Teaching Environmental Law from a Global Resources Perspective

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Teaching the lawyers and policymakers of the future
Environmental problems now and in the coming decades

- Complex
- Changing
- Crossing disciplines and boundaries
- Global as well as local – global impacts of local actions, local impacts of global actions
  – There is no “away” – G. Tyler Miller
Structuring a course in 21st century environmental law – assumptions

• The environmental lawyers of the future will need:
  – Self-awareness and understanding of other views
  – Multicultural competence
  – Scientific literacy
  – Analytical skills
  – Knowledge of laws and their limitations
  – Holistic view of problems and their solutions
  – Ability to conduct research in a constantly changing environment
Structuring a course in 21st century environmental law – assumptions

• Methodology: environmental lawyers of the future should learn how to:
  – Understand the big picture (law, science)
  – Use scientific and socioeconomic data intelligently
  – Find all relevant laws and consider them together
  – Analyze laws for coverage and effectiveness
  – Propose and discuss appropriate changes
  – Join the public dialogue and become convincing advocates
Teaching Comparative Environmental Law from a Global Resources Perspective: one experience
Main sources

http://www.unep.org/geo/geo5.asp
Related GEO readings

Related GEO readings

Keeping Track
of our changing environment

- +60% women parliamentarians
- +130% plastics production
- 120% biodiversity decline globally
- +0.4°C global mean temperature increase globally
- 21 megacities
- 300 million ha forest area lost
- +1% renewable energy sources
- +75% GDP
- Ocean Acidity 8.11 - 8.06 pH
- 36% increase in CO₂ emissions
- Global population +26%

From Rio to Rio+20 (1992-2012)

The average global citizen consumes 43 kg of meat per year, up from 34 kg in 1992

http://www.unep.org/geo/pdfs/Keeping_Track.pdf
Related sources

University of Ottawa’s JuriGlobe
http://www.juriglobe.ca/

FAO, The State of the World’s Land and Water Resources

Robert Percival/U. of Maryland, Global Environmental Law country reports
http://www.globalenvironmentallaw.com/

And hundreds of others, including YouTube!
GEO-5: Structure

Part 1: State and Trends of the Environment

Drivers
Atmosphere
Land
Water
Biodiversity
Chemicals and Waste
An Earth System Perspective
Review of Data Needs
GEO-5: Structure

Part 2: Policy Options

Africa
Asia and the Pacific
Europe
Latin America and the Caribbean
North America
West Asia
Regional Summary
GEO-5: Structure

Part 3: Global Responses

Scenarios and Sustainability Transformation
Global Responses
Earth System

Figure 7.3 Observed change in annual mean surface air temperature, 1960–2009

Change in annual mean surface air temperature, °C

Source: Sarmre and Barry 2011 based on NASA GISS temperature analysis (http://data.giss.nasa.gov/gistemp).
Earth System

Figure 7.7 The ecological footprint and biocapacity of regions, 2002
Global Course: Structure

Comparative Environmental Law foundation
  Worldviews
  World legal traditions
  Environmental rights in common pool resources

Use regulation, pollution laws & outcomes
  Atmosphere
  Land
  Water
  Energy
  Chemicals (Industry)
  Biodiversity (Life)
Foundation: Worldviews

Human-centered

“No problem”
growth economist

Free-market
environmentalist

Spaceship Earth

Earth-centered

Deep ecology

Earth-centered

Life-centered

Stewardship

Adapted from
G. Tyler Miller, Living in the Environment
Foundation:
World legal systems - JuriGlobe

University of Ottawa
http://www.juriglobe.ca/eng/
Foundation: Comparing environmental laws

- Law-drafter's or legislator's standpoint - search for models, critics against your own system;
- Harmonizers standpoint – search for the “best” model;
- Field of law researchers – search for differences and similarities to posed questions;
- Study on differences and similarities, questions of interaction of law and society.

Professor Jaakko Husa: Methodology of Comparative Law, Finnish Environment Institute (SYKE), August 2007
Foundation: Environmental rights, common pool resources

Tragedy of the commons
Tragedy of the enclosure
Who owns essential resources?
Privatization, exclusive groups, public ownership

Figure 8.1 Our "shrinking" Earth

Notes: Numbers next to images of Earth reflect hectares of land per capita.

Environmental rights and equivalents

Map 3.2 Nations Recognizing the Constitutional Right to a Healthy Environment

Legend
Green—Nations recognizing constitutional right to a healthy environment as of 2009
Grey—Nations not recognizing constitutional right to a healthy environment as of 2009

David R. Boyd
Climate Change

Deep cuts in global greenhouse gas emissions are required according to science... with a view to reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2°C above pre-industrial levels...

Stratospheric Ozone

Determined to protect the ozone layer by taking precautionary measures to control equitably total global emissions of substances that deplete it, with the ultimate objective of their elimination...

Atmosphere

Consumption of Ozone-Depleting Substances

Global Annual Mean Temperature Anomaly
The upper delta area shown in the left-hand image had over 7 million people in 1990, but has since more than tripled to over 25 million, with the cities of Dongguan, Foshan, Guangzhou and Shenzhen beginning to merge into one continuous city. This intense urbanization has led to the loss of productive farmland and natural areas, as well as creating a variety of environmental problems.
Water
Coasts
Oceans

Figure 4.17 CO₂ concentrations and ocean acidification in the North Pacific, 1960–2010

Source: Feely et al. 2009
Chemicals

Persistent Organic Pollutants

Each Party shall prohibit and/or take the legal and administrative measures necessary to eliminate its production and use of the chemicals listed in Annex A [selected persistent organic pollutants] subject to the provisions of that Annex.

Sound Waste Management

Determined to protect, by strict control, human health and the environment against the adverse effects which may result from the generation and management of hazardous wastes and other wastes.

DDT Levels in Human Tissue

Inadequate hazardous waste management and illegal traffic is a continuing threat. The frequency of new reports to the Basel Convention on this issue is falling, and data are sparse and difficult to interpret, especially from developing countries and countries with economies in transition. It is estimated that there are 2 million contaminated sites in Europe, the United States and the Russian Federation alone.

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Number of Parties to the Convention (and Parties that have joined the Multilateral Fund)
Energy
Biodiversity (Life)

Figure 5.1 Major threats to vertebrates listed as critically endangered, endangered or vulnerable on the IUCN Red List

- Agriculture/aquaculture
- Logging
- Residential/commercial development
- Invasive alien species
- Pollution
- Hunting/trapping
- Climate change/severe weather
- Change in fire regime
- Dams/water management
- Energy production/mining
- Fisheries
- Human disturbance
- Transport/service corridors
- Native species

Proportion of threatened species affected, %

Source: Baillie et al. 2010

Figure 5.6 Living Planet Index, 1970–2007

The Living Planet Index is based on the change in size of 7,953 populations of 2,544 species of birds, mammals, amphibians, reptiles and fish, relative to 1970, from around the globe.

Source: WWF 2010
Summary

• GEO-5 takes a holistic Earth System approach
• Course takes the same tack with analysis of existing laws
• View effects of laws from “cradle to cradle”
• Pose solutions for gaps and dysfunctions in the law
• Share findings
Possible ways to use GEO-5 in environmental law courses

- Single-element courses (approaches to land use or water pollution)
- Regional comparative courses (approaches to some of all elements, across a region)
- Global perspective with sampling of national approaches in each area, across legal traditions
- Multidisciplinary law/science, law/economics, law/management courses
- Multi-institution collaborative projects