

Annual Network Meeting : 2005

Malé Declaration of on Control and Prevention of Air Pollution And Its Likely Transboundary Effects for South Asia

Presentation on the Bangladesh National Activities of
Malé Declaration



Last 3 Years of Implementation

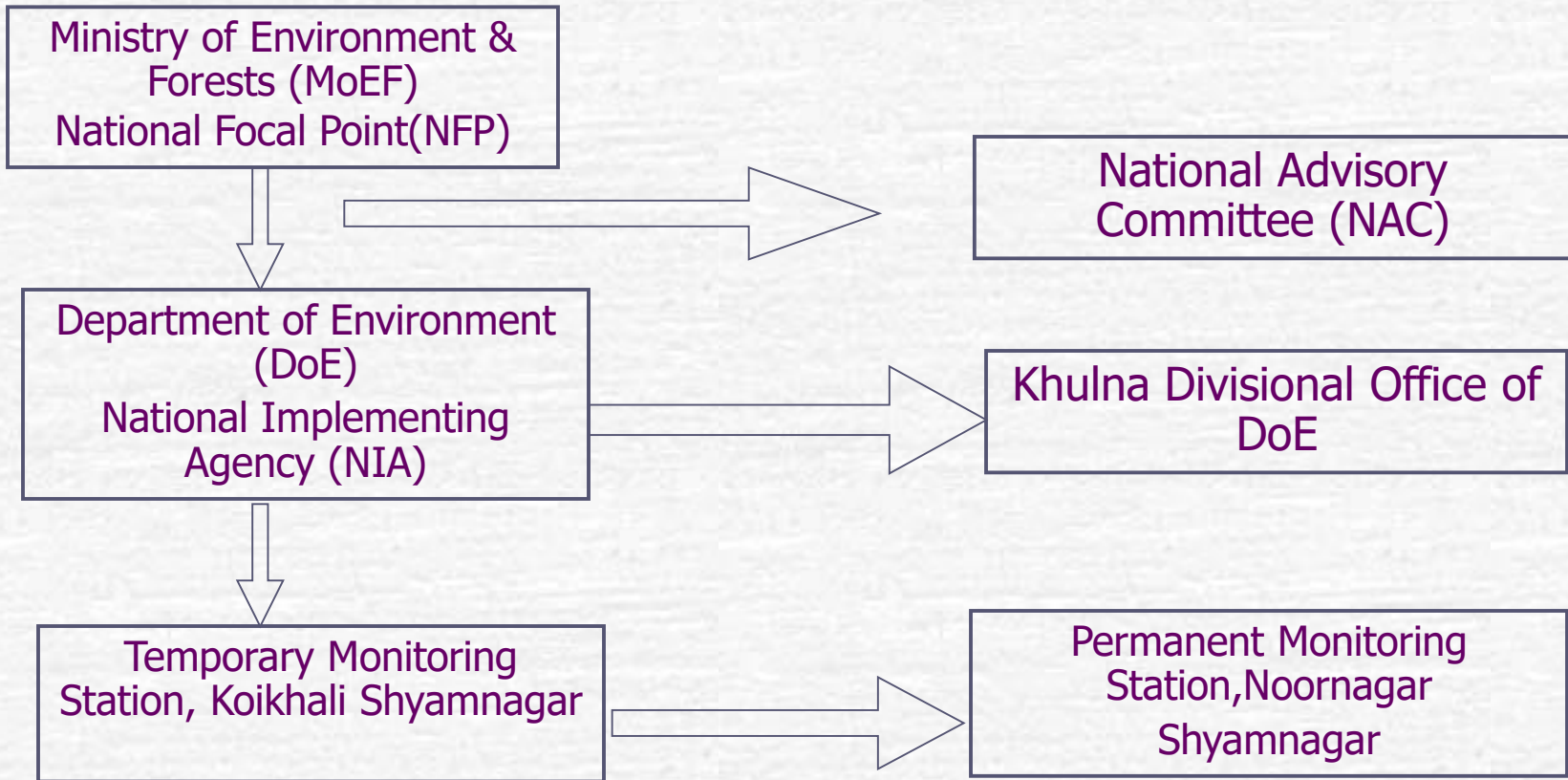
Malé Phase II Activities

- Expanding Network
- Capacity Building (Training
Supply and Installation of
equipments)



