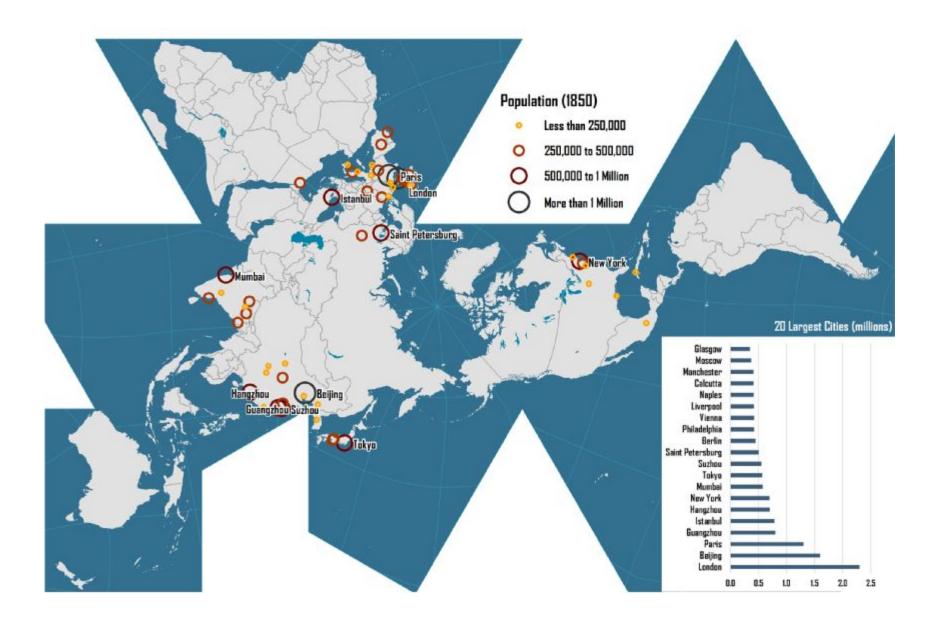
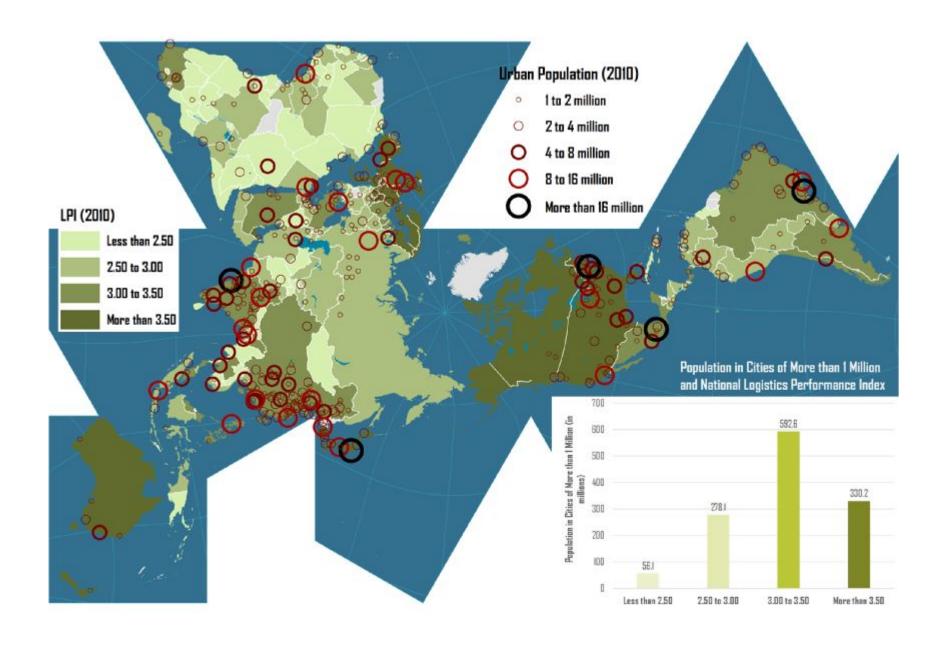
Planetary Urbanization since 1800

