

**STRENGTHENING CAPACITY FOR ENVIRONMENTAL LAW  
IN THE ASIA-PACIFIC : DEVELOPING ENVIRONMENTAL  
LAW CHAMPIONS**

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**SESSION THREE: INTRODUCTION TO  
ENVIRONMENTAL LAW**

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# OUTLINE - INTRODUCTION TO ENVIRONMENTAL LAW

## Learning outcomes :

- Understanding the concept of Sustainable Development and related legal principles eg. Precautionary Principle, Polluter Pays principle, inter-generational and intra-generational equity
- The Millennium Development Goals (MDG), 2000 & new Sustainable Development Goals (2015)
- Core components of environmental law
- Introduction to International Environmental Law (IEL)
  - links with national environmental law
  - development of regional environmental law (eg. ASEAN)
- Relevance of other disciplines (science, economics, engineering, ethics, philosophy, business & management, architecture and building etc.)



# The Scope of Environmental Law

- Environmental law is potentially very broad.
- It includes:
  - Environmental planning and impact assessment
  - Environmental protection and pollution
  - Terrestrial and marine nature conservation
  - Protection of biodiversity, and natural and cultural heritage
  - The protection and sustainable use of all natural resources



## Sustainable Development (SD) & associated legal principles

- Defined in the Brundtland Commission Report, *Our Common Future (1987)* – “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs”
- Why teaching about sustainable development is important:
  - Concept of sustainable development is now fundamental to all international and national environmental law and policy
  - Sustainable development was at the heart of the 8 Millennium Development Goals, to be achieved by 2015.
  - A new set of Sustainable Development Goals have been identified for 2015 and beyond.



## Sustainable development: definition

Brundtland Report *Our Common Future*,

*1987: "...development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*

- Principle of intra-generational equity
- Principle of inter-generational equity
- Principle of integration: economic, environmental and social/cultural integration
- Precautionary principle

## Principle of Inter-generational Equity

- Central to definition of sustainable development provided by *Our Common Future*
- *1972 Stockholm Declaration*, Principles 1 & 2
- *1992 Rio Declaration*, Principle 3
- **Principle 2, Stockholm Declaration**

The natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems, must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.
- **Principle 3, Rio Declaration**

The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.



## MILLENNIUM DEVELOPMENT GOALS (MDGs) 2000

- The eight Millennium Development Goals (MDGs) – which range from halving extreme poverty to halting the spread of HIV/AIDS and providing universal primary education, and ensuring environmental sustainability (Goal 7) all by the target date of 2015 – form a blueprint agreed to by all the world's countries and all the world's leading development institutions.
- 8 Goals
- 18 targets and
- 48 indicators
- See <http://www.unmillenniumproject.org/goals/gti.htm>



## MDGs

- **Goal 7 – Ensure Environmental Sustainability**
- **Target 9 –**  
Integrate the principles of sustainable development into country policies and programs and reverse the loss of environmental resources
- **Target 10:**  
Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation
- **Target 11 :**  
Have achieved by 2020 a significant improvement in the lives of at least 100 million slum dwellers





# Sept 2015 – Sustainable Development Goals Summit

- **17 proposed Sustainable Development Goals**

1. End poverty in all its forms everywhere
2. End hunger, achieve **food security** and improved nutrition, and promote **sustainable agriculture**
3. Ensure **healthy lives** and promote wellbeing for all at all ages
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of **water and sanitation** for all
7. Ensure access to affordable, reliable, sustainable and modern **energy** for all



## 2015 – 17 Proposed Goals for Sust.Devt (contd)

8. Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all
9. Build **resilient infrastructure**, promote inclusive and **sustainable industrialisation**, and foster innovation
10. Reduce inequality within and among countries
11. Make cities and human settlements inclusive, safe, **resilient and sustainable**
12. **Ensure sustainable consumption and production patterns**
13. Take urgent action to **combat climate change** and its impacts  
(taking note of agreements made by the UNFCCC forum)



## 2015 – 17 Proposed Goals for Sust.Devt (contd)

14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
  15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss
  16. Promote peaceful and inclusive societies for sustainable development, provide **access to justice for all** and build effective, accountable and inclusive institutions at all levels
  17. Strengthen the means of implementation and revitalise the global partnership for sustainable development
- Q – How do we track /measure these? What are the SD indicators for each state? What is the role of Environmental law here? Can law provide these indicators?



