

# Greening India's National Accounts

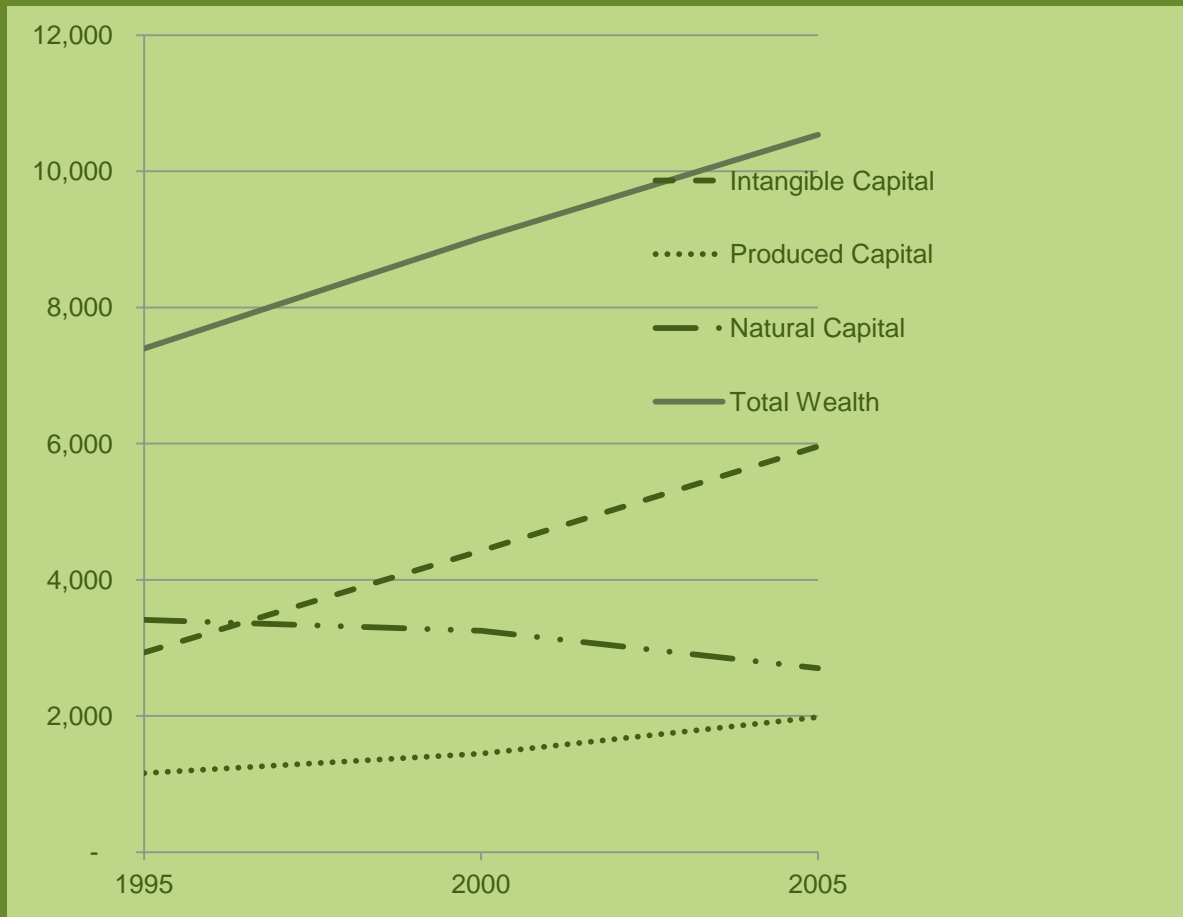
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South Asian Network for Development and Environmental Economics

# Economic Development in India

- GDP : \$3.92 trillion – 4<sup>th</sup> largest economy (2010 in PPP terms)
- 2000–01 to 2007–08: Real GDP growth averaged 7.3 per cent per annum
- Is India's growth sustainable?

