### Sustainability

The doctrine that economic growth and development must take place, and be maintained over time, within the limits set by ecology (... notion of carrying capacity here) — by the interrelations of human beings and their works, the biosphere and the physical and chemical laws that govern it

### Some pre-conditions:

- growth (... as <u>short-term</u> increase) must be separated from development (... a <u>lasting</u> improvement)
- there must be equity (... fair redistribution; social justice)
- the moral and social needs of people must be satisfied (e.g. ... not only the material)

### A required « new attitude »

- Recognition that humans are a part of nature
- Accounting for environmental costs ... not only the economic
- Wide economic disparities (... poverty) must be erased

# ADDENDUM - Changing perception of nature (In context of) Changing understanding of humanenvironment relations

From mid-eighteenth century Romanticism

- emerging (and growing) concern for the aesthetic quality of nature (natural beauty, « scenery » ....)

### From being previously an object of fear and contempt

... in the eighteenth century mountains (the Alps) were perceived as evidence of the « earth's horrible irregularity ». They were feared in Europe because they were « realm of ghosts and robbers » (Yi-Fu Tuan Landscapes of Fear)

#### Nature becomes a subject of awe and admiration

« Looking at », appreciating the landscape becomes an « activity », a way in which ones leisure time is spent

This newly found admiration of nature is manifested in literature and the arts

For more explanation SEE Knox, Marston and Nash

- 1860s emerges the first concern for conservation (as we understand it today)

  Expressed in academic/philosophical writings (George Perkins Marsh a

  Vermont American)
  - ... in 1832 Arkansas Hot Springs had become the first defined national natural reservation in the U.S.A.
- 1872 Yellowstone (Wyoming, U.S.A.) becomes first National Park in the world
- 1885 Banff ... is Canada's first National Park
- 1930 Canada's (first) National Parks Act
  - ... first federal government policy specific to National Parks

## MILESTONES PROTECTION OF NATURAL AREAS

Mid – to Late 18th century Romanticism
... concern for aesthetic quality of nature, scenery, natural beauty
Is manifested in the arts and literature.
In U.S. writings of Ralph W. Emerson, Henry D. Thoreau

1860s ... concern for conservation
Writings of George Perkins Marsh

1832 Arkansas Hot Springs
... were first natural national reservation in U.S.A.

1872 Yellowstone ... is first national park in the world

Yosemite ... was a California State Park in 1864
A National Park in 1890

1885 Banff ... is Canada's first National Park

1905 Creation of U.S. Forest Service
... 1891, there had been the (first) U.S. Forest Reserves Act

1934 Everglades National Park
... considered as the first ecologically based National Park

... in the late nineteenth century also emerged the debate between

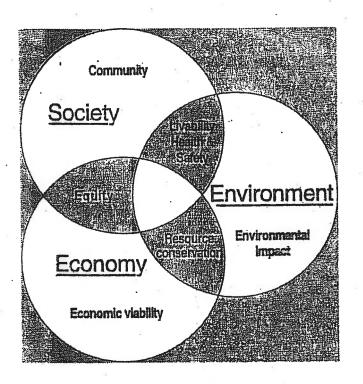
Preservationists (John Muir) and Progressive Conservationists (T. Roosevelt)

The first wanted wilderness to contain no human activity that would be unsympathetic to the primitive nature of a wilderness area, while the second wanted forest lands to be managed on a sustained yield basis (allowing timber harvesting and/but also dam building, some "selective" mining, and grazing)

## STEPS TOWARDS INSTITUTIONALIZATION OF SUSTAINABILITY

### TIMELINE

- 1980 principle is mentioned in World Conservation Strategy a joint statement of IUCN, WWF and UNEP
- 1987 Our Common Future (the Bruntland Commission Report) is report of the World Commission on Environment and Development
- 1992 First Earth Summit, Rio de Janeiro
  United Nations Conference on Environment and Development
- 2002- Second Earth Summit, Johannesburg World Summit on Sustainable Development



SOURCE : CMHC 1995

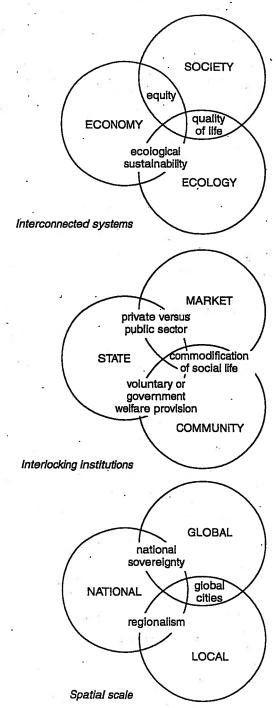


FIGURE 0.3 Stilwell's three-way framework for understanding cities

Source: composite based upon figures in Stilwell (2000, 16, 17, 19)