# Introduction to International Environmental Law

- Sources of International Environmental Law –

Article 38(1) Statute of the International Court of Justice (ICJ)

- Treaties (“International Conventions”)

- Custom (“International Custom”)

- “General principles of law”

- Judicial decisions and writings of publicists (academics)

- Distinction between ‘hard law’ (Conventions/Treaties) and ‘soft law’ (Declarations, UN General Assembly Resolutions etc)

Eg. Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) compared with the UN Declaration on Environment & Development (“Rio Declaration”)



## Main International Environmental Law Principles

- Permanent sovereignty over natural resources and concomitant obligation to prevent transboundary harm
- Precautionary principle (Rio Declaration P. 15)
- Principle of cooperation
- Principle of sustainable development
- Polluter-pays principle
- Principle of common but differentiated responsibility

See Philippe Sands, *Principles of International Environmental Law*, 2003

(to be covered in Session 11)



## II. ENVIRONMENTAL LAW AS A REQUIREMENT FOR GOOD GOVERNANCE & MANAGEMENT

- Environmental law is a core component to Good Environmental Management and Governance
- Elements of good governance :
  - government institutions
  - laws and policies (pollution laws, planning laws, conservation laws – natural and built heritage etc)
  - building the environmental infrastructure (what should these be?)
  - education : civil servants and the public
  - enforcement and implementation
- Q - funding : \$? Environmental economics



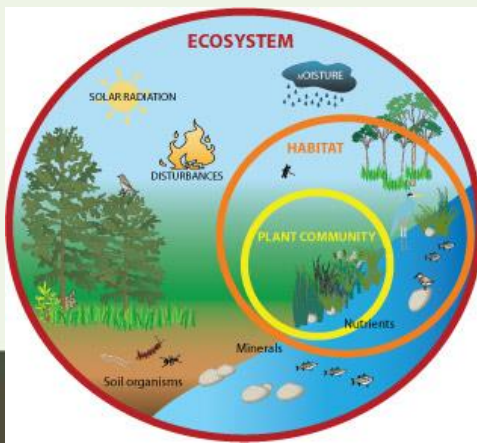
# ENVIRONMENTAL LAW AND OTHER DISCIPLINES

- Science and ecology
- Geography, land use planning, especially for urban areas
- Public health & medicine
- Economics
- Ethics and philosophy
- Engineering – new inventions, solar & wind energy etc
- Business & management- “Green Business”, CSR (corporate social responsibility)
- Public Policy



- **Ecology** studies the interactions between organisms and their environments.
- An **ecosystem** consists of living organisms like plants, animals, and microbes, and nonliving components like air, water and mineral soil that interact as a system.
- **Ecosystem management** is a strategy for the integrated management of land, water, and living resources that promotes conservation and sustainable use.

How can the law encourage ecosystem management?

