National Stakeholders' Meeting on Male Declaration on Control and Prevention of Air Pollution and Its Likely Trans-boundary Effects for South Asia

# Air Pollution Management and the Role of Stakeholders

Prof. Rabindra Nath Bhattarai

Director

Center for Pollution Studies

Institute of Engineering

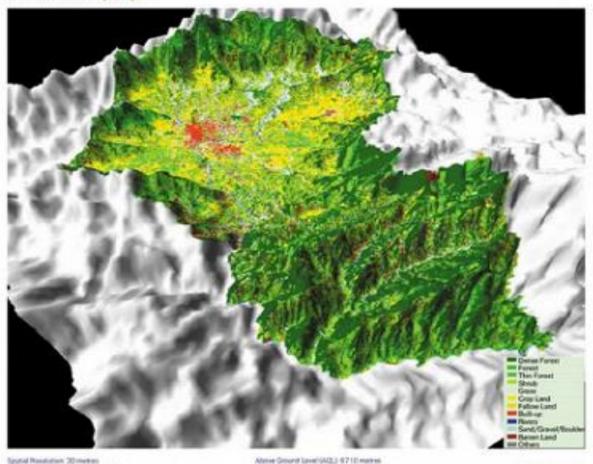
**October 4, 2008** 

#### Nepalese Scenario

- Fleming(1970) stated " air pollution may become a serious problem for kathmandu valley in the future, the combination of the "basin effect" with the lack of much air movement in the valley predisposes the region to troubles,
- Now, Air pollution is a serious problem in Kathmandu valley. Particulate matter concentration often exceed threshold value at which human health is severely affected.

#### Geographical view of Kathandu.





Spatial Resistants 20 meters Date Acquirest, 11th Scholer, 1988 Sehenold Surrent Zone 45 Setum Sweet Above Sound Spren(AA2) 6715 mother Above Ses Lover AA01 8000 cosess Failuld Serv 9'0'0' 75 dagses. Aboveth 35 degrees Exaggination 4



#### Sources of Air Pollution

- Re-suspension
- Automobiles
- Industries
- Brick kilns
- Ground level ozone
- Migrated TSP (Trans boundary)

# Effects of Air Pollution

- Health
  - Direct
  - 2. Indirect
- On Vegetation & Materials

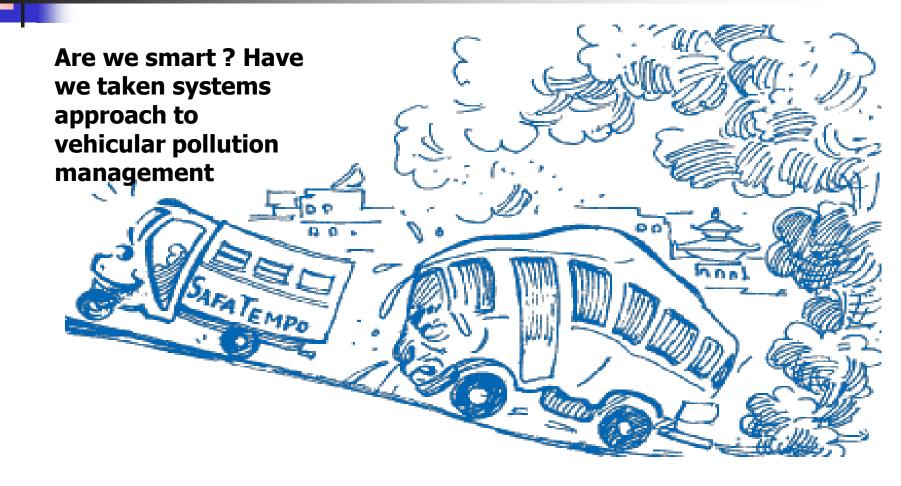


- Stickers to automobiles
- Legislation regarding Bull Brick Kiln 2004
- Remove of Diesel Tempo & implementation of Safa Tempo.

## Failures

- Question on Green Sticker's process
- No upgrading of National Standard
- No upgrading of Traffic management
- No upgrading of Roads

#### **Failures**





#### Roles of Stakeholders

- Awareness
- "Will" to have low pollution
- Demand for pollution free environment
- Economy to sustain pollution free environment
- Values education

#### **The Millennium Development Goals**

"We will have time to reach the Millennium Development Goals — worldwide and in most, or even all, individual countries — but only if we break with business as usual.

We cannot win overnight. Success will require sustained action across the entire decade between now and the deadline. It takes time to train the teachers, nurses and engineers; to build the roads, schools and hospitals; to grow the small and large businesses able to create the jobs and income needed. So we must start now. And we must more than double global development assistance over the next few years. Nothing less will help to achieve the Goals."

**United Nations Secretary-General** 

#### The Goals

- Eradicate Extreme Poverty and Hunger
- Achieve universal primary education
- Promote Gender equality and Empower women
- Reduce child mortality
- Improve maternal health
- Combat HIV/AIDS Malaria and other diseases
- Ensure environmental sustainability
- Develop a global partnership for development



- Integrate the principles of sustainable development into country policies and programmes; reverse loss of environmental resources
- Reduce by half the proportion of people without sustainable access to safe drinking water
- Achieve significant improvement in lives of at least 100 million slum dwellers, by 2020

#### The key is the sustainable development

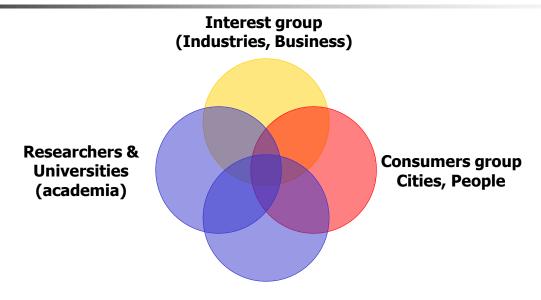
- Sustainable Development
- How do we plan for, design systems, and eventually achieve sustainable development?
- The answers to this question links all stakeholders to the common goal of Air Pollution Management

#### Who are the stakeholders

In matters of air pollution, everybody who breathe air is a stake holder. However, they can be broadly classified as:

- Cities (Municipalities)
- Corporate offices (Business)
- Governments
- Industries
- Social groups (People)
- Universities

### Grouping of the stakeholders on the basis of the primary functions



**The Government** 

The immediate priorities of different groups may seem conflicting but it is the four groups that must work together for pollution management with the ultimate tool of compassion towards nature arising out of value education

### The activity Matrix

Groups	Major activities				
Business/Indu stries	Produce	Promote	Develop	Distribute	
Academia	Research	Develop	Educate	Create awareness	
Consumer	Understand	Demand	Appreciate	Differentiate	
Government	Coordinate	Facilitate	Resource distribution	Awareness	Promote

#### The motive

- Pollution and Effect on the quality of life
- Pollution and effect on Health
- Pollution and Effect on Trade
- Pollution and Effect on National earning
- Pollution and effect on Future generation

#### The future trend

- Can not curtail development for fear of pollution
- Can not ignore pollution in developmental efforts
- The only approach is the sustainable development, not only in financial terms but in environmental terms also

#### What is common

- Ourselves, part of nature
- Understand how nature works
- Understand that it does not pay to try to be "smart" with nature
- Cooperate with nature
- Respect nature
- Have compassion to nature that amounts to having compassion to all lives



### Thank you