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Planetary urbanization
   urbanization over time
Explaining Urbanization
Pull factors
   Industrial Revolutions
   Latin American urbanization and protectionism
   Neoliberal capitalism and Global South
   Agglomeration economies/population magnets
Push factors
   Land concentration/privatization
   industrialization/mechanization of agriculture
   environmental deterioration
   Population growth and resource crunch
Urbanization and environment
   Urban Environmental injustice
   Urban metabolisms
       examples of urban metabolism
Demystification of commodities
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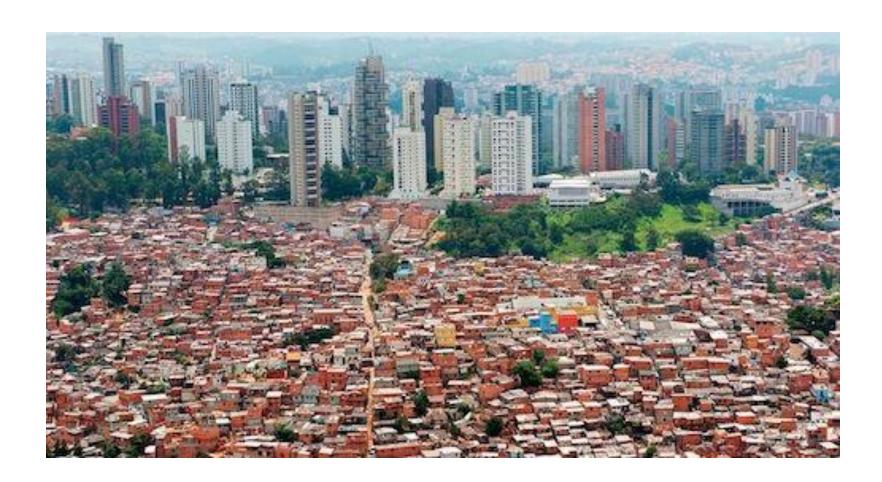


