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

***Siem Reap, Cambodia, 27 November – 1 December 2017***

**SESSION FIVE: ENVIRONMENTAL PROTECTION LAW**



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## LEARNING OUTCOMES OF SESSION 5

### Session Topic

- Understand the scope and content of environmental protection law
- Understand the institutions, tools and enforcement mechanisms of environmental protection law
- Understanding the relationship with natural resource management law and EIA law.

### Teaching Methodology

- Tutorial problem – demonstration of traditional tutorial format and problem based learning



# INTRODUCTION TO ENVIRONMENTAL PROTECTION LAW

- History and scope of Environmental Protection Law
- General versus Specific Laws
- National versus Sub-national Laws
- Institutional Arrangements
- Tools: Standards, Permits, Licenses, Orders
- Enforcement Mechanisms
- Teaching Tips



## HISTORY OF ENVIRONMENTAL PROTECTION LAWS

- Over the past four decades, most countries have developed environmental protection laws
- These laws have been enacted at the national and sub-national levels to protect air and water quality by preventing or limiting pollution
- Most countries have established environmental regulatory agencies to administer regulatory controls, monitor compliance and enforce the legislation



## THE SCOPE OF ENVIRONMENTAL PROTECTION LAWS

- Environmental Protection Law is often taught as a separate and specific aspect of Environmental Law more generally
- Environmental Protection Law generally focuses on pollution control and includes the following topics:
  - air quality
  - water quality
  - waste management (both solid and hazardous)
  - clean-up of contaminated soils and groundwater
  - risk regulation re potentially toxic substances:
    - agricultural and industrial chemicals;
    - genetically modified organisms



## THE PURPOSE OF ENVIRONMENTAL PROTECTION LAWS

- Historically, laws concerning air and water pollution have been developed as some of the earliest types of environmental law in response to major pollution events
- E.g., in the United Kingdom in the 1950's re smog, in the USA in the 1960's re pollution of inland waters by industries and marine waters by oil
- The underlying **purpose** of environmental protection laws is to *protect human health and the natural environment* from air pollution, water pollution, and exposure to toxic chemicals and hazardous wastes.



## PURPOSE (cont.): Human health impacts of pollution

- Pollution is responsible for an estimated 9 million premature deaths in 2015 (16% of all deaths worldwide)
- In the most severely affected countries, pollution is responsible for more than a quarter of all deaths
- Nearly 92% of pollution-related deaths occur in low and middle income countries
- However, pollution in these countries caused by industrial emissions, vehicles and toxic chemicals have been overlooked in both the international development and global health agendas
- Chemical pollution largely under-estimated (140,000 new chemicals and pesticides produced since 1950) despite wide dispersal in the environment — with less than half tested for safety or toxicity

SEE: *Lancet Commission on Pollution and Health*, 19 October, 2017, at

[http://dx.doi.org/10.1016/S0140-6736\(17\)32345-0](http://dx.doi.org/10.1016/S0140-6736(17)32345-0)



## PURPOSE (cont.):

### – Ecological impacts of pollution

- Destroys ecosystems (e.g. acid rain) and is closely linked to climate change
- Fossil fuel combustion in high and middle income countries, plus burning of biomass in low-income countries, accounts for 85% of all airborne particulate pollution (and also produce greenhouse gases)

### – Pollution mitigation and prevention

- Is achievable and can yield large benefits for human health and the environment (e.g., in USA, \$1.5 trillion benefit for \$65m spent)
- Claim that low-income countries must accept pollution in order to achieve economic growth and prosperity is false
- Effective pollution control will also contribute to attainment of many of the SDGs







Select City (Pollution)

What are you looking for?

- Cost Of Living
- Property Prices
- Crime
- Health Care
- Pollution
- Traffic
- Quality Of Life
- Travel

Pollution > Comparison > Cambodia vs Laos > Phnom Penh vs Vientiane

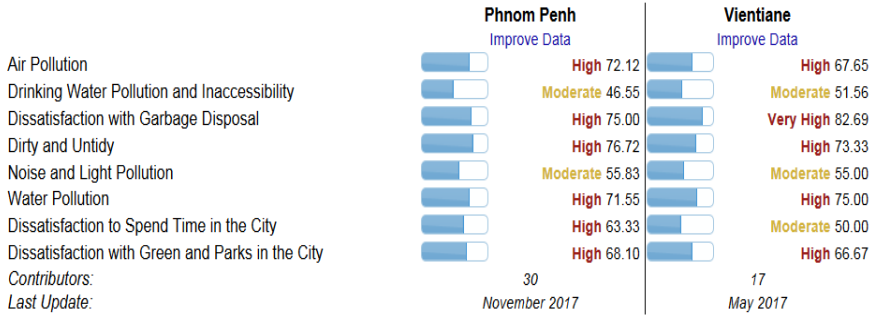
## Pollution Comparison Between Phnom Penh and Vientiane