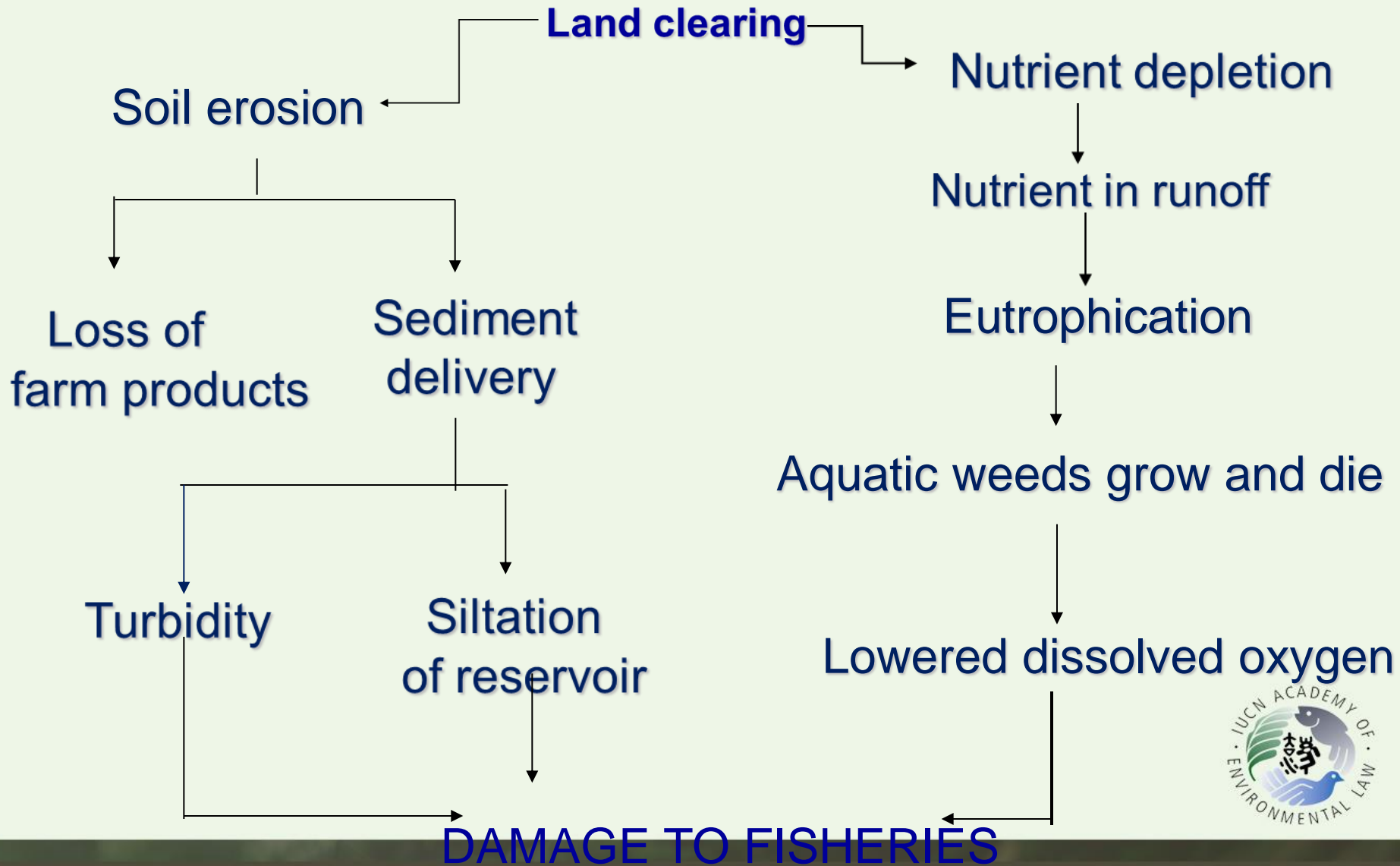




Law can encourage or require ecosystem management to help build ecosystem resilience, for example “connectivity conservation” to connect separate protected areas by ecological corridors, and a unified approach to managing coastal zones.



# Cascade of Effects



# Public health



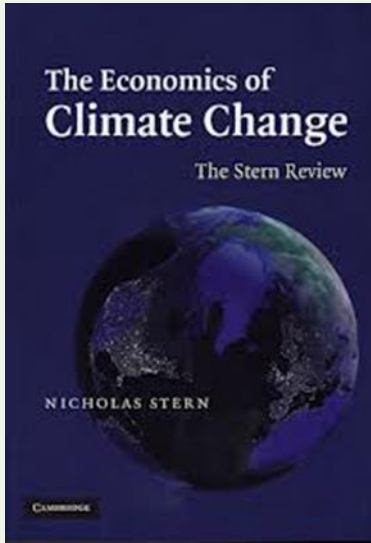
- **Public health** seeks to ensure population health by preventing and treating disease, surveillance of cases and health indicators, and promoting healthy behaviors.
- **Environmental health** is the branch of public health that is concerned with all aspects of the natural and built environment that may affect human health (physical, chemical, and biological factors external to a person).

