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1. Resources: The Logic and Limits of Growth

a. The logic of growth thesis holds that more powerful technology has improved lives and new discoveries will continue to do so in the future. Economic growth is most important in this model.

But, "progress" can lead to unexpected problems:

b. The limits of growth thesis suggests:
   - Natural resource development today exceeds the Earth's carrying capacity;
   - We cannot invent our way out of problems because technological "solutions" frequently present further problems;
   - We must seek to control population & limit damage to the environment (growth must have limits).

2. The list of environmental problems related to social development is long:
   a. Waste Disposal (Toxic; Non-Toxic; GPGP)
   b. Water supply pollution and scarcity
   c. Acid Rain
   d. Oil Spill Contaminations
   e. Air pollution
   f. Ocean Acidification
   g. Reduction in biodiversity (species extinction)
      Are we undergoing another mass extinction?
      Evidence of link between sea-level rise and extinction
   h. Climate Change
Population increases in recent years in combination with Industrialization related to Urbanization has created global environmental impacts. The most wide-ranging effects have been related to global Climate Change.

3. Climate Change (i.e. “Global Warming”)
   An increase in CO₂ (carbon dioxide) and other greenhouses gasses (GHG’s) over the past century has been observed, and it is hypothesized that this is a result of industrialization (chiefly due to the burning of fossil fuels).

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Because of an increase in CO₂ and other industrial gasses, the earth’s temperature has increased in the past century due to the “greenhouse effect.” The greenhouse effect warms the atmosphere by trapping heat radiation near the earth's surface.

Human industrialization is clearly linked to the greenhouse effect.

The Greenhouse Effect

Diagram: A simplified representation of the greenhouse effect, showing how gases in the atmosphere trap heat radiation near the earth's surface.
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3. Potential and actual consequences:
- Coastal flooding (costs: insurance, development)
- Ice sheet and glacial melting (cost: water shortages)
- Extreme storms (costs: insurance, development, lives)
- Climate pattern change (costs: lifestyle, crops)
- Drought and forest fires (costs: development, insurance, lives)

Potential solutions: International agreement to reduce industrial emissions linked to warming.

The Kyoto Protocol is one such agreement, created in 1997. Though an original member, the U.S. is the only industrialized nation which is currently not part of this agreement, yet we produce 26% of the CO₂. Climate talks continued in Durban, South Africa in 2011, and in Paris, France, in 2015. President Trump is in the process of taking the U.S. out of the Paris Agreement.
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4. What might resolve these environmental crises and others that could arise in the future?

a. **Education and Awareness**

For example, in 2014 only 63% of Americans believe that climate change is happening, and only 41% believe it is connected to human development (compared to 99% of climate scientists)!

b. **Social Reorganization**

Not just technological change (reliance on new energies and a synthesized approach to science technology and society), but real social change (new norms, roles, institutions and cultures).

(cf. the Ecological Justice Movement)

*"We are living beyond our means. As a people we have developed a lifestyle that is draining the earth of its priceless and irreplaceable resources without regard for the future of our children and people all around the world."*

– Margaret Mead (1901-78), American anthropologist

"Ecological catastrophe is as evil as white supremacist catastrophe, male supremacist catastrophe..."

5. With all these problems, does hope exist in a world out of balance? Yes!

a. **Hope exists in the knowledge of the individual:**

People should act according to their "calling"; study the Social Problems (SOCI 201) that worry you in order to fix them.

"The aim of life is to know thyself." – Socrates

"Be the change you want to see in the world." – Anon

b. **Hope exists in the “public sphere” of society:**

Free people can act together in collective projects and Social Movements – (SOCI 360) to foster positive social change.

"Freedom is what you do with what's been done to you." – Jean Paul Sartre, French philosopher (1905-1980)
Future Social Change

Q: Does hope exist in a world out of balance?
A: Yes!

c. Participatory Sociology opens the door to critically examining your self, your society, and the relationship between the two.

Biography / Self ← (institutions, roles, norms, etc.) → Society / History

The Sociological Perspective can help build the new communities needed in the 21st century to overcome the injustices and social problems constructed in the last century.