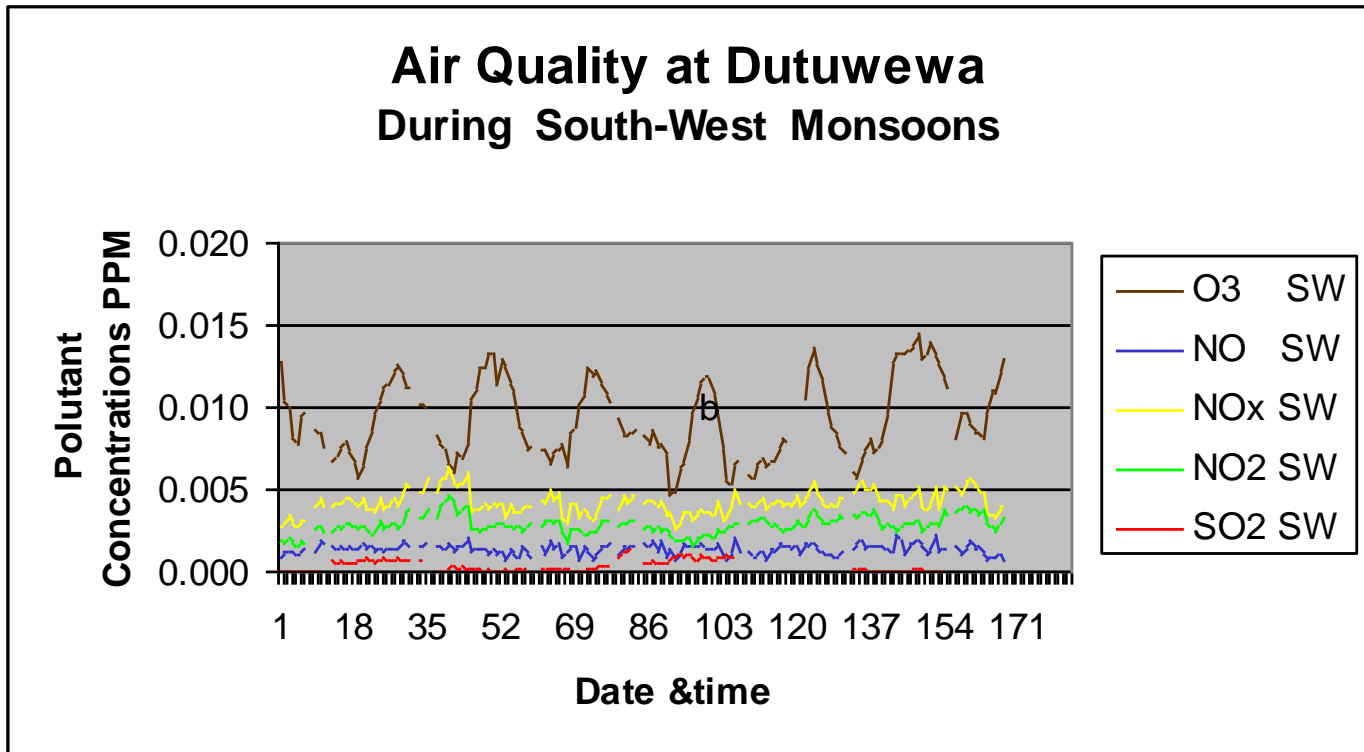
SRI LANKA

22nd to 29th July 2004

Southwest Monsoon season

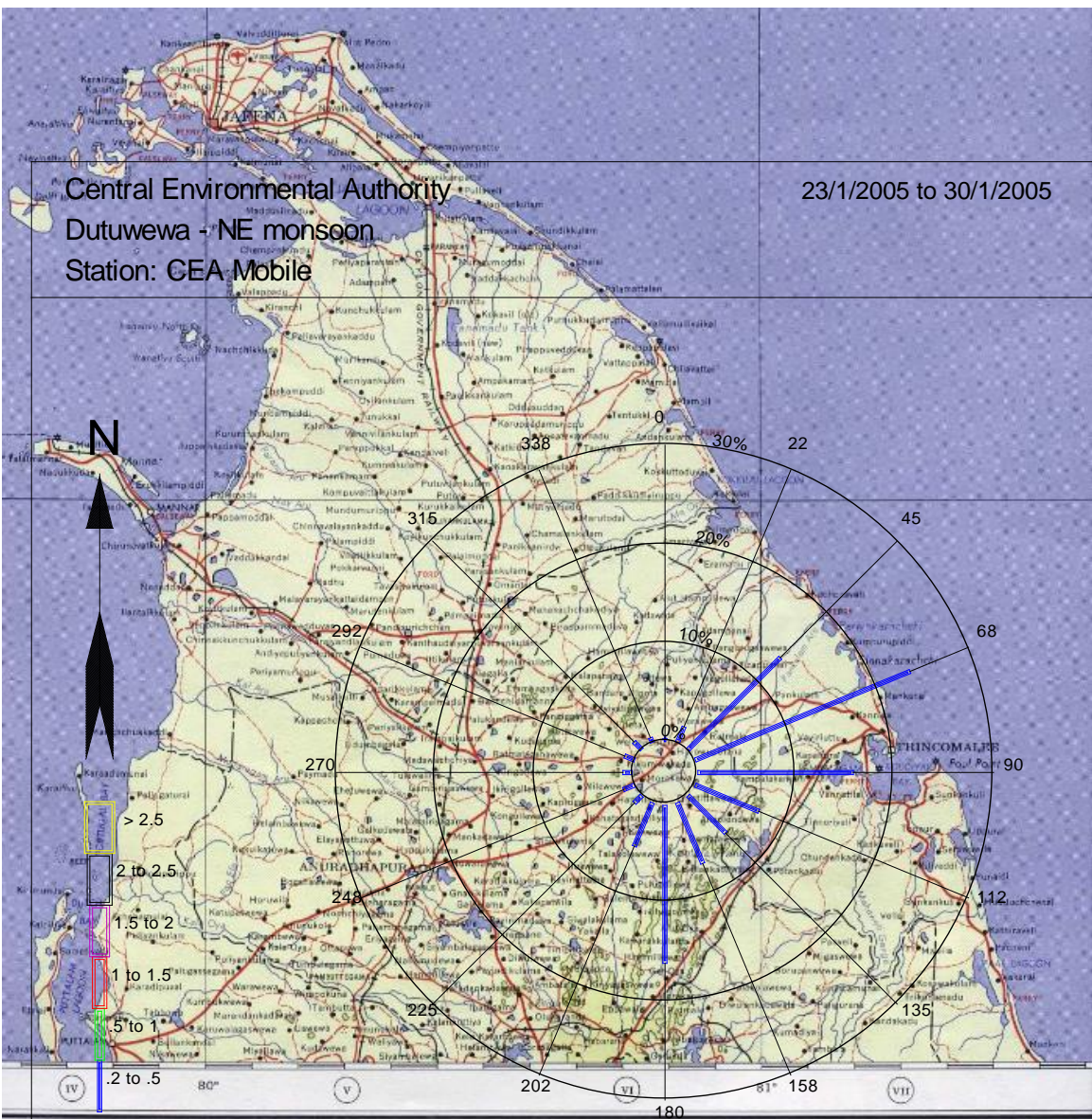


