

Implementation of  
Male Declaration on Control and  
Prevention of Air pollution and Its Likely  
Transboundary Effects

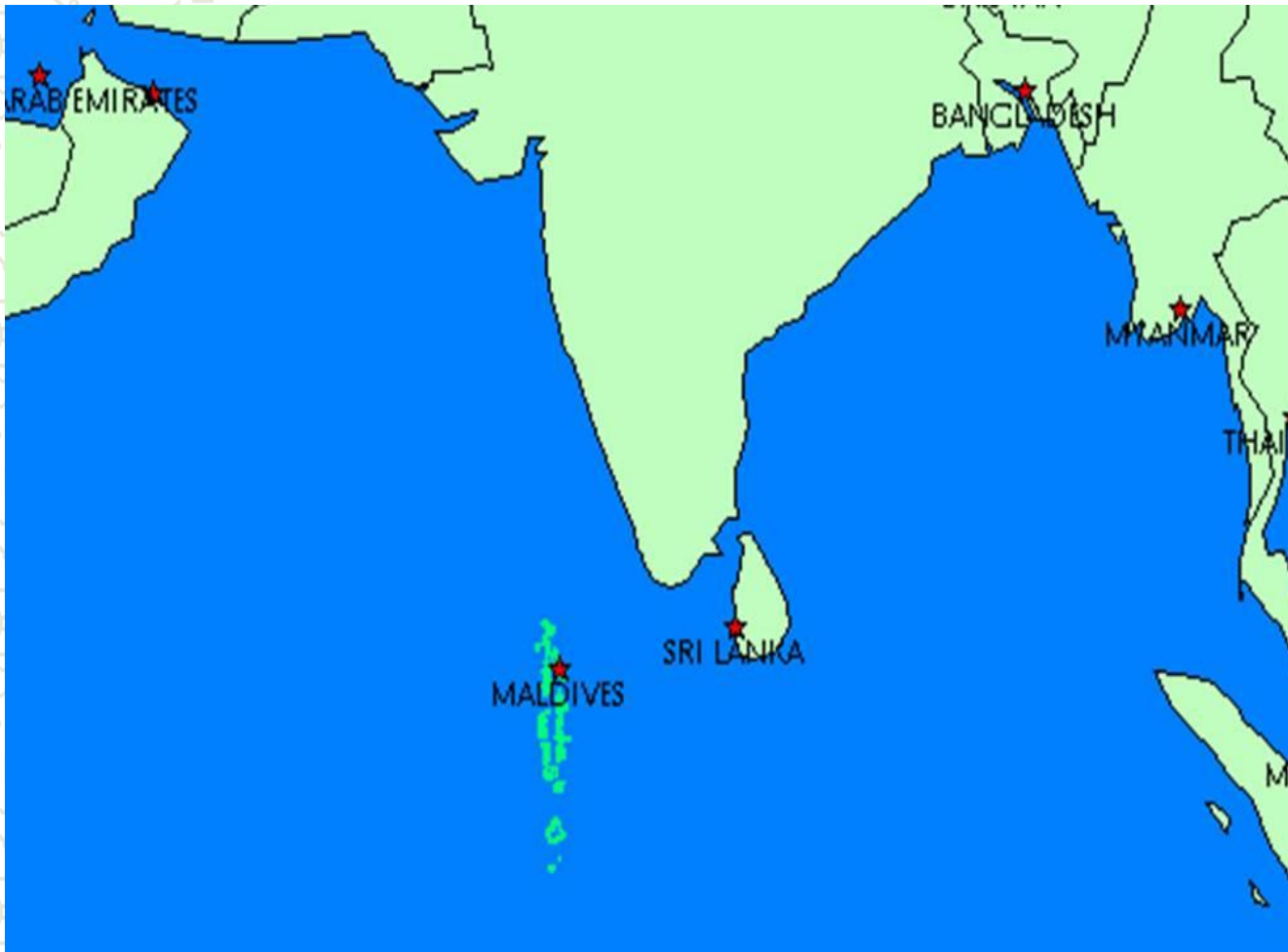




# The Male' Declaration

- ✦ **Introduction**
- ✦ **First phase Experience**
- ✦ **Second phase Experience**
- ✦ **Activities carried out in air pollution monitoring**