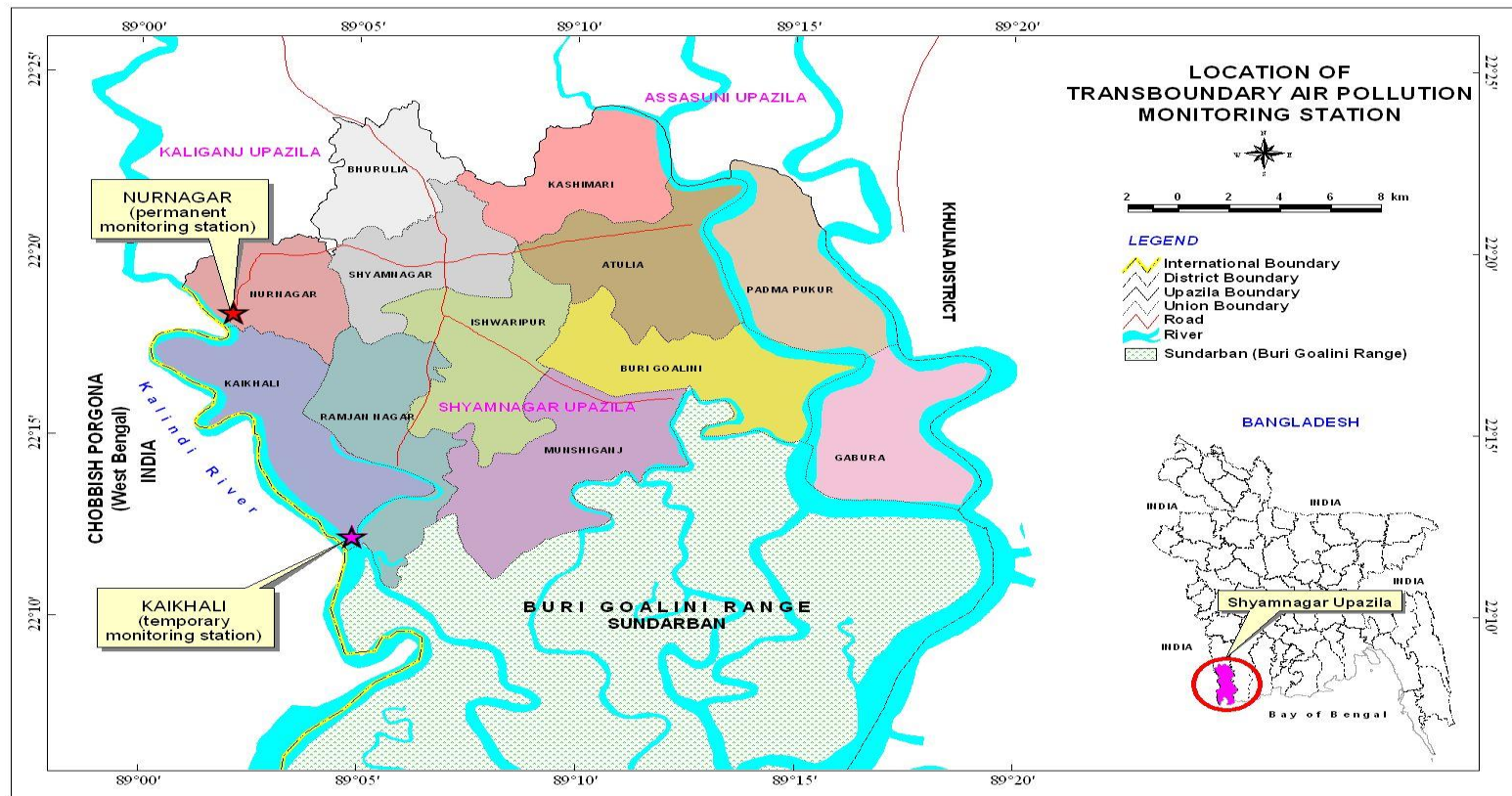
Last 3 Years of Implementation

Institutional Arrangement



Last 3 Years of Implementation

Expanding Network



Last 3 Years of Implementation

Establishment of Monitoring Site

- Selection and Finalization of Monitoring Site



MOC members visited proposed sites on 9-10-2003



Last 3 Years of Implementation

Establishment of Monitoring Site



Temporary Monitoring Station Functioning from 19 July 2004 at Koikhali Forest Office, Shyamnagar, Shathkhira



