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ADB

# **STRENGTHENING THE CAPACITY FOR ENVIRONMENTAL AND CLIMATE CHANGE LAW IN ASIA AND THE PACIFIC**

**Colombo, Sri Lanka, 28<sup>th</sup> May – 1<sup>st</sup> June, 2018**

## **SESSION SEVEN: NATURAL RESOURCES MANAGEMENT LAW**



Presented by Professor Rob Fowler, Law School,  
University of South Australia

## LEARNING OUTCOMES OF SESSION 7

### Session Topic

- Understanding the legal concepts of ownership and allocation of natural resources
- Understanding the shift from resource exploitation to sustainable use of natural resources
- Understanding the role of resource-specific legislative schemes and their relationship with other environmental laws

### Teaching Methodologies

- Small-group structured discussion
- Role-play: explanation, allocation of roles & preparations



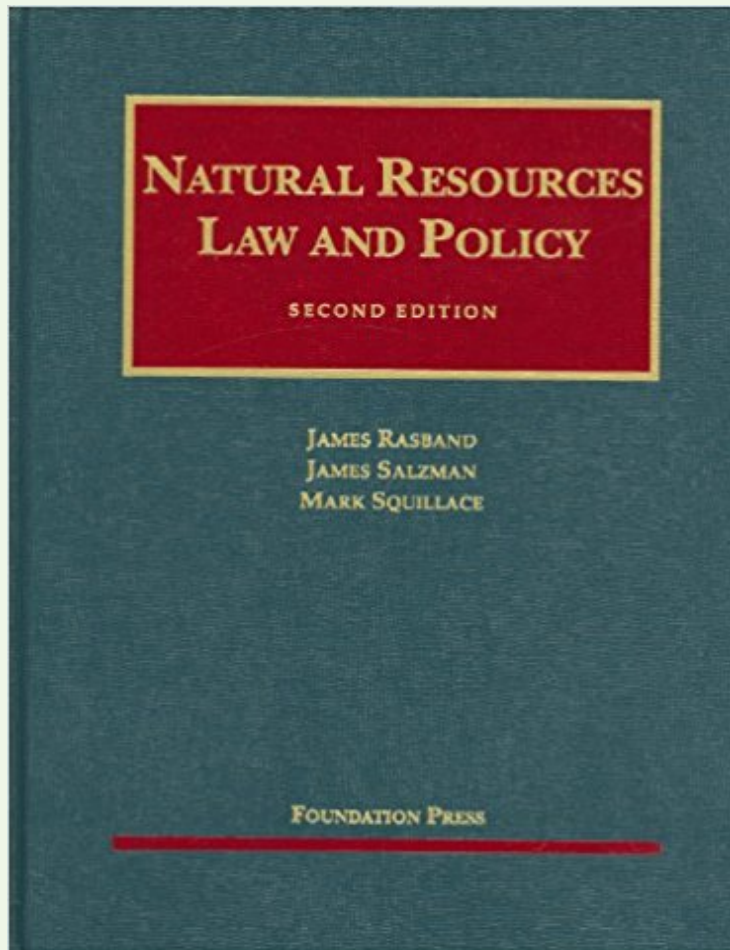
## RELEVANT SDGs

- Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss
- ALSO:
  - Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources.

(from Goal 12: Responsible consumption and production)



# INTRODUCTION TO NATURAL RESOURCES LAW



- Natural resources law is often taught as a separate and distinct subject from environmental law
- It can also be taught through more specific courses (e.g., land management law, water resources law, forestry law, mining law, oil and gas law, fisheries law, etc.)



