Population, Urbanization, and the Environment

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The World is Trending Urban

• In 2008, the world became mostly urban
• 3.5 billion people concentrated on < 3% of planet’s land surface
• Urbanization effects the environment and fertility and population growth rates
Urbanization Has Varied by Region

Higher % urban in developed countries

- More Developed: 2007 and 2050
- Less Developed: 2007 and 2050
By 2050, 80% of the world’s urban population will be in developing countries.
What Drives Growth of Urban Population?

- Migration
- Natural increase
- Fertility rates lower in urban than rural areas

Urbanization Stresses

• City growth can outpace ability of local governments
• Informal settlements and slums often unconnected to basic sanitation systems
• Air pollution often exceeds the natural environment’s ability to eliminate them

WWAP/G. Weybrecht
http://jalopnik.com
Potential for Preserving the Environment through Urbanization

- Cities offer many potential benefits
  - Technical innovation
  - Access to information
  - Efficient land and energy use
  - Better living conditions
  - Provision of clean water
  - Access to health care services

- New York per-capita greenhouse gas emissions are one-third of the U.S. average
Urbanization and the Environment: A Complex Relationship

- Environmental Kuznets Curve
- The theory holds for pollution that affects local urban environments
- Relationship less clear with impacts beyond local areas.
Simulation of future urbanization and CO2 emission in India
Urbanization is inevitable

- Complex relationships among urbanization, population growth, environment
- Raises ethical questions of equity in emissions
- Need to transfer cleaner and more efficient technologies without hindering development
- Need to invest in family planning
Thank you

Photo: Institute for Transportation and Development Policy, Bogota, Colombia