AIR QUALITY DATA



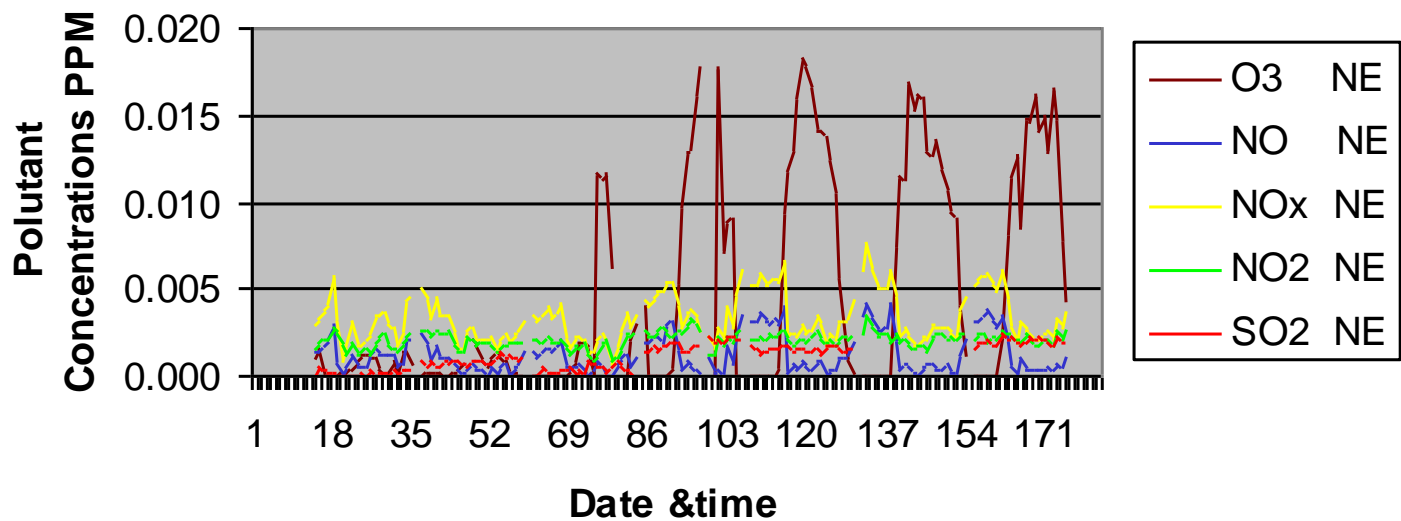
Central Environmental Authority
 Dutuwewa - NE monsoon
 Station: CEA Mobile