# Introduction



► Longitude  
 $\approx 73E$

► Latitude  
 $\approx 7N - 2S$

► Altitude  
 $\approx 1.5m$

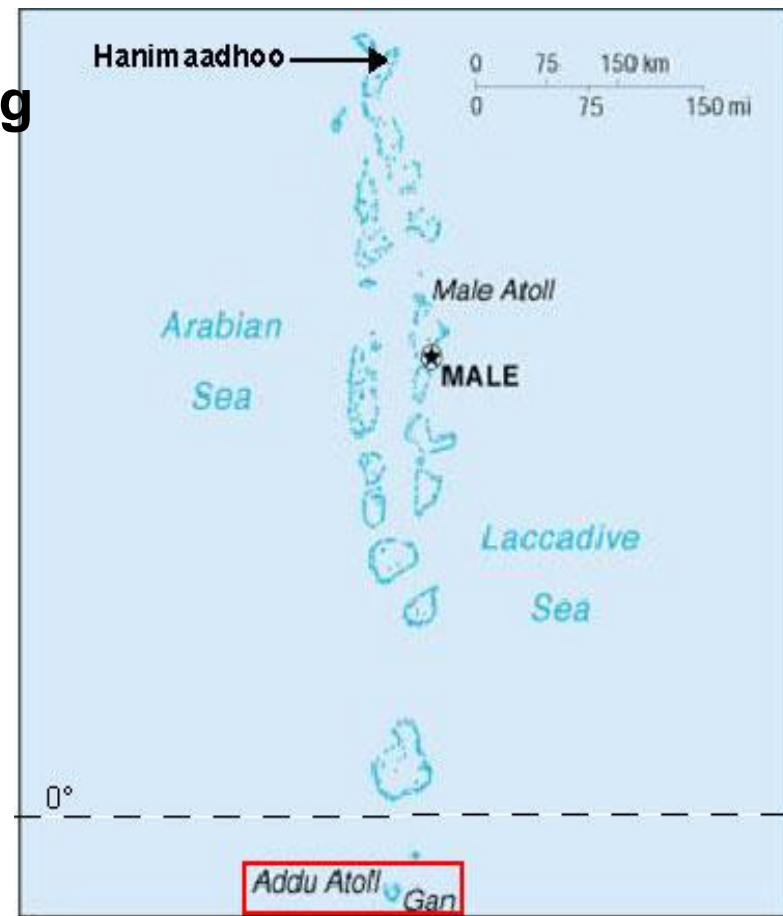
# Geography

- ✦ A chain of coral atolls 260 km long  
50- 120 km wide

Total land area:

Approx 300 sq.qm

- ✦ 25 geographical atolls
- ✦ Over 5,000 separate reefs
- ✦ 1,192 Islands
- ✦ Size from 0.5 to 2 sq.km,
- ✦ 199 inhabited islands,5 airports





# Experience of first phase

## ✿ It was found

- **Lack of adequate scientific knowledge of air pollution**
- **Lack of clear understanding of air pollution**
- **Air pollution is not clearly incorporated into the mandates of the government**



# Difficulties encountered

- ✱ **Lack of baseline data**
- ✱ **Insufficient**
  - **Technical Training**
  - **Human resource capacity**
  - **Managerial experience**
  - **In depth awareness on air pollution and transboundary air pollution**
- ✱ **Lack of institution for air pollution monitoring and regulation**



# Outcomes of the First Phase

- ✚ **Created awareness on air pollution in the Government**
- ✚ **Development of an air Pollution action plan**



# Air Pollution Action Plan

 **Monitoring**

 **Capacity Building**

 **Prevention**

 **Management**





# The Second Phase

- ✦ **Establishment of Transboundary Air Pollution Monitoring Station (HCO)**
- ✦ **Initiation of monitoring of Transboundary air Pollution**
- ✦ **Capacity Building on air Pollution monitoring and Assessment**

# ● Monitoring and Capacity Building

● Air pollution monitoring capacity is being developed at the Department of Meteorology

Department of Meteorology is currently carrying out the monitoring of the transboundary air pollution through the passive samples





# Existing policy measures

- ✿ **Second National Environment Action Plan**

- ✿ **Sixth National Development Plan**

- ✿ **National Air pollution Action Plan**

# Hanimaadhoo Climate Observatory





# Aerosol Instrumentation

- ▶ **Light Absorption** –Aethalometer, 7-wavelength
- ▶ **Light Scattering** –Nephelometer, 3-wavelength
- ▶ **Total Particle Concentration** CPC
- ▶ **Black Carbon** Aethalometer
- ▶ **Aerosol Optical Depth** –Sun Photometer
- ▶ **Size Distribution** SMPS



# Radiation Instrumentation

- ▶ **Global and Diffuse Radiation**

Pyranometers

- ▶ **Direct Radiation** Pyrhemliometer (quartz & calcium florid window)

- ▶ **Global & diffuse (400-700 nm) –**

- ▶ **Spectral Radiation (325-1075 nm) - ASD**  
FieldSpec Handheld; Grating Spectrometer

- ▶ **Meteorological Parameters**



# Plan for next 3 years

- ✦ **A new Air pollution Monitoring Station in southern Island (Gan)**
- ✦ **Vehicle emission monitoring station in Male' and in Densely populated islands**



**Thank You**