



"Malé Declaration on Control and Prevention of Air Pollution and Its Likely Trans-boundary Effects for South Asia"

MAIN OBJECTIVES

- To promote the establishment of a scientific base for prevention and control of Transboundary air pollution in South Asia to encourage and facilitate coordinated interventions of all the stakeholders on Transboundary and shared air pollution problems at national and regional levels.

IMPLEMENTATION IN FOUR PHASES

- Phase I (1999 - 2000) – Baseline information on air pollution and awareness raising
- Phase II (2001 - 2004) – Capacity building
- Phase III (2005 - 2009) – Tackling air pollution problems
- Phase IV (2010-) – Enhance Regional Cooperation

Tasks for Phase-I

The Tasks Assigned to the NIAs under Phase-I of the Malé Declaration (July 1998 to February 2000) are given below:

- To Carry out a Baseline Study
- Compilation of Expert's Database
- Create a Database on Air Pollution
- Formulation of a National Action Plan to Cope with the Air Pollution.

Implementation Status Phase-I

- A Country Report Containing the Baseline Report, National Action Plan, Database, Maps and National Emission Inventory was compiled in July, 2000 and forwarded to UNEP
- A Network of Institutions establishment, baseline studies and action plans were coordinated by Regional Resource Centre for Asia and the Pacific (RRC-AP) of UNEP, Bangkok in collaboration with all member countries of SACEP.
- Baseline studies and action plans (including Pakistan) were reviewed in year 2000 at Bangkok and agreement reached on the Phase-II of the project.

Tasks for Phase-II

- Selection of sites for setting up monitoring stations.
- Provision of required equipment by UNEP-AP.
- To Install the Monitoring Stations by February, 2004.
- To organize a one week in-country training programme for all the technicians supposed to carry out the installation of monitoring equipment.
- Monitoring results of the air may be reported to RRC.AP on monthly basis from March, 2004.
- To organize a national stakeholders meeting in Pakistan by February, 2004.

Implementation Status Phase -II

- Monitoring Station has been Installed at Bahawalnagar
- Ambient Air Monitoring Equipment installed for Particulate Matter (PM10 & TSPM)
- Wet Deposition Monitoring Bulk Collector was Installed of
- Wet Only Collector was Installed
- Diffusive Samplers (for NO2, SO2 & O3) installed according to the Monitoring Protocol
- Established Laboratory for Analysis of Basic Parameters of Field Samples Collected from Dry & Wet-Only Collectors

Visit of Monitoring Station at Bahawalnagar



Fixing of Wet-Only Collector



Fixing of Bulk Collector



Fixing of High Volume Air Sampler



Fixing of Diffusive Sampler



Training Imparted to Meteorological Officials

- Basic Training was Imparted to PMD Officials Second Time at Bahawalnagar (Punjab Province) to Improve their Skills & Expertise for the Following Aspects:
 - Wet Deposition Monitoring
 - High Volume Air Sampler (HVAS) Operation & Calibration
 - Bulk Collector Sampling
 - Diffusive Samples Monitoring
 - Monitoring Intervals & Data Reporting
 - Good Laboratory Practices
 - Equipment Calibration
 - Water Distillation Preparation & Usage

Training on Air Sampler



Training on Air Sampler



Training in Laboratory



Training on Wet-Only Collector



Tasks under Phase-III

- Continue to promote the establishment of scientific base for prevention and control Transboundary air pollution in Pakistan as part of regional initiative in South Asia.
- The National Advisory Committee (Ac) established during Phase II implementation will meet, at least once in a year, at national level and advise NIA and other organization involved in monitoring exercise.
- Participate by the NIA project Coordinator of the Male Declaration Secretariat
- Regularly report the monitoring results in digital format to RCC.Ap for the centralized database, which is maintained at Secretariat.

Task under Phase III.....Cont.

- Provide guidance and nominate an expert institution for the development of regional integrated modeling and atmospheric transport capabilities.
- Nominate an expert institution for the crop impact assessment and conduct rapid integrated assessment.
- Provide guidance and nominate an expert institution to conduct the corrosion impact assessment programme.

Implementation Status Phase-III

- Participated in capacity building programmes at National and Regional Level on Monitoring.
- A study on impacts of particulate air pollution on the respiratory health of school children was carried out in Pakistan.
- Established continuous air quality monitoring system in federal and provincial capitals and upgraded EPAs laboratories with collaboration of JICA

Phase III

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- About 2.5 million vehicles converted to CNG and 3,331 CNG stations were set up in the country.
- The largest number of CNG stations in the world
- Reduction of Sulphur in diesel from 1% to 0.5% and further reduction to 0.05% by 2012.
- Adaptation of EURO-II Emission standards for new vehicles effective from 2009 for gasoline vehicles and 2012 for diesel vehicles (delayed till 2014 due to non-availability of Euro-II compliant diesel).

Tasks under Phase-IV

- Phase IV will continue to assist the member countries enhance their regional cooperation, monitoring, impact assessment; strengthen the initiatives started in the first three phases and to initiate new ones. A Task Force is proposed, to plan the future of the MD to consider the expanding network.

Implementation Status Phase-IV

- Government of Pakistan in collaboration with IUCN established Pakistan Clean Air Network (PCAN) in 2005 with the assistance of ADB in 2005. It aims to address air quality issues in Pakistan and promote better air quality management (AQM) practices in urban centers by awareness raising, capacity building and provision of a broad knowledge base for AQM.
- Pakistan is actively working with "Partnership for Clean Fuels and Vehicles (PCFV)" and "Clean Air Initiative for Asian Cities (CAI-Asia) Center", Manila to promote better air quality and reducing air pollution and greenhouse gas emissions from transport, energy and other sectors.

Thanks

Contact # +92-51-9245548
 Fax # +92-51- 92645549
 Email: dilshadbabar@hotmail.com
 Website: www.mocc.gov.pk