## INTRODUCTION TO NATURAL RESOURCES LAW

- In teaching this aspect of environmental law, it is important for students to learn how this large group of laws governs the **management and conservation of natural resources from an environmental perspective (rather than a commercial perspective)**;
- TTT participants may want to consider the possibility that aspects of natural resources law can be incorporated within their own environmental law course

## THE SCOPE OF NATURAL RESOURCES LAWS

- Most countries have developed specific laws providing for **the grant of rights to own, use or extract** various types of natural resources, in particular:
  - Land
  - Water
  - Forests
  - Minerals
  - Petroleum (oil and gas – including, recently, “unconventional” gas)
  - Fisheries
- In addition, specific laws governing land management/land degradation have also been widely adopted (reflected at the international level in the UN Convention to Combat Desertification)



## THE LEGAL BASIS OF NATURAL RESOURCES LAWS

- The legal basis for the operation of most natural resources laws is that the “**dominant**” title (or, in other words, the ownership) of such resources belongs to the government;
- The relevant level of government that enjoys this title can vary from one country to another:
  - In countries with a **federal** constitutional system (e.g., USA, Canada and Australia) it is often the state/provincial governments that own natural resources such as land, forests and minerals, whilst the national (federal) governments own offshore resources (oil and gas/fisheries);
  - In countries with a **unitary** constitutional system, either national or regional governments may own natural resources, depending upon their constitutional arrangements.
  - Note also the varied recognition of **indigenous land and other resources rights** where colonisation has occurred in the past



# THE PURPOSE OF NATURAL RESOURCES LAWS

*Surely we have a responsibility  
to leave for future generations  
a planet that is healthy and  
habitable by  
all species*



Sir David Attenborough

[philharding.net/quotes-corner/](http://philharding.net/quotes-corner/)

- The original **purpose** of natural resources laws in most countries was to provide for an ordered process for the *allocation of rights to natural resources* (resource “tenures”) so as to avoid conflicts between competing interests;
- However, modern versions of these laws that have been developed over the last 30-40 years include provisions that require the administering authorities to consider the environmental impacts of resource utilization activities when granting rights to natural resources (cf., “sustainable use”).





# THE MODERN PURPOSE OF NATURAL RESOURCES LAWS

- **To ensure the balancing** of the perceived benefits arising from the utilization of particular types of natural resources with the need to avoid significant environmental impacts;
- In addition, to ensure that **renewable** resources such as water, fisheries, wildlife and forests are “sustainably” used or managed so as to avoid over-extraction or excessive depletion;
- This balancing process generally does not result in refusals to grant rights to natural resources but rather in the imposition of environmental safeguards through **conditions attached to the relevant grant of rights (tenure)**



# REGULATORY MECHANISMS UNDER NATURAL RESOURCES LAWS

**PUBLIC NOTICE FOR MINING LEASE AND ENVIRONMENTAL AUTHORITY (MINING LEASE)**  
Mineral Resources Act 1989 - Section 252A (superseded\*)  
Environmental Protection Act 1994 - Section 152

**Proposed Greenvale Project - Mining Lease Application Number 10368 and for a term of 25 years - Charters Towers Mining District**

It is advised that application has been made for a mining lease and environmental authority under the provisions of the above-mentioned Acts, for the mining/purpose of Cobalt Ore, Nickel Ore, Scandium Waste Rock/Riprap, Living Quarters/Camp, Processing Plant, Stock Pile Ore/Overburden, Tailings/Settling Dam, Water management, Workshop/Machinery/Storage on the following land parcels within the Charters Towers Regional Council Lot 501 on SP 232789 Lands Lease, Road Reserve

The application is located at approximately 4.9 kilometres West, North West of Greenvale.

The applicant(s) are: **Sconl Mining Operations Pty Ltd (100%)**

Date and time Applications Lodged: **20 April 2012 at 10:25AM**

Mining activities to be carried out include: Cobalt Ore, Nickel Ore, Scandium, Waste Rock / Riprap, living quarters/camp, Processing plant, Stock pile ore/overburden, tailings/settling dam, Water management, Workshop/Machinery/Storage.

**Mining lease application documents**  
The application documents consist of the Application for Mining Lease and copies of or extracts from the application documents, and the endorsed Mining Lease Public Notice detailing the location and description of the land applied for (including surface area and access), may be downloaded from the Department's website <https://www.business.qld.gov.au/industries/mining-energy-water/resources/public-notices-tenders> or may be inspected at the Department of Natural Resources, Mines and Energy office - Level 8, 445 Flinders Street, Townsville, QLD 4810, or may be obtained by contacting the local mines assessment hub on (07) 4447 8230.

