

DEVELOPMENT & ITS COSTS

ANTH 306/Medical Anthropology

Development & its Costs

- **Globalization** – human activity within economic, political, cultural and demographic processes becomes increasingly integrated across national and regional boundaries.
- Population mobility has propelled globalization and affected transmission of disease.
- McElroy & Townsend define **economic development** as:
 - Planned, systematic change, with increased use of modern technology, new patterns of production and consumption of goods, and intensive extraction of natural resources to sustain growth and create export markets.
- Abstract concept often imposed from the top-down.

Development & its Costs

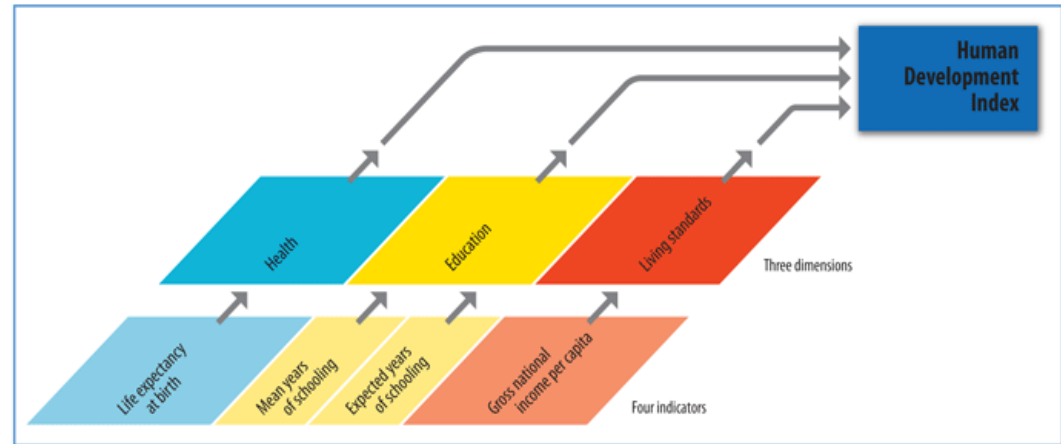
- Concept of ***modernization*** involves replacing traditional ideas, behaviors, & technology with new forms of ideas, behaviors and tools.
- The notion of “***progress***” is embedded in concept of modernization.
- Reorganizing of social institutions, cultural priorities – e.g., kin groups of traditional societies vs. individualism of Western, industrial societies.
- *Consumerism & cash economy* are vital aspects around which culture becomes organized.
- Material possessions come to symbolize “progress”.

Development

- Concept usually refers to attempts to promote “progress” by improving peoples’ lives.
- But how to measure?
 - Gross National Product?
 - Per capita income?
 - Life expectancy?
 - Literacy rates?
- In 1990 researchers at **United Nations Development Program** devised a composite index called the **Human Development Index**

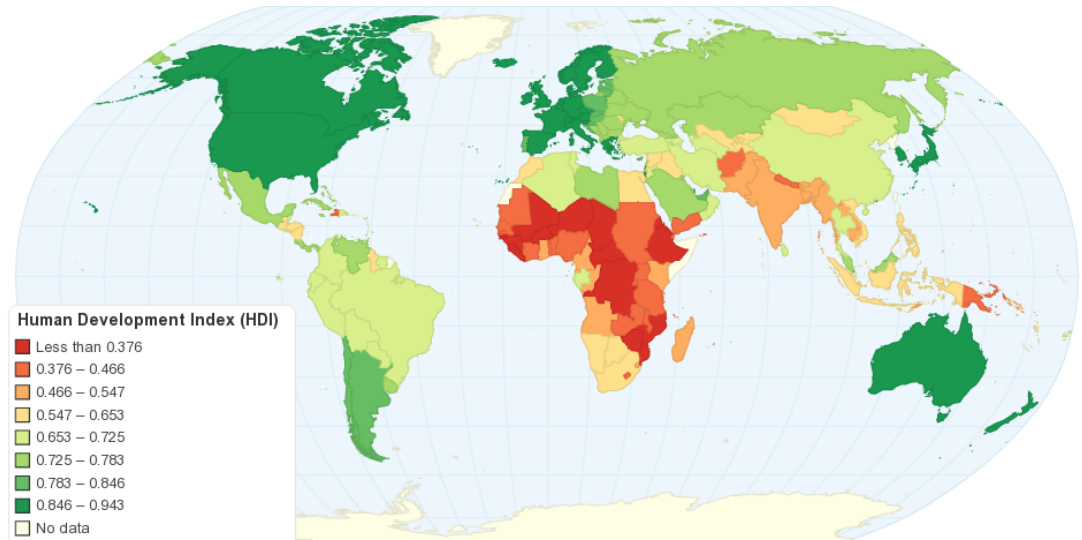
Components of the Human Development Index

The HDI—three dimensions and four indicators



Note: The indicators presented in this figure follow the new methodology, as defined in box 1.2.

