

# Institutional Challenges to the Implementation of the Bangladesh Air Quality Management Project

**Rehana Akhter**  
Project Director  
Department of Environment



Department of Environment

**Derek Langgons**  
Project Consultancy Co-ordinator  
SMEC International Pty Ltd



Better Air Quality Workshop 2002

Wan Chai, Hong Kong, 16-18 December, 2002



Department of Environment



## The Air Quality Management Project


- The AQMP is a project being implemented by the Department of Environment (DoE) under the Ministry of Environment and Forest, jointly funded by the Government of Bangladesh and the World Bank.
- AQMP commenced in August, 2000 and is due for completion in December, 2004.
- The project is a learning and innovation loan and aims to develop capacity in DoE for improved air quality management.

Department of Environment

SMEC

## AQMP Objectives

- The AQMP's primary objective is to develop components of an air quality management system to reduce human exposure to air pollution.
- The current focus area of the project is Dhaka. However, this will be extended to other urban areas of Bangladesh in the future.



Better Air Quality Workshop 2002 ..3

Department of Environment


SMEC

## AQMP Activities

Two primary components



Component 1: Vehicle emissions reduction component

- Revise vehicle emission standards for new registration as well as in-use vehicles
- Enforcement of the standards
- Pilot programs such as auto clinics for vehicular emissions control.



*In-use vehicle emission testing*



Better Air Quality Workshop 2002 ..4

Department of Environment   **Component 2: Air quality monitoring and Evaluation**

---


- Measurement and assessment of current ambient air quality
- Revision of ambient air quality standards
- Development of a daily air pollution index
- Development of a comprehensive air quality management plan
- Integrated public awareness campaign and education strategy including the development of air quality information for the DoE website.

Better Air Quality Workshop 2002 ..5

Department of Environment   **AQMP Implementation**



---

- Implementation of the AQMP has not been easy.
- Air quality management is a relatively new field in Bangladesh and this project aims to develop sustainable capacity. This cannot be achieved quickly.
- We have selected 5 institutional challenges facing the project to discuss today.



*AQMP Continuous Air Monitoring Station*



Better Air Quality Workshop 2002 ..6



## Challenge 1 : Stakeholder Involvement

- Our project requires input and co-operation from a large number of agencies and stakeholders. There are many levels of government and various departments with separate areas of responsibility.
- In order to ensure effective input and co-operation, AQMP needs to not only develop capacity within DoE but also within our stakeholders.
- This is particularly critical in areas such as fuel quality and vehicular use where DoE is not the regulating authority.
- Co-ordination and consultation with stakeholders can be difficult.
- Infrastructure for communications is poor. Many stakeholders do not have access to email.



Better Air Quality Workshop 2002 ..7



## Challenge 2: Human Resources

- AQMP has approximately 30 technical staff positions. However, it is difficult to attract staff and even more difficult to keep trained staff from moving into the higher salaried private sector.
- AQMP is a capacity building project focused on training and institutional development. Loss of trained staff could significantly impact project sustainability.



Better Air Quality Workshop 2002 ..8



## Challenge 3: Policy Development


- There is currently no well defined air quality management policy in Bangladesh. Current air quality and vehicle emission standards need to be reviewed.
- Stakeholder consultation, cost-benefit analysis, socioeconomic impact analysis, compensation and policy review are concepts that are relatively new and these need to be considered by AQMP during policy development and implementation.

Better Air Quality Workshop 2002 ..9





## Challenge 4: Data Management

- Effective air quality management requires accurate and relevant data on a variety of issues such as vehicle registrations, meteorological observations, fuel consumption, etc.
- As in many developing countries, Bangladesh is still developing computerized data collection and management systems. Obtaining data is a challenge. If data is available, it is often outdated and not available electronically.




Better Air Quality Workshop 2002 ..10





## Challenge 5: World Bank Procurement

- World bank procurement methods require IT based processes. Project staff trained in IT processes and procurement are necessary. Bidders need to also be experienced with these bidding procedures. Otherwise, this can cause the procurement of goods, and especially services for the project, to take considerable time.
- Determining the required resources for future activities of the project can be a challenge as these activities are often reliant upon staff development and stakeholder co-operation.



Better Air Quality Workshop 2002 ..11





## Overcoming the Challenges

How is AQMP trying to overcome these challenges?

- Regular stakeholder consultation. Identifying stakeholders and developing relationships with key people. Email where available.
- Technical workshops, focus groups and general discussions to develop stakeholder capacity.
- Preparing discussion papers for circulation to stakeholders prior to workshops.
- Providing a challenging and exciting working environment with regular training to minimize the loss of trained staff from the project.



Better Air Quality Workshop 2002 ..12



## Overcoming the Challenges

- **Development and implementation of detailed but simple procedures and accurate record keeping to help new staff to integrate more quickly.**
- **Promoting improved policy development through stakeholder consultation, identifying potential policy benefits and implications, preparation of regular briefing material for senior policy makers and indirectly through improved public awareness.**
- **Procurement based on actual forecast capacity to ensure most efficient use of resources.**
- **Implementation of enforcement strategies to ensure the outcomes of policy decisions.**

Better Air Quality Workshop 2002 ..13



## Conclusions

1. **Air quality management is a new field in Bangladesh. The AQMP will help to improve the institutional capacity for monitoring and managing air quality in Bangladesh.**
2. **The magnitude of the air pollution problem in the urban areas is significant and therefore the demand for results from the project is understandably high.**
3. **The challenges we have outlined, as well as other institutional challenges in Bangladesh, must be overcome if effective air quality management capabilities are to be sustainable.**

Better Air Quality Workshop 2002 ..14