**Environmental authority documents**  
The application documents for the proposal consist of the following:  
**Application for an environmental authority (mining activities) for a level 1 mining project.**

Copies of, or extracts from, the application documents may be viewed at the Department of Environment and Science website <http://www.dep.qld.gov.au/management/see-mining/current-applications.html> or may be obtained by contacting Permit and Licence Management by phone on 1360 130372 or by email on [palms@des.qld.gov.au](mailto:palms@des.qld.gov.au).

**Making a properly made objection/ submission**  
It is advised that any person/entity may make an objection to the grant of the mining lease, and/or a submission about the application for the environmental authority. The **objection period**, during which objections/submissions can be given, concludes on **25 May 2018** at 4:30pm (AEST).

A properly made objection and/or submission must be received on or before 4:30pm (AEST) on the last day of the objection/submission period. It must also be made in writing, addressed to:

**Mineral Assessment Hub**  
Department of Natural Resources, Mines and Energy  
PO Box 1782  
TOWNSVILLE QLD 4810  
[Mineralhub@dnrme.qld.gov.au](mailto:Mineralhub@dnrme.qld.gov.au)

A properly made objection is one that states the grounds of the objection and the facts and circumstances relied on in support of the grounds; is signed and dated by each person/entity (i.e. signatory) making the objection; states the name and address of each signatory.

Intending objectors to the mining lease application may contact the local mines assessment hub on (07) 4447 8230 and obtain the approved objection form or obtain the approved objection form (MPA-20) from the department's website - <https://www.business.qld.gov.au/industries/mining-energy-water/resources/applications-compliance/forms-fee>.

**Submissions for the Environmental Authority application:**  
A properly made submission must meet all of the following requirements:

- be written or made electronically
- state the name and address of each submitter
- be made to the administering authority stated above
- be received on or before the last day of the submission period
- state the grounds of the submission and the facts and circumstances relied on in support of the grounds.

Intending submitters may contact the Department of Environment and Science, Mineral Business Centre on (07) 4222 5352 to obtain a submission form or obtain a copy from the department's website.

[www.des.qld.gov.au](http://www.des.qld.gov.au) A copy of the objection must also be served upon the applicant(s) on or before the last day of the objection period at the following address:

**Sconl Mining Operations Pty Ltd**  
C/- Hetherington Exploration & Mining Title Services (QLD) Pty Ltd  
PO Box 49, Spring Hill LPO  
Spring Hill QLD 4804

\* This notice is issued under transitional provisions of the Mineral Resources Act section 829 - "Certificates of application for a mining lease given before commencement".

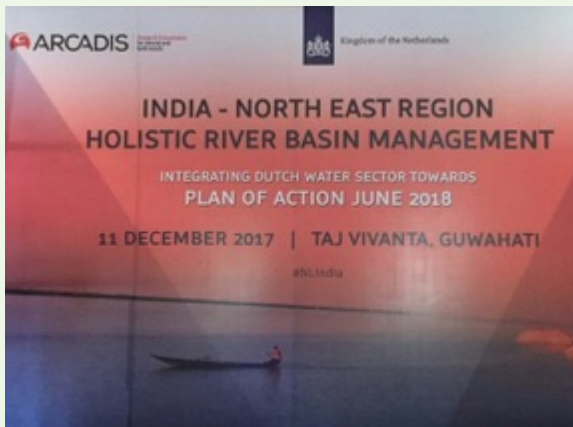
- The principal mechanism for the allocation of rights to utilize natural resources is the grant of various forms of resource “tenure”(i.e., a legal entitlement to use a particular resource);
- Tenures may range from a full **transfer of ownership** of the relevant natural resource from the government to other parties (e.g., for land, timber or minerals/gas) to more limited forms of tenure - such as **leases, licences or permits** (e.g., to take water; to use land for particular purposes such as the grazing of sheep or cattle; or to operate as a commercial fisher);
- There may also be a requirement to make **payments** to the relevant government authority in return for the grant of resource tenures (e.g., mining and oil/gas “royalties”)



