

Opportunities and Bottlenecks in Recognizing Co-benefits in Developing Countries

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New Delhi, India

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air pollution ↑

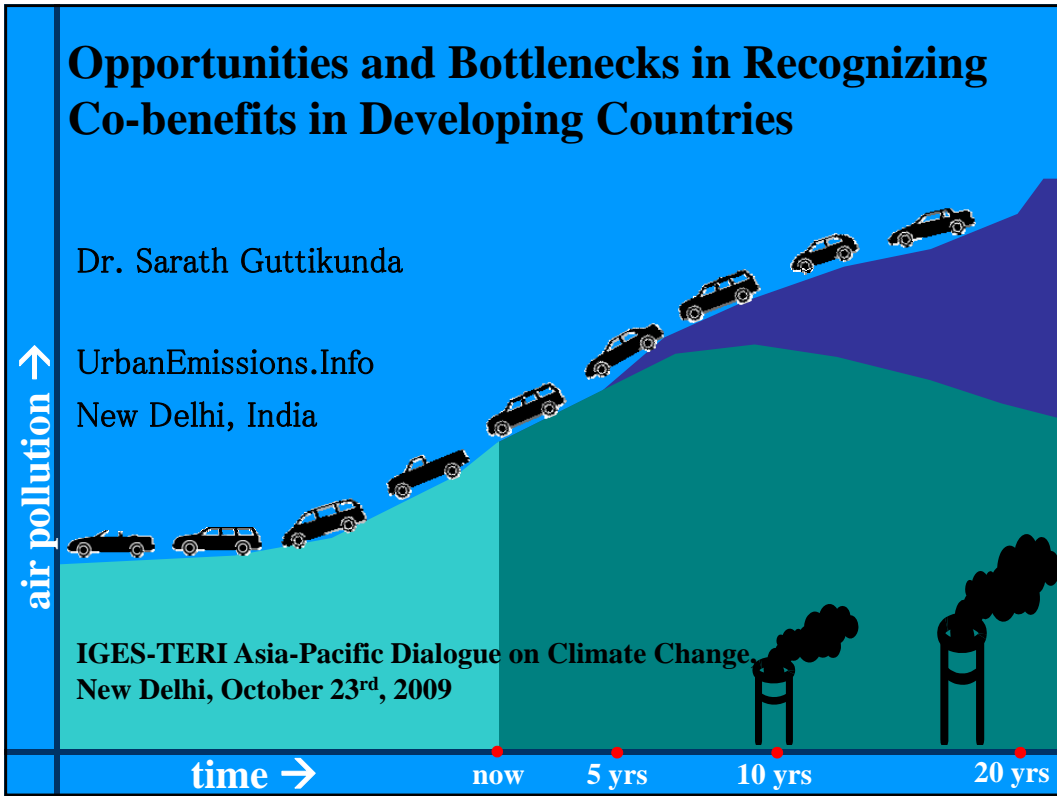
time →

now

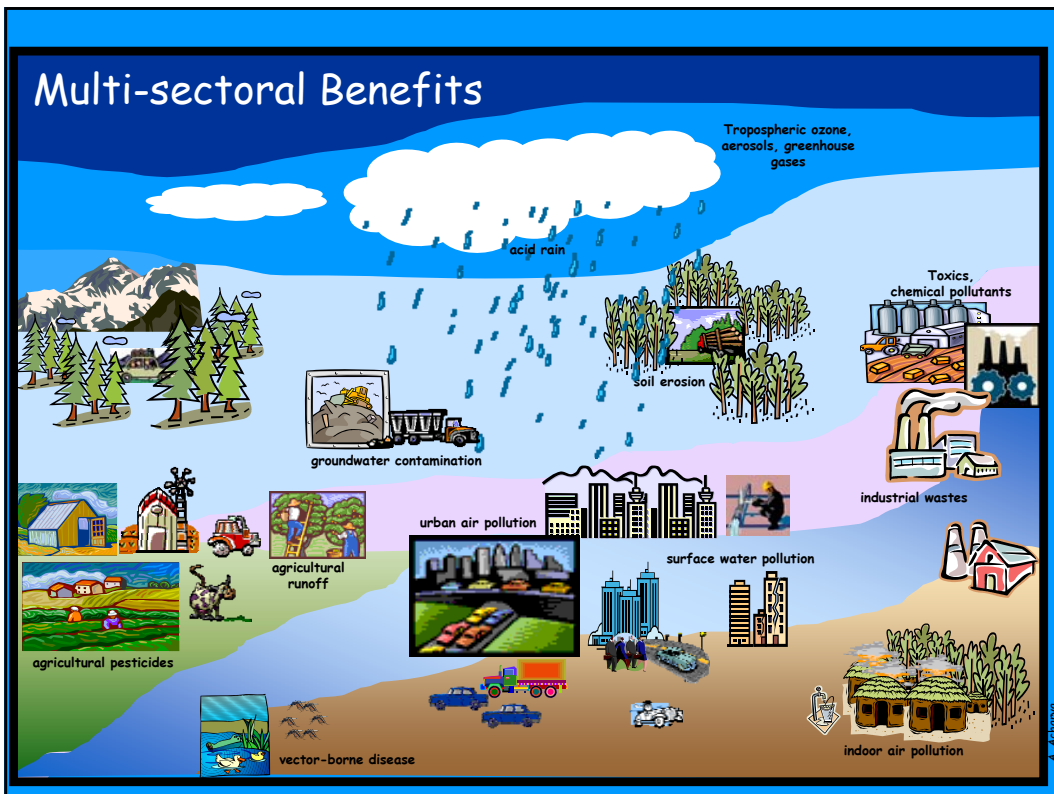
5 yrs

10 yrs

20 yrs



Multi-sectoral Benefits

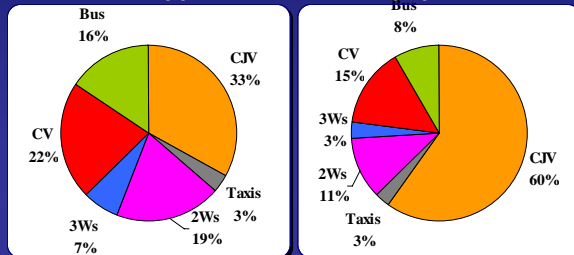


Delhi: Metro Rail



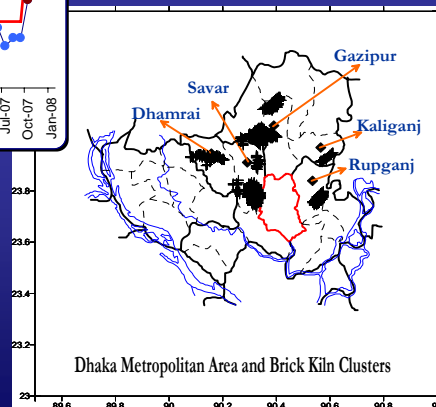
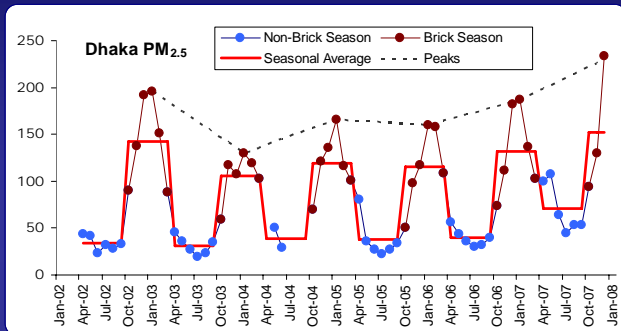
Planned for
65 + 125 km

10% drop in 2010 PM₁₀ & CO₂ Emissions



@ www.urbanemissions.info/applications

Dhaka: Brick Kilns



Source: SIM-air Series No.21 "Impact of Brick Kilns on Air Quality"

Ulaanbaatar: Stoves



@ www.urbanemissions.info/ulaanbaatar

Opportunities for Co-Benefits

- Clean fuel for domestic sector
 - Indoor air pollution & black carbon
 - Heating only boilers to central heating
- New technologies for power plants
- Fly ash control to brick making
 - Approved CDM methodologies
- EE for building material
 - Brick & Cement
- Transport sector
 - Clean fuels
 - Non-motorized transport
 - Maintenance programs

Way Forward

An integrated approach for “co-benefits” could be in the common and world-wide accepted definition of “air pollution”, which refers to

- all kind of pollutants (primary and secondary)
- all kind of sources (anthropogenic and natural)
- all kind of consequences (short- and long-term, short- and long-distance, direct and indirect, public health and ecosystem).

Science & Policy Workshop on AP & CC, Sweden, October, 2009

Stumbling Blocks

- Separate administrative jurisdictions and lack of comprehensive planning
- Rigid procurement rules
- Lack of scaling-up and replication of best practices
- Lack of information on baselines and options

300 cities >2 m pop by 2025 +
thousands of Secondary Cities



Source: Google Earth & www.demographia.org

Thank you

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