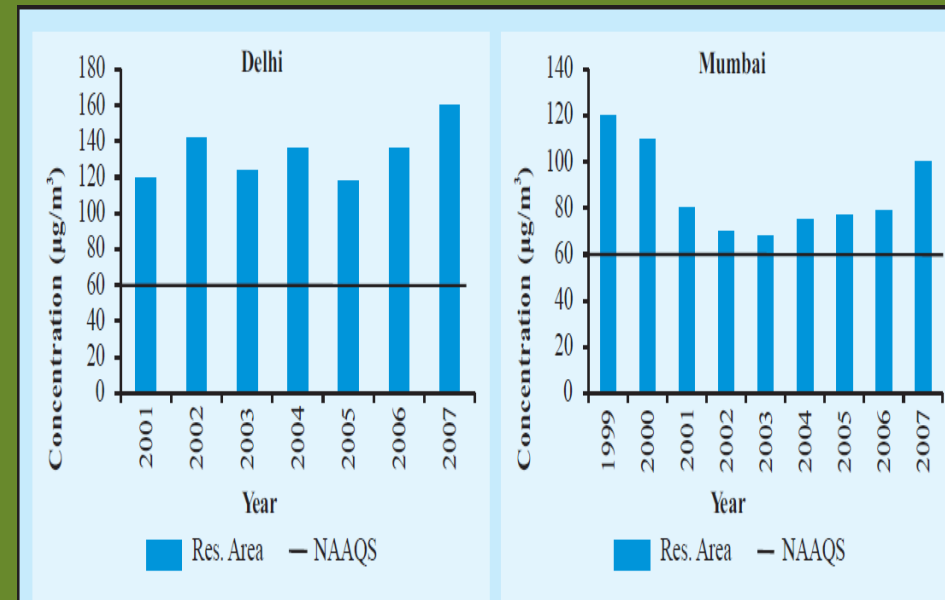
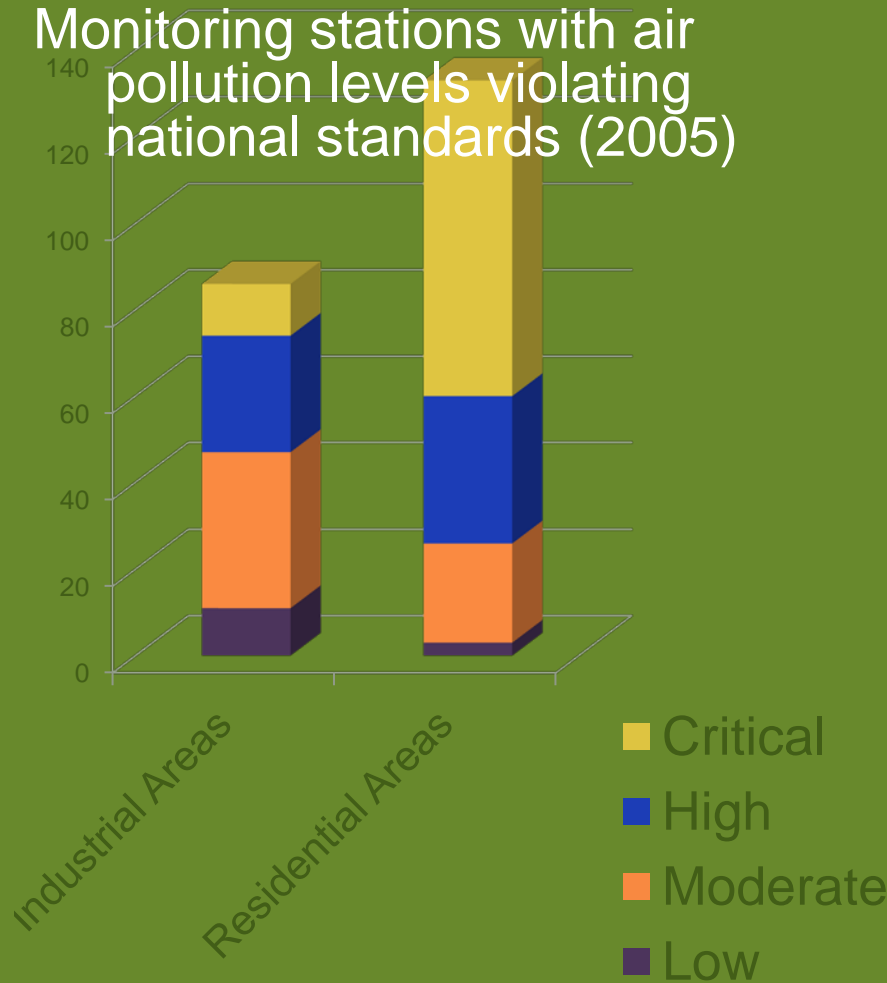
# Wealth per capita (USD 2005), India (World Bank)