## MANAGEMENT MECHANISMS UNDER NATURAL RESOURCES LAWS



- It is common for natural resources laws in many countries now to require **resource management plans** to be developed
- Purpose of these plans: to provide policy guidance to administering authorities with respect to their decisions on the allocation of tenure rights (e.g., water allocation plans, fisheries management plans and forests management plans)
- Plans provide a mechanism for pursuing the objective of achieving **the sustainable use of natural resources**, but their adoption and implementation can be contentious (e.g., re water allocation)

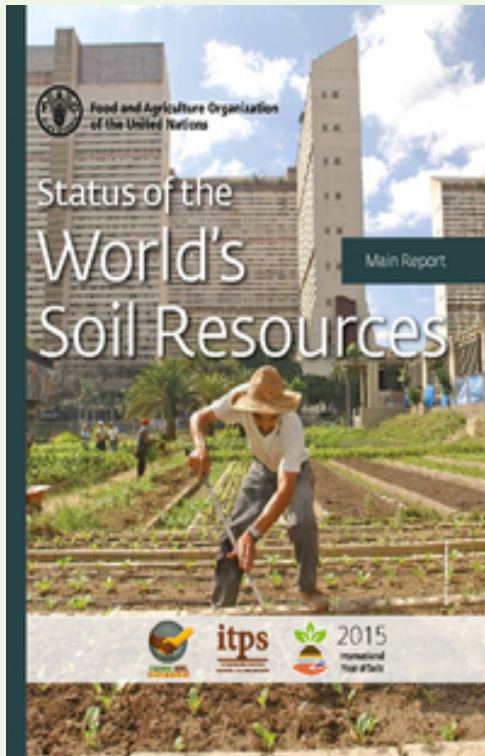


# INTEGRATED NATURAL RESOURCES MANAGEMENT

- There is a general trend towards providing for **integrated natural resources management** in order to better coordinate the operation of previously separate and distinct natural resources management laws;
- In particular, laws have been adopted in a growing number of countries to enable the **coordinated management of land and water resources** within a particular region, such as a river basin;
- These laws may be accompanied by administrative arrangements for the establishment of **regional natural resources management authorities** to develop resource management plans and administer the granting of resources tenures within the region



# LAWS TO PROTECT LAND AS A RESOURCE



- Land degradation is a serious problem in many countries, carrying with it a huge economic cost in terms of reduced agricultural production for food
- 2018 study estimates global economy will lose US\$23 trillion by 2050 through land degradation (see <https://www.unccd.int/actions/ldn-target-setting-programme/ldn-country-profiles> )
- see also 2015 Status of the World's Soils Report (available at <http://www.fao.org/documents/card/en/c/c6814873-efc3-41db-b7d3-2081a10ede50/> )



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- see also 2015 Status of the World's Soils Report (see
- In many countries, additional laws have been adopted to provide specifically for the **protection of the land resource**, for example:
  - **Soil conservation legislation** to protect land from degradation through poor agricultural practices;
  - Laws to prevent excessive **clearance of natural vegetation** by farmers;
  - Special legislation to enable the **control of “invasive” species** of plants and animals; and
  - Laws to provide for the clean-up of soils and groundwater affected by **chemical pollution** (see role-play exercise)



## LAWS TO PROTECT LAND AS A RESOURCE

- Large areas in India suffer from various types and degrees of soil erosion:
  - Around 93 Mha land is affected due to water erosion and 11 Mha due to wind erosion.
  - About 6.74 Mha is under salt affected soils and
  - 4.36 Mha forest area is under accelerated erosion due to shifting cultivation.

