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TRENDS IN ENVIRONMENTAL CRIMES IN ASIA

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ABSTRACT

Environmental crimes are a threat to natural resources, peace, security and development. Asia, being a treasure of natural resources, is under pressure to combat such crimes. However, there are certain gaps in tackling environmental crimes. This is because of the inevitability in divorcing inherent biases in the laws that are framed to fight environmental crimes. Many instances show that what constitutes harms against the environment is mediated by non-environmental considerations like economy, ease of doing business, politics and culture. Asian nations are no exception to this especially in the context of their desire to industrialise rapidly and achieve economic growth.

INTRODUCTION

Environmental crimes are on the rise across the globe and, as a result, the world is being dredged of its rich natural resource base. Transnational environmental crimes, in particular, attract people due to lucrative deals and lower risks. In 2016, environmental crimes were evaluated at US\$91-259 billion annually, placing it at fourth in the list of economically lucrative criminal acts after drugs, counterfeit and human trafficking.¹

Unfortunately, until recently, most countries did not accord any priority to environmental crimes. This created a dearth in appropriate and proportionate governmental response to fight such crimes. One United Nations (“UN”) study identified certain gaps in tackling environmental crimes due to reasons like lack of data, knowledge and awareness, inadequate use of legislation, lack of

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¹ ‘Environmental crimes are on the rise, so are efforts to prevent them’, *UN Environment Programme* (Web page, 21 September 2018) <<https://www.unenvironment.org/news-and-stories/story/environmental-crimes-are-rise-so-are-efforts-prevent-them>>.

institutional will and governance, lack of capacity in the enforcement chain, lack of national and international cooperation and information sharing among authorities, and lack of engagement with private actors and local communities.²

Environmental crimes are a threat to natural resources, peace, security and development.³ In addition to the traditionally understood environmental crimes such as wildlife crimes, pollution, and forestry crimes, newer kinds of crime like carbon trade and water management crime are arising.⁴ Asia, a treasure of natural resources and home to a wide variety of flora and fauna, is under pressure to combat such crimes. Further, the pursuit of economic development and rapid industrialization add to these woes. Against this backdrop, it becomes crucial to examine the current capabilities of Asian countries to fight such environmental crimes.

In this paper, eight Asian countries have been chosen. An attempt has been made to study their legal-procedural frameworks to deal with environmental crimes, the status of implementation and the adjudicatory responses. The effort is to understand the way in which environmental crimes are understood and perceived by these nations to gauge the trends in environmental crimes in Asia. The paper is limited to these eight Asian countries and their legal frameworks.

It is argued in this paper that what constitutes environment harm is mediated by non-environmental considerations. This is further specific to the history, context and priorities of a nation. The study of the eight Asian nations helps in establishing the same.

² 'The State of Knowledge of Crimes that have Serious Impacts on the Environment', *UN Environment Programme* (Report, 2018) <<https://www.unenvironment.org/resources/publication/state-knowledge-crimes-have-serious-impacts-environment>>.

³ 'The rise of environmental crime: A growing threat to natural resources peace, development and security', *UN Environment Programme* (Report, 2016) <<https://www.unenvironment.org/resources/report/rise-environmental-crime-growing-threat-natural-resources-peace-development-and>>.

⁴ 'Environmental Crime', *Interpol* (Web page, 2018) <<https://www.interpol.int/Crimes/Environmental-crime>>.

ENVIRONMENTAL CRIMES: OVERVIEW

Environmental crime is a complex and ambiguous term.⁵ The approaches to understanding environmental crimes vary - whether it is merely violation of legal codes as defined by law or whether it should also include the risks and harm to environment.⁶ Over the years, it has become an umbrella term to cover crimes related to biodiversity, natural resources and environmental quality.⁷ Biodiversity related crimes include: illegal acts that impact flora, fauna and their habitat; cruelty to wildlife; and illegal trade, to name a few. Exploitation of natural resources is understood to cover illegal mining and fishing among others. Concerns regarding environmental quality are rising on exponentially with increase in pollution of various kinds and hazardous waste generation. Therefore, environmental crimes are evolving in character and encompass a wide variety of actions. They cannot be restricted into a singular and one-dimensional definition.