Source: HDRO.



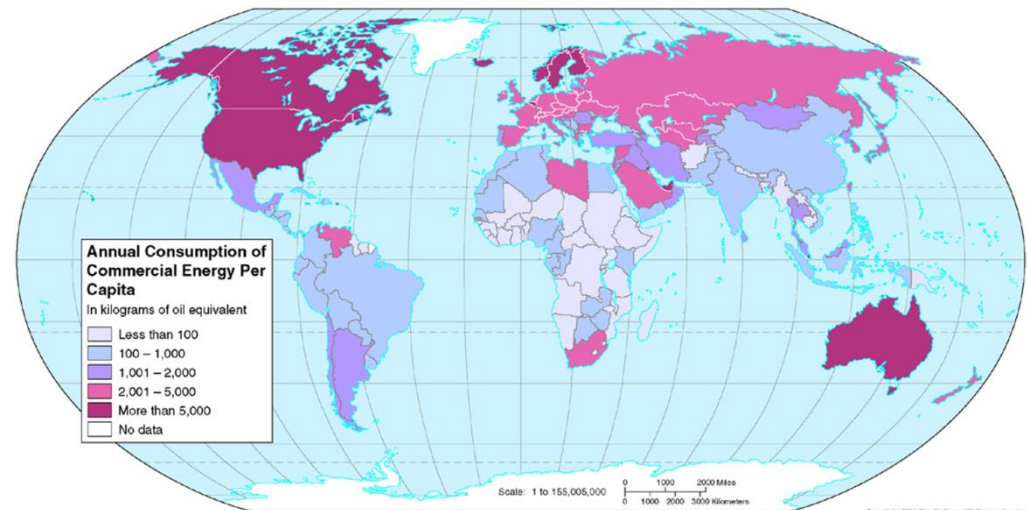
Sustainable Development

- McElroy & Townsend define as:
 - Social & economic changes that meet needs & aspirations of current generation without degrading environment & jeopardizing ability of future generations to meet their own needs.
- They note disproportionate energy consumption by developed nations – something that population explosion alarmists need to recognize!

TABLE 9.1
Selected Health and Development Indicators in Five Nations

	Japan	United States	Ecuador	India	Mozambique
Gross National Income Per capita 2006	\$38,410	\$44,970	\$2840	\$820	\$340
Energy use (oil equivalent) Per capita (kg) 2003	4040.4	7794.8	781.5	512.4	435.8
Population growth rate Percent per year 1990–2006	0.2	1.0	1.6	1.8	2.7
Percent of population urbanized 2006	66	81	63	29	35
Total fertility rate 2006	1.3	2.1	2.6	2.9	5.2
Contraceptive prevalence (per cent)	56	76	73	56	17
Skilled attendant percent of births 2000–2006	100	99	99	47	48
Infant mortality Per 1000 2006	3	6	21	57	96

Sources for country data: UNICEF, State of the World's Children, 2008. Energy use from <http://earth.trends.wri.org>. Accessed August 23, 2008.



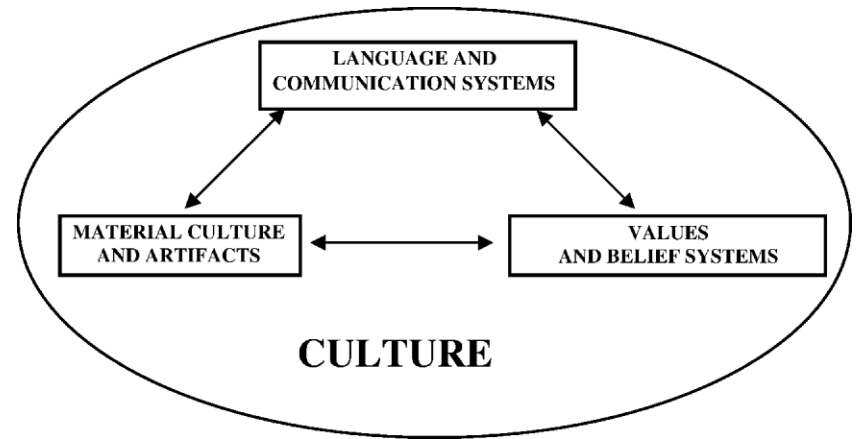
Health Effects of Agricultural Development

- As McElroy & Townsend note, **Green Revolution** was effort to convince developing nations to use higher yielding hybrid varieties of food crops, chemical fertilizers & pesticides, as well as irrigation.
- These projects often led to unintended consequences as a result of modifying the natural environment.
- Especially true with any water-related projects, such dam construction and irrigation schemes.