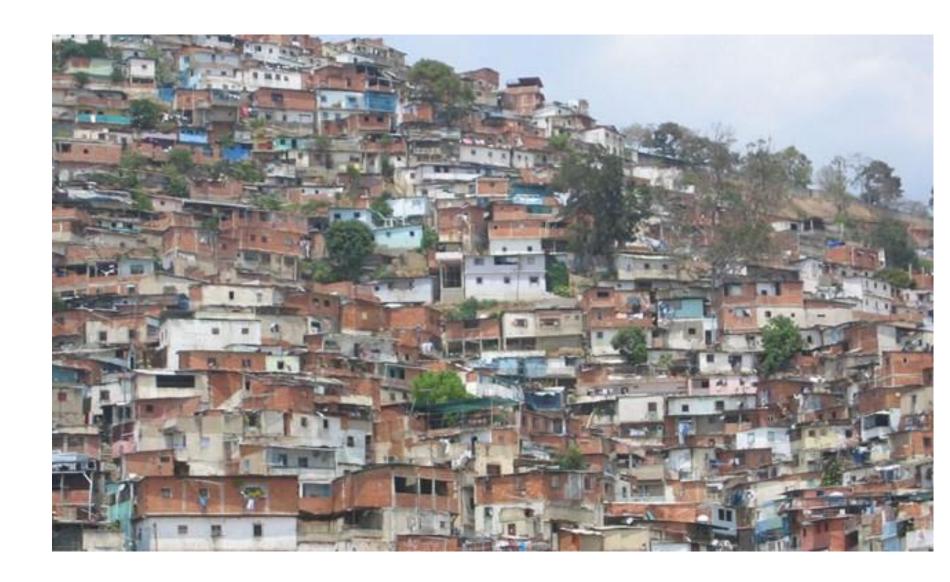


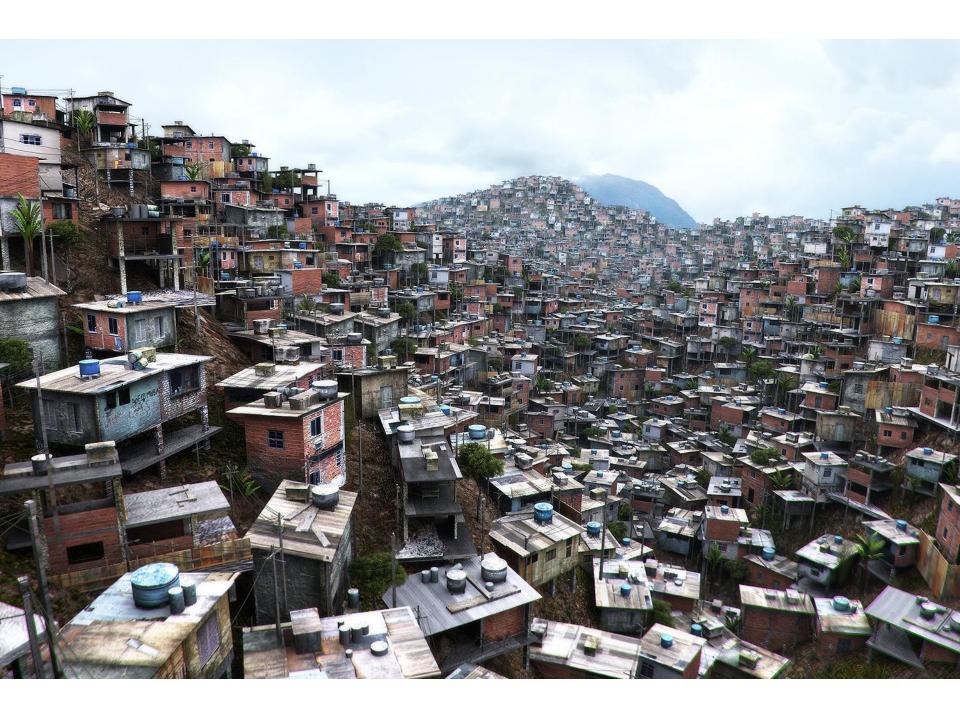
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Explaining Planetary urbanization

- Push and Pull factors
- Pull
 - -the two industrial revolutions and jobs
- -political economies in global south (protectionism and neoliberal policies since 1980
- Push
 - Land concentration and privatization
 - Mechanization of agriculture
 - Environmental damage
 - Population growth and resource crunch in countrysides
 - Neoliberal capitalism since 1980



