

# The Environment and Risk

# What's Sociological about the Environment?

- It is a physical phenomenon but still of vital interest to sociological investigation
- Can help understand distribution of environmental threats and damage (better protection and quicker recovery in richer countries)
- Offer an account of how patterns of human behaviour shape and create pressure on the physical environment (the pollution created by industrialized countries would cause havoc if replicated in the developing countries)

# Sustainable Development

- 1970 Club of Rome Report cites 'limits to growth'
- More fashionable since to speak of sustainable development:
  - More use of renewables
  - Protection of species and biodiversity
  - Maintaining clear air, water and land
- 'Meeting the needs of the present, without compromising the ability of future generations to meet their own needs' (Brundtland Commission)
- Millennium Development Goals

# Sources of Environmental Threat

- Pollution and Waste
  - Air pollution caused by toxic emissions into the atmosphere: outdoor and indoor sources. Coal was primary polluter up until 1960s, and now motorized vehicles have taken over
  - Water pollution caused by chemical contamination by chemicals, pesticides and untreated sewage
  - Solid waste caused by packaging, non-degradable material. ‘Throw-away society’

# Depletion of Resources

Depletion of renewables is key worry:

- Water – pressure on supplies is acute in parts of the world (North African and Middle East climates increases pressure)
- Soil degradation – when quality of the earth is worsened and its natural elements stripped out by over-use
- Deforestation – forests help regulate water supplies, release oxygen and prevent soil erosion. More than a third of world's original forests have disappeared. Tropical rainforests (some 7% of earth's surface) are high profile

# Risks & Technology

Fears of risks generated directly by our own science, not just the scale of living

- Nano-technology and the need to control its replication (the 'grey goo' problem)
- Global Warming: the gradual rise in the earth's average temperature
- Greenhouse Effect: build-up of heat-trapping gases within the atmosphere

# Global Warming: Consequences

1. Rising sea levels
2. Desertification
3. The spread of disease
4. Poor harvests
5. Changing climate patterns
6. Geopolitical instability

# GM Foods

- Belief that manipulating the composition of basic crops can boost yields
- Also use GM to resist herbicides, boost vitamin content, change appearance etc
- New departure because they involve transplanting genes between different organisms (humans into pigs)
- GM crops became controversial because of uncertainty about their effects on the land and on humans
- Highly co-ordinated and effective opposition led to withdrawal of many GM foods by retailers and a retreat by Monsanto, the main corporation in the field