23/1/2005 to 30/1/2005

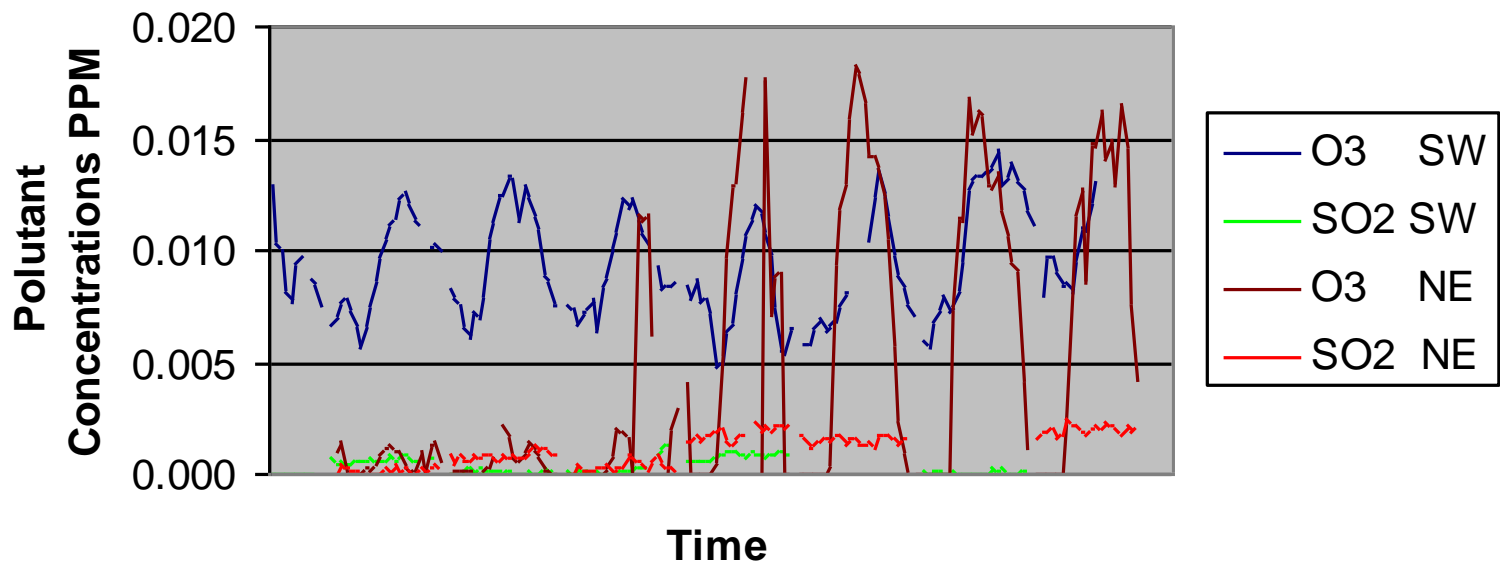


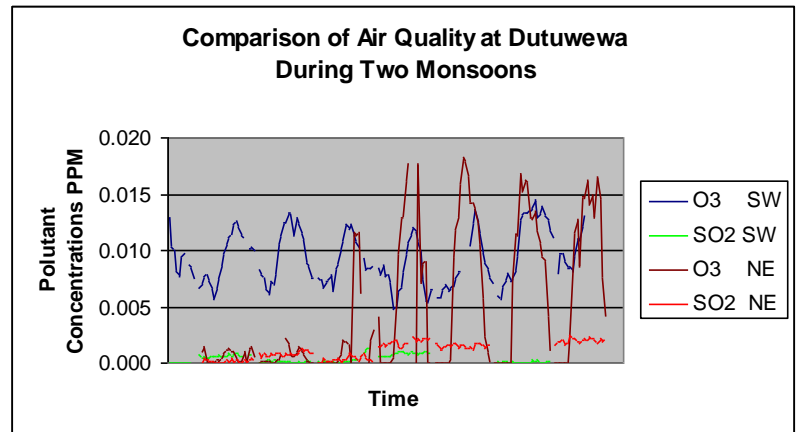
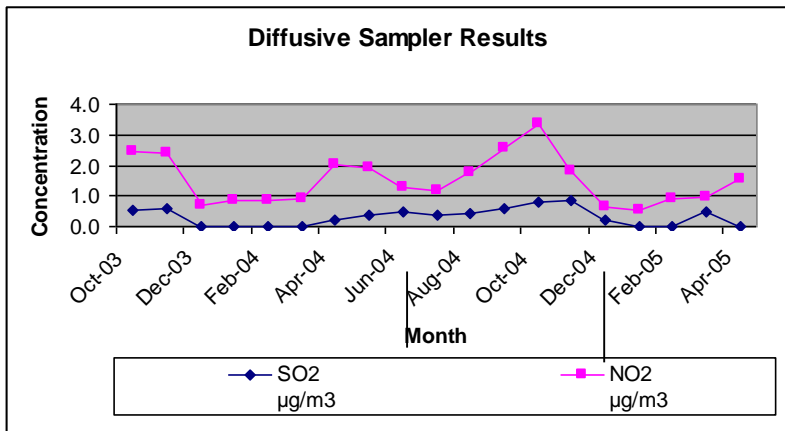
Magnitude(m/s)
 0.0% calm
 89.1% Valid Data present.

Air Quality at Dutuwewa During North-East Monsoons



Comparison of Air Quality at Dutuwewa During Two Monsoons





Challenges & Difficulties

- Unsteady power supply at the selected site
- Long distance to travel (High transport cost)
- **Bordering conflict prevailing area**
 - Possible attack by wild elephants due to prevailing war situation
 - Possible attack by conflicting parties
- **A safe location near the existing monitoring site is being under consideration**

Data gaps

- Passive Monitoring -SO₂, NO₂-Successful
- Rainwater Monitoring
 - pH - Successful
 - EC - Successful
 - ion - Partially
- PM10
 - not successful

due to problem in power supply

Proposed activities for next 2 years

- Ozone passive sampling
- Passive sampling at the selected second site (Horton plains)
- Starting of dry deposition monitoring (PM10)
- Corrosion study – One or **more locations**
- Any other activity as agreed in this meeting depending on the availability of funding

PLAN FOR THE IMPACT ASSESSMENT ACTIVITIES

- Only the corrosion test at the first stage because there are lack of expertise in crop impact, health impact and rapid urban assessment.

PLAN FOR AWARENESS PROGRAMMES

- Intend to launch lecture series on transboundary air pollution for Master Degrees in Environmental Science, Management and Engineering.
- Intend to introduce a brochure on Malē Declaration and related activities.

THANK YOU