- Between 24 and 33% of the global disease burden is attributable to environmental factors.
- Environment plays a role in nearly 85% of all disease.

How can environmental law minimize the public health impacts of pollution?



- **Economics** is the social science that analyzes the production, distribution, and consumption of goods and services.
- **Environmental economics** is the branch of economics concerned with the economic effects of environmental policies, notably the costs and benefits of regulating pollution.
- In contrast, **ecological economics** is a transdisciplinary field focused on the relationships between ecological and economic systems, treating the economy as a subsystem of a larger ecological life support system.



- Environmental taxes
  - E.g. British Columbia's carbon tax
- Pollution permits
  - E.g. Clean Air Act NSPS that permit air emissions
- Pollution exchanges and credits
  - E.g. EU carbon credit trading
- Q - Singapore's taxes on cars and on road usage – the Certificate of Entitlement (COE) and Electronic Road Pricing

## **Australian Load Based Licensing (LBL)**

Sets limits on pollutants emitted by holders of environment protection licences, and links licence fees to pollutant emissions.

- sets clear minimum standards for environmental performance
- incorporates powerful incentives for ongoing pollution reduction
- gives licensees flexibility to implement cost-effective pollution abatement methods
- increases regulatory transparency

## Electronic Road Pricing, S'pore

- [http://www.mhi.co.jp/en/products/detail/electronic\\_road\\_pricing\\_system.html](http://www.mhi.co.jp/en/products/detail/electronic_road_pricing_system.html)



Important to discuss political context of environmental issues with students

- Environmental politics refers to the political interaction between governments, corporate sector and civil society regarding environmental issues
  - need for accountability, transparency
- Often involves non-government organizations (NGOs) - examples:
  - International : Greenpeace International
  - National /Local : Australian Conservation Foundation, Nature Society S'pore, Bangladesh Environmental Lawyers Association (BELA)

**Q - Status of the individual – what rights does he have?**

See Aarhus Convention – right to information, participation, access to justice

Concept of the Public Trust, the EIA process and public consultation



# Regulatory theory

- Command and control –
  - very government –oriented;
  - laws and administrative measures
- Smart regulation
- Self-regulation
- Voluntary measures - EMS; ISO 14001, ISO 18001 etc.



# Command and control

- “Command and control” regulations focus on preventing environmental problems by specifying how a company will manage a pollution-generating process.
- Relies on detailed regulations followed up by an ongoing inspection program
- Examples: laws imposing controls on emissions – permits, installation of monitoring devices, mandatory reporting
- China’s “3 synchronizations” – treatment facilities must be designed, built and operated at the same time as project itself is designed, built and operated



# Smart regulation

Designing environmental regulations for optimal performance; they must be:

- Effective
- Efficient
- Least cost
- Administratively viable
- Politically acceptable
- See Gunningham et al, *Smart Regulation: Designing Environmental Policy*

[http://books.google.com.au/books?id=jle5SaNN6t8C&printsec=frontcover&dq=smart+regulation+designing+environmental+policy&source=bl&ots=HmZVaDcMNO&sig=uAIPZFJtHkO43xHanutzSXBQm2U&hl=en&ei=PcBrTbC\\_IZDevQOVmPXjAg&sa=X&oi=book\\_result&ct=result&resnum=7&ved=0CFIQ6AEwBg#v=onepage&q&f=false](http://books.google.com.au/books?id=jle5SaNN6t8C&printsec=frontcover&dq=smart+regulation+designing+environmental+policy&source=bl&ots=HmZVaDcMNO&sig=uAIPZFJtHkO43xHanutzSXBQm2U&hl=en&ei=PcBrTbC_IZDevQOVmPXjAg&sa=X&oi=book_result&ct=result&resnum=7&ved=0CFIQ6AEwBg#v=onepage&q&f=false)



