

STRENGTHENING INSPECTION AND MAINTENANCE IN ASIA

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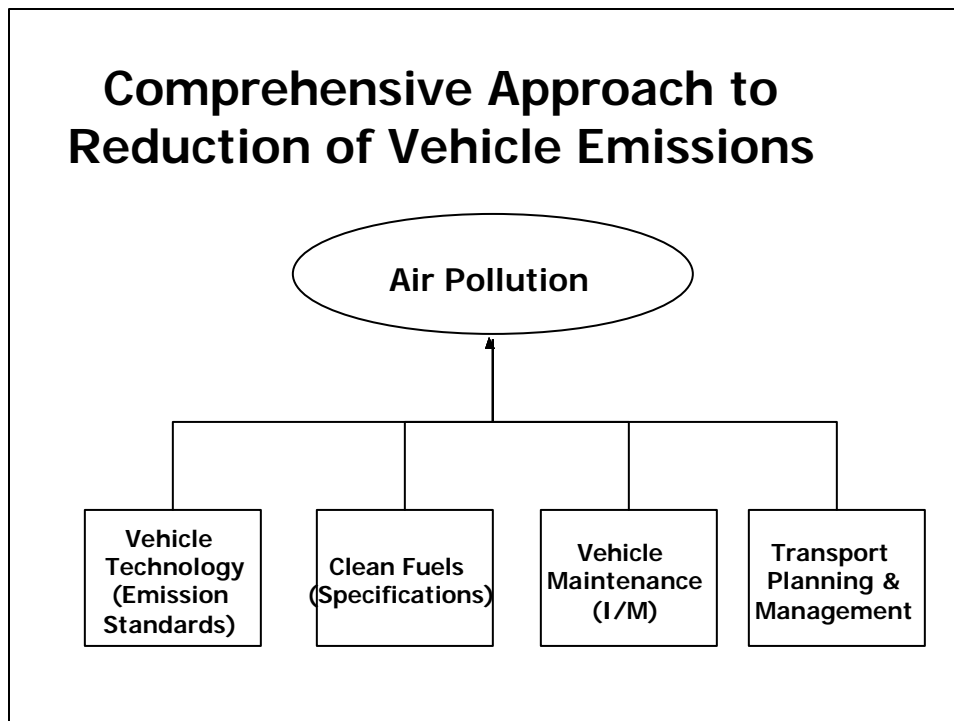
Synthesis Chongqing Workshop

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Background (1)

- † Presentation is based on RETA workshop on Inspection and Maintenance in Chongqing, PRC, 7-9 November, 2001
- † Workshop had about 130 participants from 15 countries in Asia representing government, private sector and NGOs
- † Focus in this presentation in on Environmental dimension of I&M



Emission standards (1)

- † Tightening of new vehicle emission standards is most effective way to reduce mobile source pollution over time
- † I&M programs assure maximum benefits of new vehicle standards by assuring proper maintenance
- † I/M or in-use emission standards need to be linked to type approval standards for new vehicles.

Emission standards (2)

- † Majority of Asian countries follow ECE (Euro) standards, but at different speeds
- † No regional discussion on harmonization of standards
- † Some new vehicles in Asia are now potentially cleaner than required by country standards but poor fuel quality makes it difficult to realize maximum reductions in emissions
- † Poor fuel quality major impediment to quicker adoption of tighter new vehicle standards

Emission standards (3)

- † Motor cycle standards very important in Asia
 - Some Asian MC standards more stringent than Europe and USA (especially India, Thailand and Taipei, China)
 - More Work Needed To Develop Good MC I&M Test
- † No proper link between in-use standards and new vehicles emission standards in some countries
- † In-use standards should become increasingly differentiated as tighter new vehicle standards are phased in
- † If in-use standards too strict emerging I&M systems will face problems

Inspection and Maintenance - set up -

- † Centralized (Test Only) system whereby Inspection is separate from maintenance works best, yet several Asian countries ignore these lessons of experience and go for decentralized or hybrid systems
- † Private sector is best qualified to implement I&M system regulated by government

Inspection and Maintenance - Institutional Arrangement -

- † Success of I&M in Asia will depend on support of senior decision makers and institutional capacity to manage and regulate the system
- † I&M works best if linked to annual registration of vehicles
- † Mixed responsibilities for I&M often results in conflicts between Dept. of Environment and Dept. of Transport

Inspection and Maintenance - Technical Issues -

- † Trend towards “loaded test” to measure compliance with tighter standards, this will require major overhaul of many existing I&M stations
- † Technical quality of I&M systems run by government is often weak
- † More technical knowledge is now available, yet policy makers in Asia are often not well informed

Inspection and Maintenance - Quality Assurance + Audit -

- † To control corruption and assure quality a well established QA and audit is essential
- † Computerized systems are the future
- † Governments often lack capacity to regulate well and to carry out QA
- † QA and audit best done by independent groups reporting to government
- † Often no effective procedures against corrupt inspectors

Inspection and Maintenance - Public Participation-

- † Public perception on effectiveness and transparency of I&M will determine willingness to cooperate in I&M system
- † Few countries in Asia have effective, sustained awareness raising campaigns on I&M
- † Performance standards are required for I&M stations that guarantee fast and reliable tests

Inspection and Maintenance - the "M" in I&M -

- † It is the "M" that actually reduces pollution not the "I", yet in most Asian countries few efforts are made to improve quality of maintenance
- † "M" industry needs to be active partner in discussion on I/M programs
- † Referee stations are required to offer second opinion to vehicle owners

Inspection and Maintenance - Road Side Testing -

- † Roadside testing can compliment I&M but not replace it
- † Roadside testing good to keep public focused on issue of vehicle pollution
- † Roadside testing should be focused on gross polluting vehicles
- † Roadside testing difficult to oversee and more open to corruption
- † Remote Sensing emerging as a good complement to I&M

Inspection and Maintenance - Cost Effectiveness + Impact -

- † More stringent emission standards are more effective in long term, I&M can have larger short term impact
- † Although I&M is increasingly used as instrument to reduce pollution no efforts are made to quantify environmental impact
- † Little is know about actual cost-effectiveness of I&M systems in Asia

Alternative Approaches to Reduce emissions from in-use Vehicles

- † Retrofit program (if sound technology is used which includes catalyst) combined with I&M and appropriate fuel
- † Entry Bans on polluting vehicles
- † Fuel additives can have impact provided no new pollutants are introduced
- † Age limits and phase out programs for gross polluting vehicles