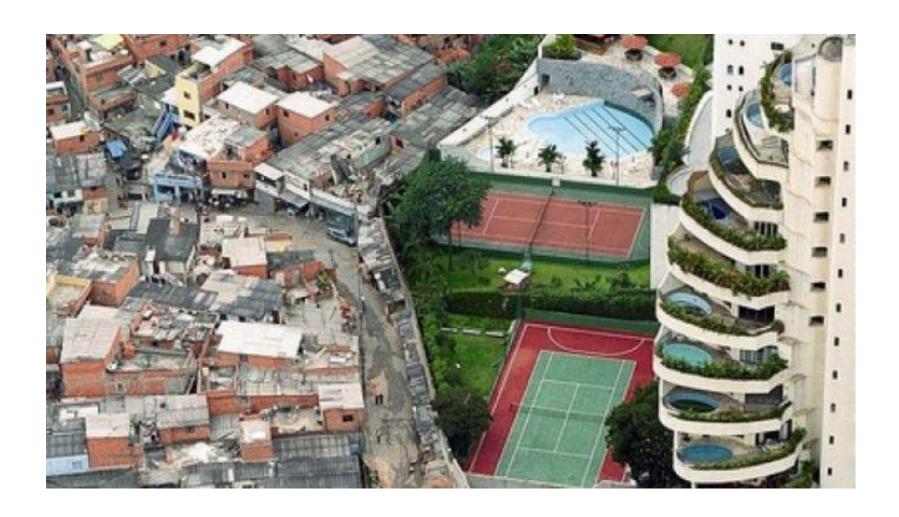


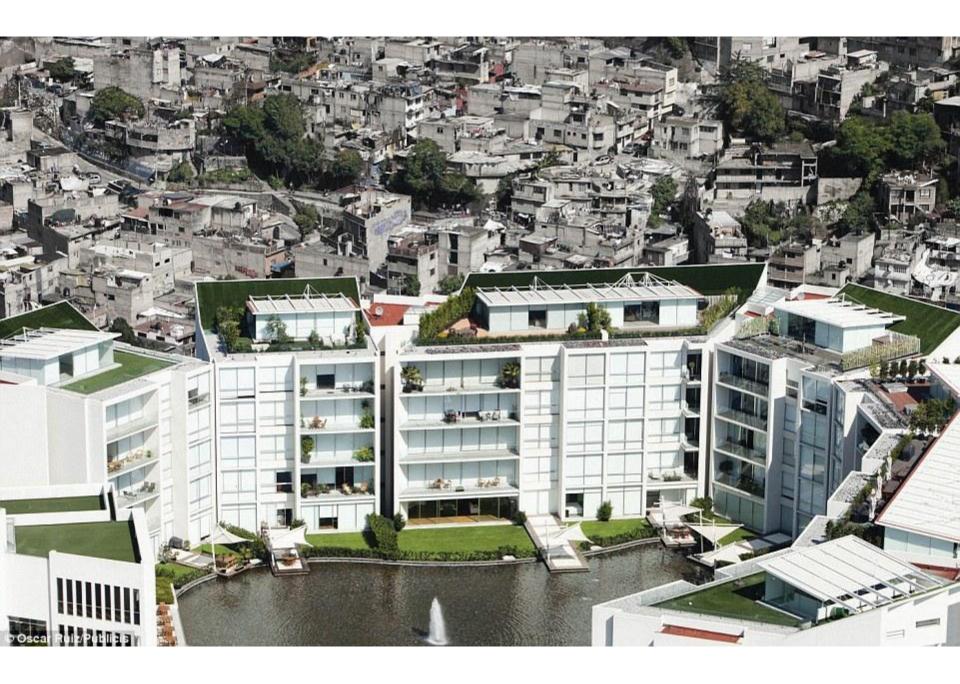


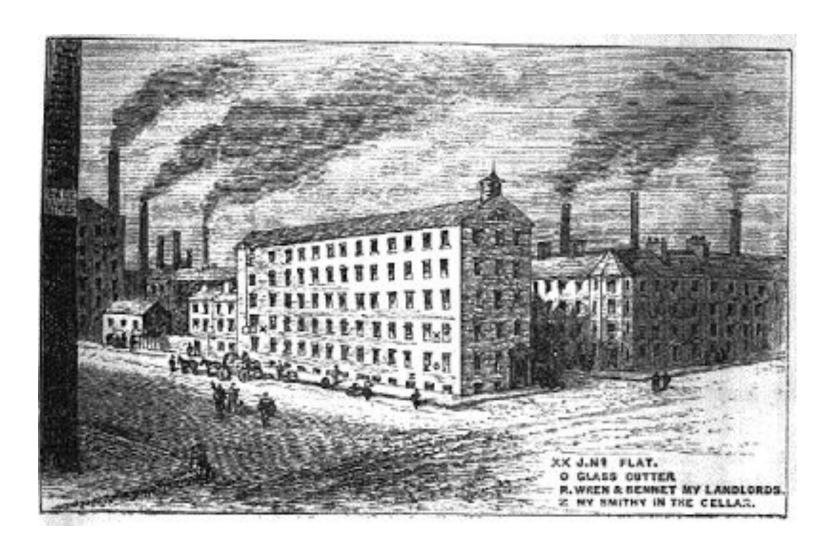
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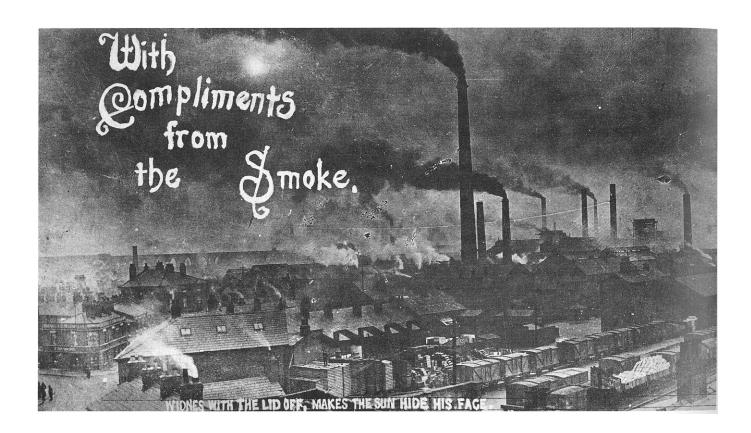
Urbanization as an environmental problem

- Long histories of segregation and environmental injustice
- Hundreds of millions who do not enjoy the promises of modern urban life









Urbanization as environmental problem II

- Urban metabolisms—urbanization on wide spatial scale, beyond city limits
 - Inputs and outputs, materials consumed and then expelled
 - Outputs as wastes
 - Inputs come from vast rural hinterlands