### **SORRY STATE**

Land degraded by water erosion

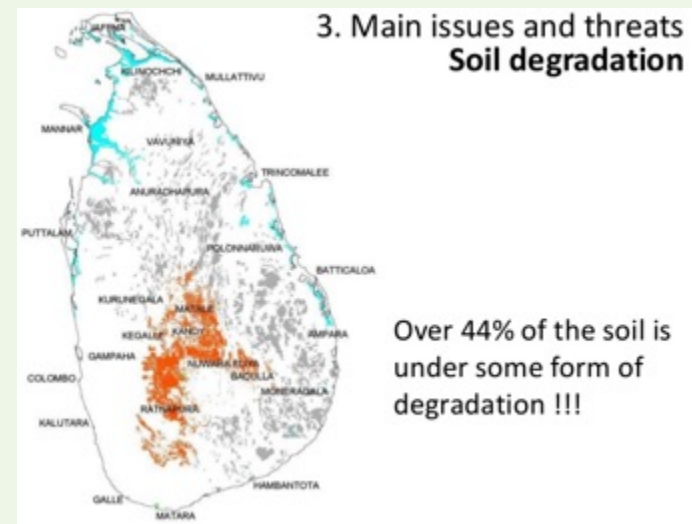
State	TGA*	Area%
Uttar Pradesh	2,38,566	54
Madhya Pradesh	3,08,641	44
Karnataka	1,91,791	41
Jharkhand	79,714	40
Andhra Pradesh	2,75,045	32
Meghalaya	22,429	31
Assam	78,438	30
Maharashtra	3,07,713	29

Source: National bureau of soil survey and Land use Planning (ICAR)

\* Total geographical area in kilometre square

- “One third of the land area of Sri Lanka faces soil erosion”

Statement by Mr. Patchi Champka Ranawake, Sri Lanka Minister of Power and Energy, 27 July 2015.



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International Environmental  
Law Research Centre

### The Rajasthan Soil and Water Conservation Act, 1964

This document is available at [ielrc.org/content/e6406.pdf](http://ielrc.org/content/e6406.pdf)

For further information, visit [www.ielrc.org](http://www.ielrc.org)

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# TRANSBOUNDARY RESOURCE MANAGEMENT ISSUES

- Transboundary conflicts may arise in relation to natural resource management, especially where river systems extend across multiple jurisdictions
- India shares a number of transboundary rivers with countries like Pakistan, China, Nepal, Bhutan and Bangladesh.
- India has water-sharing treaties with these countries but conflicts have not been resolved due to several gaps and omissions in the clauses of the treaties.
- Almost all the bilateral water treaties between India and other countries were signed during 1960s and 70s. They did not foresee the emergence of water scarcity challenges in the light of climate change and more variable rainfall patterns.
- See “Water Sharing: India’s Interstate and Transboundary Dynamics”, at <http://offprint.in/en/articles/water-sharing-india-s-inter-state-and-transboundary-dynamics>



# TRANSBOUNDARY RESOURCE MANAGEMENT ISSUES

- Trans-boundary pollution impacts may also arise from resource extraction or other development activities, for example:
  - Air pollution from the ongoing burning of forests in Indonesia
  - Marine pollution and damage to fisheries from oil well spill accidents (e.g., the Montara oil spill in the Timor Sea in 2009) ;
  - Contested access to marine fisheries (see India-Sri Lanka fisheries dispute - case study in Session 13)
  - Sethusamundram canal project (- case study in Session 13)



# RELATIONSHIP BETWEEN NATURAL RESOURCES LAWS & OTHER TYPES OF ENVIRONMENTAL LAWS

- Other types of environmental laws may be applicable to projects that involve the use of natural resources, for example:
  - Spatial planning and environmental impact assessment procedures in relation to new resources projects, e.g., mining or forestry; or
  - Environmental protection (pollution control) measures in relation to new mining, oil and gas projects;
- However, natural resources laws often exclude the application of other environmental laws to activities that they cover.
- This reflects a political/economic prioritising of resource development over environmental and conservation considerations



## SUMMARY

- NRM laws constitute a distinct and substantial component of environmental law
- NRM law may be taught as a separate subject (or specific subjects, e.g., water law, forestry law, mining law etc.), but it is also possible to include aspects of NRM law in a general course on environmental law
- The critical focus in teaching NRM law must be to examine how resource conservation and sustainable use objectives are accomplished
- For many countries in the Asian region, including in South Asia, there is also a trans-boundary perspective that deserves particular attention (and may involve the application of international/regional environmental law)