# Voluntary measures

- Environmental Management Systems (EMS)
- International Standards Organisation: ISO 14000
- **ISO 14000** is a family of standards related to environmental management that helps organizations :
  - (a) minimize the negative impacts of their operations /processes on the environment
  - (b) comply with applicable laws, regulations
  - (c) continually improve in the above.
- The ISO 14001 standard represents the core set of standards used by organizations for designing and implementing an effective environmental management system
- c/p EMAS (Eco-Management and Audit Scheme) in Europe



## Why get ISO 14001 certified?

- An effective EMS can reduce waste, consumption of resources, and operating costs.
- Lower insurance costs
- Opens more markets, reduces trade barriers
- Provides a defense to corporation and directors, should there be accidents caused by negligence of employees – useful if laws presume liability on officers of company eg. Singapore's s. 17, EPMA
- Q – citizen suits?



## CORPORATE SOCIAL RESPONSIBILITY (CSR) AND ENVIRONMENTAL REPORTING

- Good corporate governance – nature and extent of corporate accountability : who are stakeholders? shareholders v board of directors v society?  
US Foreign Corrupt Practices Act 1977
- Business ethics – Q – Chinese practice/culture of “Guanxi” (connections) ?
- CSR - Corporate initiative to assess and take responsibility for the company's effects on the environment and impact on social welfare
- Environmental reporting - the communication of social and environmental effects of a company's economic actions is an important element of CSR.
- See – Global Reporting Initiative & Sustainability Reporting Guidelines
- <https://www.globalreporting.org/Pages/default.aspx>
- <https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf>



# Ethics and philosophy

- Students should have a basic understanding of the ethical and philosophical foundations of environmental law
- Can be introduced by examining modern statements of environmental charters: examples:
  - World Charter for Nature, 1982
  - Earth Charter, 2004
  - IUCN Covenant on Environment and Development, 4<sup>th</sup> ed. 2010



## SAVING THE EARTH - ETHICS

- **WORLD CHARTER FOR NATURE, 1982** - adopted by UN General Assembly 1982,
- 5 general principles

<http://www.un.org/documents/ga/res/37/a37r007.htm>

- 1. Nature shall be respected and its essential processes shall not be impaired.
- 2. The genetic viability on the earth shall not be compromised; the population levels of all life forms, wild and domesticated, must be at least sufficient for their survival, and to this end necessary habitats shall be safeguarded.
- 3. All areas of the earth, both land and sea, shall be subject to these principles of conservation; special protection shall be given to unique areas, to representative samples of all the different types of ecosystems and to the habitats of rare or endangered species.





## World Charter for Nature, 1982 (contd)

- 4. Ecosystems and organisms, as well as the land, marine and atmospheric resources that are utilized by man, shall be managed to achieve and maintain optimum sustainable productivity, but not in such a way as to endanger the integrity of those other ecosystems or species with which they coexist.
- 5. Nature shall be secured against degradation caused by warfare or other hostile activities.



# The Earth Charter

- The **Earth Charter** is an international declaration of fundamental values and principles for building a just, sustainable, and peaceful global society in the 21st century.
- Created by a global consultation process, and endorsed by organizations representing millions of people, the Charter "seeks to inspire in all peoples a sense of global interdependence and shared responsibility for the well-being of the human family, the greater community of life, and future generations."
- It calls upon humanity to help create a global partnership at a critical juncture in history. The Earth Charter's ethical vision proposes that environmental protection, human rights, equitable human development, and peace are interdependent and indivisible.
- The Earth Charter Initiative organization exists to promote the Charter



# The Earth Charter 2004

Preamble:

“We stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise.

To move forward we must recognize that in the midst of a magnificent diversity of cultures and life forms we are one human family and one Earth community with a common destiny.

We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace.

Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life, and to future generations”

See <http://www.earthcharterinaction.org/content/pages/Read-the-Charter.html>



# PRINCIPLES



## I. RESPECT AND CARE FOR THE COMMUNITY OF LIFE

### 1. Respect Earth and life in all its diversity.

a. Recognize that all beings are interdependent and every form of life has value regardless of its worth to human beings.

### 2. Care for the community of life with understanding, compassion, and love.

a. Accept that with the right to own, manage, and use natural resources comes the duty to prevent environmental harm and to protect the rights of people.

b. Affirm that with increased freedom, knowledge, and power comes increased responsibility to promote the common good.



## II. ECOLOGICAL INTEGRITY

- **5. Protect and restore the integrity of Earth's ecological systems, with special concern for biological diversity and the natural processes that sustain life.**
- - a. Adopt at all levels sustainable development plans and regulations that make environmental conservation and rehabilitation integral to all development initiatives.
  - b. Establish and safeguard viable nature and biosphere reserves, including wild lands and marine areas, to protect Earth's life support systems, maintain biodiversity, and preserve our natural heritage.
  - c. Promote the recovery of endangered species and ecosystems.
  - d. Control and eradicate non-native or genetically modified organisms harmful to native species and the environment, and prevent introduction of such harmful organisms.
  - e. Manage the use of renewable resources such as water, soil, forest products, and marine life in ways that do not exceed rates of regeneration and that protect the health of ecosystems.
  - f. Manage the extraction and use of non-renewable resources such as minerals and fossil fuels in ways that minimize depletion and cause no serious environmental damage.



### III. SOCIAL AND ECONOMIC JUSTICE

- **9. Eradicate poverty as an ethical, social, and environmental imperative.**
- **10. Ensure that economic activities and institutions at all levels promote human development in an equitable and sustainable manner.**
- **11. Affirm gender equality and equity as prerequisites to sustainable development and ensure universal access to education, health care, and economic opportunity.**
- **12. Uphold the right of all, without discrimination, to a natural and social environment supportive of human dignity, bodily health, and spiritual well-being, with special attention to the rights of indigenous peoples and minorities.**



## IV. DEMOCRACY, NON-VIOLENCE, AND PEACE

- **13. Strengthen democratic institutions at all levels, and provide transparency and accountability in governance, inclusive participation in decision making, and access to justice.**
- **14. Integrate into formal education and life-long learning the knowledge, values, and skills needed for a sustainable way of life.**
- **15. Treat all living beings with respect and consideration.**
- **16. Promote a culture of tolerance, nonviolence, and peace.**



# IUCN Draft Covenant on Environment and Development 2010

<http://data.iucn.org/dbtw-wpd/edocs/EPLP-031-rev3.pdf>





## IUCN Draft Covenant on Environment and Development 2010

- The Draft Covenant is “a blueprint for an international framework (or umbrella) agreement consolidating and developing existing legal principles related to environment and development.”
- The intention is that it will remain a “living document” until it is adopted as a basis for multilateral negotiations.
- Editions - 1995, 2000, 2004, 2010



## CONTENTS – IUCN DRAFT COVENANT

- I – Objective
- II. Fundamental Principles
- III. General Obligations
- IV. Obligations relating to Natural Systems and Resources
- V. Obligations relating to Processes and Activities
- VI. Obligations relating to Global Issues
- VII. Transboundary Issues
- VIII. Implementation and Cooperation
- IX. Responsibility and Liability
- X. Application and Compliance
- XI. Final Clauses
- COMMENTARY



# Religion and the Environment

- See the Forum on Ecology and Religion at Yale  
<http://fore.yale.edu/religion/>
  - WWF – Sacred Earth : Faiths for Conservation  
<http://www.worldwildlife.org/initiatives/sacred-earth-faiths-for-conservation>
  - *Environmental Protection in Islam*, IUCN Environmental Policy and Law Paper No. 20, Second rev. ed. 1994  
<https://portals.iucn.org/library/efiles/documents/EPLP-020-rev.pdf>
  - [Charter for Compassion - http://charterforcompassion.org/](http://charterforcompassion.org/)
- Q – Inadequate - focus only on humans