Commodity demystification

- --Uncovering the environmental and social conditions of production of the products we purchase and consume. This includes waste disposal. Tendency to ignore these conditions
- --essential for considering how cities can be made more sustainable













Planetary urbanization urbanization over time **Explaining Urbanization** Pull factors **Industrial Revolutions** Latin American urbanization and protectionism Neoliberal capitalism and Global South Agglomeration economies/population magnets **Push factors** Land concentration/privatization industrialization/mechanization of agriculture environmental deterioration Population growth and resource crunch Urbanization and environment Urban Environmental injustice **Urban** metabolisms examples of urban metabolism Consumerism and Demystification of commodities

Leave you with a set of questions about cities

- Can cities and its corollary urbanization be environmentally friendly (sustainable), that is, strike a balance between resources available and resources consumed? And, by emitting wastes in a way that limits contamination? If so, how?
- Can cities be more environmentally just by class and race/ethnicity?

Global Environmental Problems Climate Change

Others?

- 1. Air Pollution
- 2. Water Pollution
- 3. Deforestation
- 4. Soil depletion and contamination
- 5. 6th Extinction
- 6. Environmental Injustice

All these environmental problems are aggravated by climate change

Air pollution

80% of world's urban population breathes unhealthy air

Water pollution

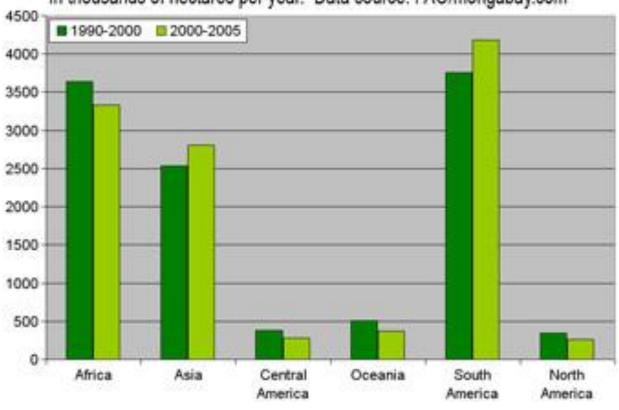
- -garbage, pesticides, fertilizers, mining waste, and untreated human and animal waste
- -immense public health and ecological dangers



Deforestation

- -urban growth
- -to make consumer goods from wood
- -land clearing for agriculture and ranching

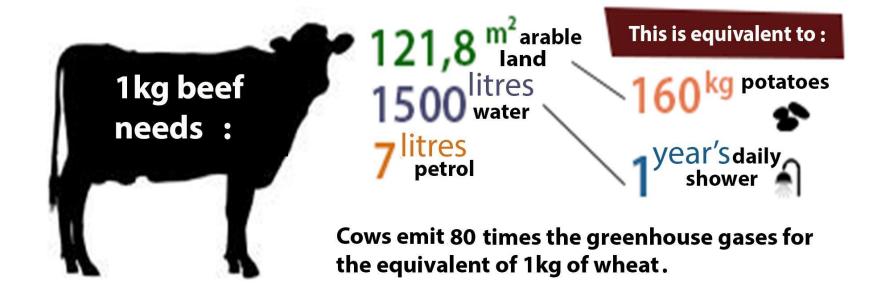
TROPICAL DEFORESTATION BY REGION, 1990-2000 & 2000-2005 In thousands of hectares per year. Data source: FAO/mongabay.com