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Department of Environment

Last 3 Years of Implementation

Establishment of Monitoring Site

- Collecting rainwater by Bulk Collector



Rainwater Collection at Temporary Monitoring Site



Last 3 Years of Implementation

Establishment of Monitoring Site

- Selection and Finalization of land for Permanent Monitoring Site



Permanent Monitoring Station site at Nurnagar Union, Shyamnagar Upazila, Satkhira District



Last 3 Years of Implementation

Establishment of Monitoring Site

- 16 decimal of land was donated by a local people



Donor of the land



Last 3 Years of Implementation

Establishment of Monitoring Site

- Construction of Permanent Monitoring Site



Construction of Monitoring Site at Noornagar



Last 3 Years of Implementation

Supply and Installation of Equipments

- Received Equipments and Consumables from UNEP RRC AP
- 2 equipments (Passive Sampler, Bulk Collector) were installed at the temporary Monitoring Station
- AAS will be installed in DoE's Khulna Divisional Office Lab Shortly



Last 3 Years of Implementation

Database Completeness

- Passive Samplers were used for air quality monitoring and send to IVL, Sweden and analysis report received



Last 3 Years of Implementation

Database Completeness

Air Concentration Analysis for Passive Sampler

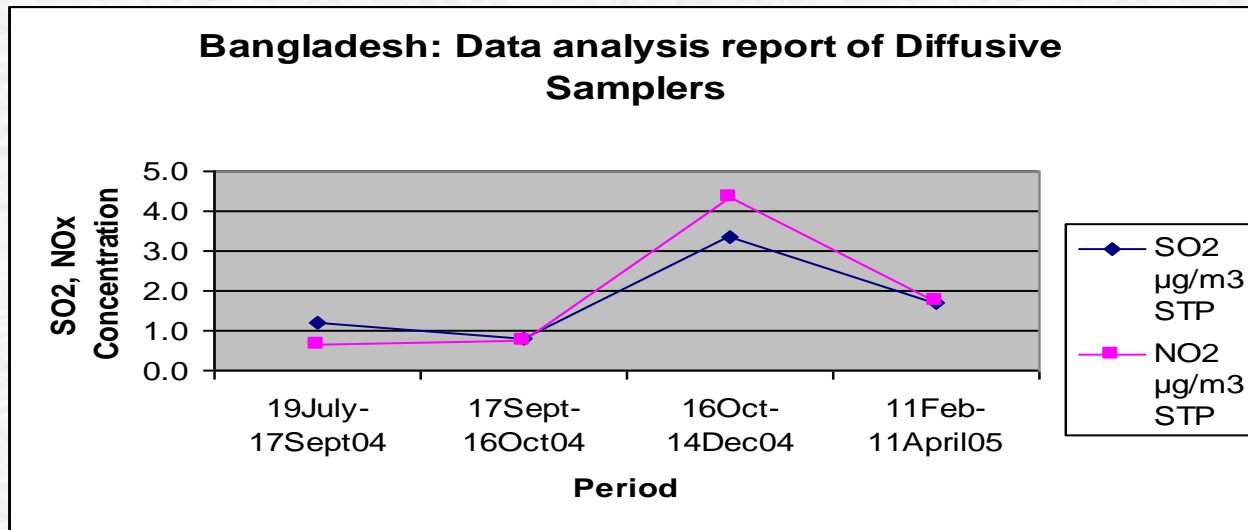
Form: (Air P)		Results of air concentration analysis (Passive Sampler)					
Site name:	Bangladesh, Stn 7					Site Classification:	
Name of Laboratory:IVL							
Unit:	$\mu\text{g}/\text{m}^3$						
Station	Sampling period		Temp C	Gas		NO ₂ $\mu\text{g}/\text{m}^3$ STP	*
	Start time	Stop time		SO ₂ $\mu\text{g}/\text{m}^3$ STP	*		
Bangladesh, Stn 7	7/19/2004 16:50	9/17/2004 16:12	29.4	1.2		0.7	
Bangladesh, Stn 7	9/17/2004 16:16	10/16/2004 15:40	29.6	0.8		0.7	
Bangladesh, Stn 7	10/16/2004 15:45	12/14/2004 8:20	27.4	3.3		4.4	
Bangladesh, Stn 7	2/11/2005 16:15	4/11/2005 11:03	24.0	1.7		1.7	
Bangladesh, Field blank	7/19/2004 16:50	8/17/2004 17:23	29.2	0.6		0.7	
Bangladesh, Field blank	8/17/2004 17:25	9/17/2004 16:15	29.6	0.8		1.0	
Bangladesh, Field blank	12/14/2004 8:25	2/11/2005 16:13	20.0	5.5		3.9	
STP=Standard Temperature and Pressure 20C 1013hPa							
*Status: b = below detection limit							