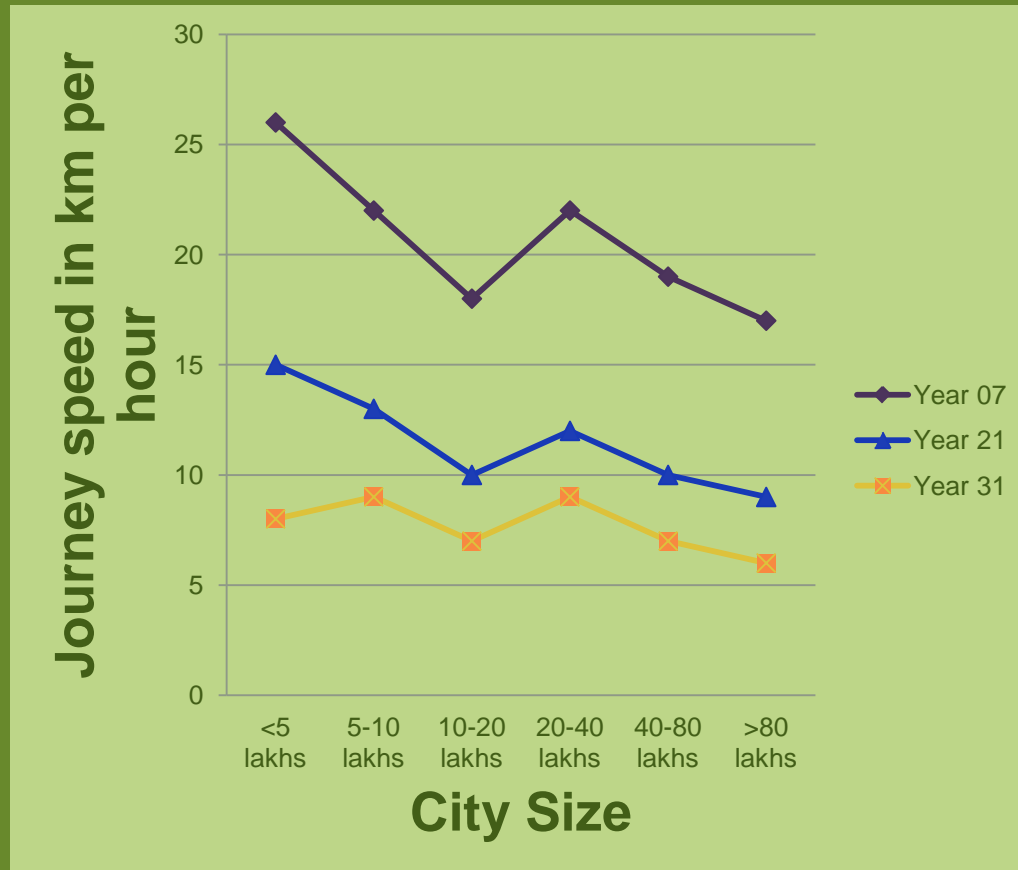
- Limited data -- only 3 data points
- Wealth per capita is growing in India – this is good
- Growth in physical and intangible wealth per capita is at the cost of a decline in natural capital – this is not so good

# Trends in respirable particles (State of the Environment Report, 2009)

Monitoring stations with air pollution levels violating national standards (2005)



# Urbanization trends



- 28% of the population is urban (2001 census)
- 87 big cities expected to grow by 66% by 2031
- Between 1995-2005 – B'lore and Chennai increased vehicles by 50%

Congestion (Journey Speed) in Indian cities

# Air Pollution has Welfare Impacts

Study	Year	Morbidity (M) or Pre-mature Mortality (PM)	Annual costs per Capita (USD)	Annual aggregate savings from reductions to safe standards (USD)
Murty et al. (Delhi)	2002	M +PM	89	1,142 mill
Murty et al. (Kolkata)		M + PM	54	772 mil
Gupta (Kanpur)	2008	M	3	5 million
Chowdhury and Imran (Dhaka)	2010	M	4	34 mill

- Contributes to pre-mature mortality and morbidity
- Aggregate costs across cities can be substantial

# Greening National Accounts India

- Championed by the Minister of Environment
- Operationalized under the Ministry of Planning and Implementation (Central Statistical Org)
- Expert Committee – Terms of Reference
  - To develop a framework for 'Green National Accounts' for India
  - To identify data requirements and gaps
  - To develop a roadmap for implementation

# Expert Group for Green National Accounting, India

- Partha Dasgupta, Prof Emer, Cambridge University
  - T.C. Ananth, Chief Statistician,
  - Pronob Sen, Principal Advisor, Planning Comm
  - Kaushik Basu, Chief Econ Advisor, MoF
  - Nitin Desai, formerly USG , United nations
  - Vijay Kelkar, Chair, National Stock Exchange
  - Kirit Parikh, former member, Plng Comm
  - Kanchan Chopra, Ex-Director, IEG
  - Sunderam, Prof, DSE
  - Somanathan, Prof, ISI
  - Gundimenda, Assoc Prof, IIT Mumbai
  - Ramesh Kolli, Add DG, Central Statistical Org
  - Shyamsundar, SANDEE
- **Co-Chairs: Strong international expertise combined with Government support**
  - **Senior GoI officials**
  - **Civil Society/Private sector**
  - **Academics**



# Expert Group for Green National Accounting, India

- Changes in wealth as main measure of sustainability (Conceptual phase/Interim report completed)
- Focus on
  - Forests
  - Land degradation
  - Ground water
  - Mineral resources
- Data available for estimation of physical changes in stocks
  - Comparative data limited
  - Identification and Aggregation issues
  - Valuation second phase
- Reconciliation with income and capital accounts – satellite accounts