World Forest Cover, 1990-2010

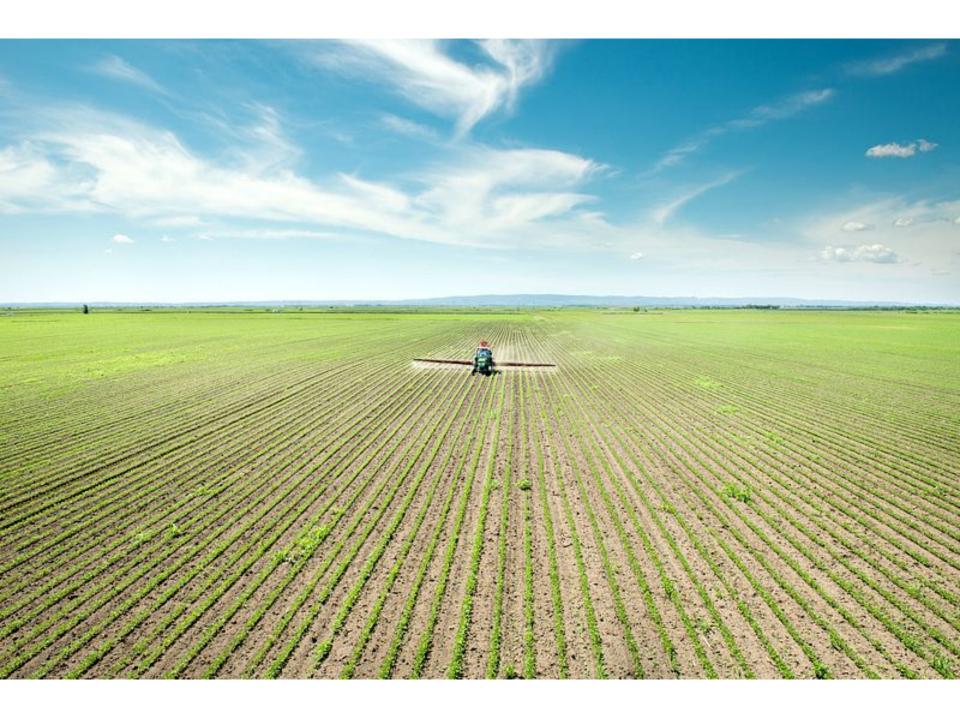
Region	Total Forest Cover		
	1990	2000	2010
	Million Hectares		
Africa	749	709	674
Asia	576	570	593
Europe	989	998	1,005
North and Central America	708	705	705
Oceania	199	198	191
South America	946	904	864
World	4,168	4,085	4,033

Source: Compiled by Earth Policy Institute from U.N. Food and Agriculture Organization, Forest Resources
Assessment 2010: Global Tables (Rome, 2010), www.fao.org/forestry/fra/fra2010/en/.



Soil depletion and contamination

- --Soil erosion and loss. Over last 50 years 30% of arable land has become unproductive
- --caused by deforestation and use of unsuitable tropical soils, monoculture, and unsustainable tilling practices
- --rising soil infertility. Infertility ☐ fertilizer. Vicious cycle of fertility loss and more fertilizer. Law of diminishing returns



The 6th Extinction

½ of all living organisms may be gone by 2100

Overfishing and overhunting

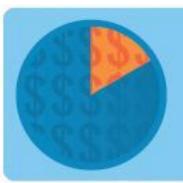
main causes are deforestation, pollution, and climate change

Looming Insectageddon



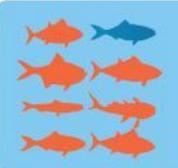
2050₁

IS THE YEAR EXPERTS SAY WORLD FISHERIES EXPECT TO COLLAPSE



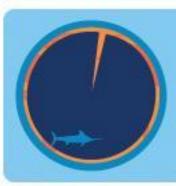
\$50B

1/5 OF FISH ARE CAUGHT ILLEGALLY RAKING IN AN EST. \$50B A YEAR



80%k

THE WORLD'S FISH STOCKS ARE ALREADY FULLY EXPLOITED



90%\

OF PREDATORY FISH: TUNA, SHARKS, SWORDFISH, COD & HALIBUT ARE GONE!



300,000

WHALES AND DOLPHINS ARE KILLED EACH YEAR VIA BY-CATCH



8M SQUARE MILES

THE GREAT PACIFIC GARBAGE PATCH IS 2X LARGER THAN THE UNITED STATES!

Environmental Injustice

Something we've discussed a fair amount. We will frequently return to it.

What is it?

Environmental Injustice/inequality

- The ways in which environmental pollution or other types of environmental degradation is unequally distributed in space to affect poorer, marginalized, and often people of color, more acutely than wealthier people.
- This occurs in living environments (towns and neighborhoods) and also working environments (fields and factories)
- Reinforces notion that environmental problems are social problems
 - A harm to "nature" is often a harm to people and their livelihoods
 - That harm (who and how) is correlated with one's social position, by economic class, race, etc.

In your estimation, what is the most threatening environmental problem humanity faces today (apart from climate change)

- A. The 6th extinction
- B. Soil loss and pollution
- C. Environmental Injustice
- D. Deforestation
- E. Water and/or air pollution