Development = Change

- All development involves change – sometimes minor and sometimes major.
- A fundamental premise of anthropology is that sociocultural systems are functionally *integrated* – each component is attached to many others.
- Thus changing one element in a system can impact many other elements in the system.



Unintended consequences of development

- Development record reveals numerous well intended but poorly conceived attempts to institute planned/directed change in human societies.
- Unanticipated consequences – especially social & ecological – often occur.
- In fact many diseases effecting people in developing nations today are what John Hunter and Charles Hughes (1972) labeled ***diseases of development***.

Diseases of Development

- **Hunter and Hughes identified 3 classes:**
 1. Diseases that result from *integration into large-scale industrial societies and change in lifestyle*, e.g., diabetes, obesity, hypertension, cancer.
 2. Diseases that result from *development programs which upset environmental conditions*, introducing or increasing bacterial & parasitic diseases, e.g., schistosomiasis & malaria.
 3. Diseases associated with *poverty, malnutrition, & unsanitary living conditions*, e.g., kwashiorkor, pellagra, tuberculosis.

Diseases of Development



- Schistosomiasis (AKA Bilharzia) is among fastest spreading parasitic infections in developing world.
- Endemic in 74 developing countries
- More than 80% of those infected live in sub-Saharan Africa.
- Causative agents are trematode flatworms (flukes) of genus *Schistosoma*
- Propagated by snails that live in ponds, lakes, and waterways, such as this irrigation system in Luxor, Egypt.
- Humans contract it by working or playing in water.
- Evidence of its presence in Egypt goes back 3,000 years ago.

Link to development

- Many development projects often call for damming of rivers to build hydroelectric power stations.
- Other projects often involve constructing irrigation canals for cash crops like cotton.
- Problem is that conversion of water from its free flowing state to a standing condition creates a prime habitat for the disease vectors such as snails & mosquitoes.

Health Disparities in Developed Economies

- Gap that exists between people living in poorest & richest countries in world also replicated internally within those countries.
- As McElroy & Townsend note “poverty is not good for health”.

TABLE 9.2
Income Inequality in Selected Countries

Country	Percent of Income Received by	
	Poorest 20% of Population	Richest 20% of Population
South Africa	3.5	62.2
Brazil	2.8	61.1
Ecuador	3.3	58.0
Costa Rica	3.5	54.1
China	4.3	51.9
Nigeria	5.0	49.2
United States	5.4	45.8
Australia	5.9	41.3
Russian Federation	6.1	46.6
Canada	7.2	39.9
Sweden	9.1	36.6
Japan	10.6	35.7

Source: World Bank, *World Development Indicators*, 2007. Washington, DC.

Ethnicity & Health Disparities

- Clearly there are some differences in health associated with ethnicity:
 - Example: cystic fibrosis and sickle cell anemia both have genetic basis
- But differences in not same as disparity.
- Health disparities arise not from biology but from patterned discrimination.
- Health disparities go beyond differences in health status to disparities in health care that people of different “races” or “ethnicities” receive for same condition.
- Disparities hold up even when adjusting for income level and insurance coverage.

Anthropology of trouble

- At beginning of 1990s anthropologist Roy Rappaport suggested that anthropologists might be able to help identify some of the deeper underlying social disorders and maladaptations of modern society.
- McElroy & Townsend note that an ecological perspective can help with seeing the “big picture” and avoiding overly narrow view of world.
- They suggest that the term ***public anthropology*** refers to this type of broader approach.
 - *Global environmental change*
 - *Violence/terrorism*
 - *Nuclear hazards*

Videos for this module

- Short one by Helen Coster on treating Chagas disease in Bolivia.
- Longer one by Ethan Kay on providing women with clean, efficient cookstoves in places such as rural India and Africa.
- In both these cases the “development” that is needed is relatively small-scale & not overly expensive but definitely has high impact potential.
- That is exactly what donors and governments should be concentrating on!