Last 3 Years of Implementation

Database Completeness

Air Concentration analysis for Diffusive Sampler



Last 3 Years of Implementation

Capacity Building

- 2 officials of DoE attended the Training on Technical issues during 20-24 May 2002 at AIT, Bangkok
- 4 officials of Department of Environment attended Training Programme at CPCB, India in two batches



Last 3 Years of Implementation

Capacity Building

- In Country Training Organized from 19-23 October 2003



Last 3 Years of Implementation

Formation of National Advisory Committee

Joint Secretary, MOEF, Convener.

Representative from BMD

Representative from DoF

Representative from BAEC

Representative from Department of Science, KU

Representative from Department of Chemistry, DU

Representative from Department of Microbiology, DU

Representative from IMED

Representative from FF&L wing of Planning Commission

Representative from CEN

Representative from FBCCI

Representative from BARC

Representative from SRDI

Project Director, Member Secretary



Last 3 Years of Implementation

Challenges and difficulties

- Establishment of Temporary & Permanent Monitoring Site
- Retaining Manpower
- Supply of electricity at the Permanent Monitoring Site



Plan for Next 3 Years

Institutional Arrangement Plan

- Will remain almost same as per last 3 years
- Regular meeting of the National Advisory Committee (NAC) will be organized
- Laboratory under Khulna Divisional Office of DoE will be developed to provide laboratory support
- Local level Monitoring Committee may be formed



Plan for Next 3 Years

Monitoring Plan

- Existing temporary station at Koikhali will be shifted to permanent monitoring station
- Installation of equipments in the permanent monitoring station and make it fully operational
- Laboratory under Khulna Divisional Office of DoE will be developed to provide necessary Laboratory support to the Malé Monitoring Activities



Plan for Next 3 Years

Monitoring Plan

Following parameters may be included at the permanent monitoring station at NoorNagar :

Air Quality Parameters

- PM₁₀ (Particulate matter having a diameter of $< 10\mu\text{m}$)
- Total Suspended Particulate Matter (TSPM)
- Sulphur Dioxide (SO₂)
- Nitrogen Dioxide (NO₂)

New Station may be set up, if fund is available



Plan for Next 3 Years

Plan for emission inventory and modeling

- Emission Inventory and modeling may be done following Emissions Inventory Manual and associated software
- Training will be required for Emission Inventory Preparation Team



Plan for Next 3 Years

Plan for Impact Assessment including proposed institution

Health Impact :

- Estimating total impact
- Health Studies

Proposed Institution :

National Institute of Social & Prevention Medicine (NIPSOM), Mohakhali, Dhaka



Plan for Next 3 Years

Plan for Impact Assessment including proposed institution

Crops Impact :

- Mapping Risk and using Indicator Plants
- Assessing Yield Reduction

Proposed Institution :

- BSMR Agriculture University, Shalna, Gazipur



Plan for Next 3 Years

Plan for Impact Assessment including proposed institution

Corrosion Impact :

- Exposing to samples on racks
- Exposure to Kits
- Stock at risk study

Proposed Institute :

- Department of Chemical Engineering, Bangladesh University of Engineering & Technology (BUET), Dhaka



Plan for Next 3 Years

Plan for Impact Assessment including proposed institution

Acidification Studies :

- Mapping sensitivity of soils/ ecosystem to acidification
- Time development of acidification

Proposed Institution :

- Soil Research Development Institute (SRDI), Savar



Thank You



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