## VCENUY 31 (MNCED)

### THE SEVENTHEMES

- 1. THE PROGRERING WORLD
  revitalizing growth with sustainability
- 2. THE JUST WORLD Sustainable living
- 3. THE HABITABLE WORLD human gattlements
- 4. THE FERTILE WORLD
  global and regional resources
- 5. THE SHARED WORLD

  Global and regional resources
- 6. THE CLEAN WORLD
  menaging chamicals and waste
- 7. THE PEOPLE'S WORLD

  people perticipation and responsibility

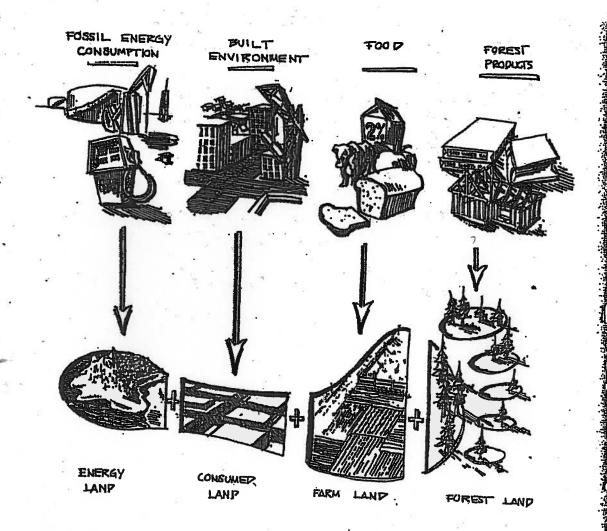


Figure 1: Converting Consumption Into Land Area.

The production and use of any good or service depends on various types of ecological productivity, which can be converted into a land-area equivalent. Summing the land requirements for all significant categories of consumption and waste yields the total ecological footprint for that population.

Illustration by Phil Testemale. Source: Wackernagel and Rees 1995: 67.

Pays	Empreinte par habita	e écologique int (en hectares
Bangiadesh	0,5	į
Mozambique	0.5	1
Sierra Leone	0,5	
Haïti	0,8	
Afghanistan	0,9	9
<u>Pérou</u>	1,2	g
Nigeria	1,3	
Chine'	1,5	
Moy. mondiale	2,3	
Brésil	2.4	
Mexique	2,5	
Afrique du Sud	4.0	
Allemagne	4,7	
France	5,3	
Suède	6,7	300
Canada	8,8	
États-Unis	9,7	

Source - Renefining Grands

### ENVIRONMENTAL WORLDVIEWS

W (1971)	Technocentric		Ecocentric	
	Cornucopian	Accomodation	Communalist	Deep ecology
Green label	Exploitative	Conservationist	Preservationist	Extreme preservat.
Type of economy	Unfettered markets Anti-green	Green markets Guided by market instruments	Deep green markets Regulated. Defined standar	Very deep green Heavy regulation Control over ds 'resource take'
Management Strategy	Maximize GNP Resources are infinitely substitutable	Modified economic growth - substitution not an option	Zero economic growth Complete prot of critical natu capital	rconomy ect. Localized
Ethical position	Instrumental (man over nature)	Moral « considerability » Intra and inter- generation equity	Extension of previous to no human entitie (bioethics)	
Sustainability lab	el Very weak Sustainability	Weak sustainability	Strong	Very strong

From: A. Jordan and T. O'Riordan 1999 Environmental problems and management

### Table 4.1 Shallow and Deep Ecology Compared

EXPAN	14.00 GT
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TEUNIO	

Place of Thirt energy Colors	THE RELEASE OF		
Shallow Eco	ology	Deep Ecc	logy
(Spaceship ea		(Sustainabl	

Views humans as separate from nature

Emphasizes the right of humans to live (anthropocentrism)

Views humans as part of nature

Emphasizes the idea that every life-form has in principle a right to live; recognizes that we have to kill to eat, but that we have no right to destroy other living things without sufficient reason based on ecological understanding

Concerned with human feelings (anthropocentrism)

Concerned with the feelings of all living things; deep ecologists feel sad when another human or a cat or dog feels sad and grieve when trees and landscapes are destroyed

Concerned with the wise management of resources for human use (anthropocentrism)

Concerned about resources for all living species

Concerned with stabilizing the population, especially in less developed countries

Concerned not only with stabilizing the human population worldwide, but also with reducing the size of the human population to a sustainable minimum without revolution or dictatorship

Either accepts by default or positively endorses the idealogy of continued economic growth.

Replaces this ideology with that of ecological sustainability and preservation of biological and cultural diversity

Bases decisions on cost-benefit analysis :

Bases decisions on ethical intuitions about how the natural world really works

Bases decisions on short-term planning and goals:

Bases: decisions on long-range planning and goals and on ecological Intuition when all lacts are not available "

Tries to work within existing political social economic and ethical systems

Questions these systems and looks for better systems based on the way the natural world works :

Source: G.T. Miller, Jr. Living In the Environment 4th ed. (Belmont, Calif: Wadsworth, 1982]:456.