**PROPERTY**  
List your property for free.  
No contracts. No worries.

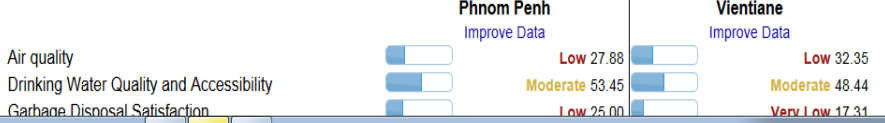
Like Tweet G+

Index	Phnom Penh	Vientiane
Pollution Index:	78.85	76.16
Pollution Exp Scale:	140.37	135.49

### Pollution Phnom Penh vs Vientiane



### Purity and Cleanliness Phnom Penh vs Vientiane



## GENERAL VERSUS SPECIFIC LAWS

- Some countries (for example, USA) have adopted specific statutes which provide separate regulatory approaches to problems of air quality, water quality, chemical safety, waste management and the clean-up of contamination.
- Other countries (for example, United Kingdom, Australia and China) have attempted to integrate their environmental protection legal framework by enacting a general, “framework” environmental protection law



## NATIONAL VERSUS SUB-NATIONAL LAWS

- National environmental protection laws are important because air and water travel across sub-national borders, and states and provinces cannot regulate sources of pollution outside their borders
- National legislation also prevents states and provinces from competing with each other for industry by adopting lenient environmental controls (known as the **“race to the bottom”**)
- In many countries, national environmental protection laws are supplemented by sub-national laws or implemented by sub-national entities (e.g., states or provinces)
- In the USA, for example, states enforce national air, water, and waste management laws, but may adopt more stringent requirements within their own borders and may regulate environmental problems not addressed by national legislation



## INSTITUTIONAL ARRANGEMENTS

- The implementation of environmental protection laws is usually accomplished by government agencies at the national and sub-national levels;
- Government agencies give effect to environmental protection legislation by developing environmental standards, issuing permits and licenses and ensuring compliance;
- In some countries (Brazil, for example), prosecutors play a prominent role in enforcing environmental protection laws;
- In other countries (USA and India, for example), citizen suits against polluters or against government agencies are significant enforcement tools.



## “COMMAND-AND-CONTROL” VERSUS ECONOMIC INCENTIVES

- The first generation of environmental protection laws relied heavily on central government imposition of emission limits and other pollution control technologies enforced by civil and criminal penalties (the “command and control” approach)
- The second generation of environmental protection laws introduced economic mechanisms such as pollution taxes and emissions trading schemes;
- Voluntary schemes have also emerged, for example:
  - ISO certification;
  - product labeling; and
  - rewarding companies that voluntarily discover, disclose, and promptly correct environmental law violations.



## REGULATORY APPROACHES

- Although the goal of environmental protection laws is to protect human health by improving environmental quality, specific statutes and regulations generally employ one of the following major approaches:
  1. **health based** (adopt requirements that protect human health regardless of cost)
  2. **technology-based** (require industry to adopt the best available pollution control technology)
  3. **balancing** (compare the health benefits of a proposed regulation to its economic costs)



## REGULATORY TOOLS

- **Ambient air quality or water quality standards** specify the permissible level of pollutants in air or water
- **Emission limitations** restrict discharges of pollutants from specific sources in order to achieve applicable air and water quality standards
- **Licenses and permits** authorize the operation of polluting facilities or the manufacture and sale of pesticides and other chemicals subject to effluent or emission limitations and/or other regulatory requirements
- **Bans or limitations** prohibit or restrict the manufacture and use of certain pesticides, chemicals and other dangerous products



## REGULATORY TOOLS (cont'd)

- **Design standards** specific how certain industrial facilities or pollution control technology should be designed
- **Information disclosure or labeling requirements** require public disclosure of product ingredients or facility emissions
- **Market-based systems** allocate pollution credits to industry that can be traded and reduce these credits over time to improve environmental quality
- **Liability rules** (Ex: US Superfund statute) may impose strict, joint and several liability for environmental clean-up costs





## ENFORCEMENT MECHANISMS

- **Monitoring, reporting, and record-keeping requirements** are often imposed on regulated entities to promote compliance
- **Inspections** enable government agencies to verify compliance
- **Compliance orders** may be issued to address violations
- **Civil penalties** are often imposed by government agencies or by courts for violation of permit or license requirements or violation of compliance orders
- **Criminal penalties** consisting of fines or imprisonment are also prescribed for more serious violations of environmental protection laws



## CITIZEN SUITS AS ENFORCEMENT TOOLS (see also Session 9)

- To enhance environmental protection despite limited resources, some countries permit private citizens to sue to enforce their environmental protection laws
- Citizens may sue the polluter and recover civil penalties or sue government agencies to compel them to enforce the environmental laws
- Citizen suit provisions in environmental statutes typically widen standing requirements (by recognizing collective interests in environmental protection without the need to show direct injury or loss)
- Citizens may also be permitted to recover lawyers fees and expert witness fees



## TEACHING TIPS

- Environmental protection law can be taught as a stand-alone pollution course or can be a section of a wider-ranging Environmental Law course;
- Problem exercises involving air and water pollution can introduce students to statutory interpretation, administrative procedure, permitting, and civil and criminal enforcement mechanisms.