Scholars have attempted to capture the various dimensions of environmental crimes. For instance, White and Heckenberg bring out 'brown', 'green' and 'white' environmental concerns where 'brown' relates to the urban life and pollution, 'green' refers to the wilderness areas and conservation issues and 'white' include impact of new technologies like genetically modified organisms.⁸ These environmental offences may be committed by individuals, groups, governments or businesses. Currently, there is no international treaty on tackling environmental damage. The only guiding instrument in this regard is the UN Environment Programme (UNEP) Guidelines for the Development of Domestic Legislation on Liability, Response Action and Compensation for Damage Caused by Activities Dangerous to the Environment adopted in 2010. Under this, such environmental damage can be a product of "not complying with applicable statutory or regulatory

⁵ Carole Gibbs and Rachel Boratto, 'Environmental Crime' (March 2017) <<https://oxfordre.com/criminology/view/10.1093/acrefore/9780190264079.001.0001/acrefore-9780190264079-c-269?print=pdf>>.

⁶ Carole Gibbs, Meredith L. Gore, Edmund F. McGarrell, Louie Rivers, 'Introducing Conservation Criminology: Towards Interdisciplinary Scholarship on Environmental Crimes and Risks', (2010) 50 (1) *The British Journal of Criminology* 124.

⁷ 'INTERPOL-UNEP conference to tackle most pressing environmental crime issues', *UN Environment Programme* (Web page, 5 October 2016) <<https://www.unenvironment.org/news-and-stories/story/interpol-unep-conference-tackle-most-pressing-environmental-crime-issues>>.

⁸ R. White and D. Heckenberg, *Green criminology: An introduction to the study of environmental harm* (New York: Routledge, 2014) 69.

requirements or through wrongful international, reckless or negligent acts or omissions”.⁹ In this paper, while analyzing the approaches to environmental crimes across selected Asian nations, the focus is placed on the statutory framework and its violation. This is to comprehend the diverse approaches that inform the idea of environmental crimes in different regions.

It is noteworthy that the UNEP guidelines follow a strict liability standard and define environmental damage to include a series of effects resulting from actions of offenders. For instance, it considers the reduction or loss of the ability of the environment to provide goods as environmental damage.¹⁰ The differences in approach to environmental crimes have also given roots to various theoretical approaches, for instance, the deterrence theory, in regulation of the same.¹¹ In framing the regulations, a shift to smart regulation which includes combining economic incentives, regulatory instruments, self-regulation and third parties, would ensure flexibility and tailored solutions to environmental problems.¹²

On the other hand, approaches to deciphering environmental harms are based on major tenets of green criminology, state-corporate crime, ecofeminism, environmental racism/justice and deep ecology. These help in a legalistic approach along with studying the role of corporate, social, economic and political factors on environmental harms and risks.¹³ This paper does not extend to a detailed discussion of these theoretical frameworks. That said, this diversity of perspectives to environmental crimes is important to understand its impact on global community and to frame the access to healthy environment as a human right.

⁹ ‘International Environmental Law and Environmental Crime: An Introduction’, *EU Action to Fight Environmental Crime* (2015) <https://efface.eu/sites/default/files/EFFACE_International%20Environmental%20Law%20and%20Environmental%20Crime_An%20Introduction.pdf>.

¹⁰ Ole Kristian Fauchald, David Hunter and Wang Xi, *Yearbook of International Environmental Law* 2008 (Oxford University Press, 2009) 215.

¹¹ Gibbs (n 5) 18. Deterrence theory, subjective expected utility theory, social license theory, motive opportunity choice model, norms of compliance and corporate citizenship are some of the theoretical approaches to environmental crimes and its regulation.

¹² N. Gunningham and P. Grabosky, *Smart regulation: Designing environmental policy* (Oxford University Press, 2004).

¹³ Gibbs (n 5) 22-23.

APPROACHES TO ENVIRONMENTAL CRIMES IN ASIA

Economic growth and globalization have drawn immense amounts of natural resources from the Asian nations. The threat of environmental crimes goes beyond transnational boundaries affecting the global environment heritage. These crimes are dealt with at a domestic level and require a study to understand their effectiveness and future recourse. This paper has undertaken study of the legal-procedural framework on environmental crimes in the following eight Asian countries: Indonesia, Singapore, United Arab Emirates, Japan, South Korea, China, Thailand and India.

These countries were selected based on three parameters: (i) their geographical position in Asia, (ii) countries which are part of the International Consortium on Combating Wildlife Crime partners with regional hubs¹⁴ and, (iii) economic wealth in the form of the nominal GDP released by the International Monetary Fund (World Economic Outlook, April 2019).¹⁵ Considering the composition of countries in each of these indicators along with overlaps, eight Asian countries are studied below for their approaches to environmental crimes.

Indonesia

Indonesia, a sprawling archipelago, is a rich source of diverse flora and fauna and thick cover of forests. However, it faces the highest rate of deforestation.¹⁶ With the decentralization reforms in 1999, there were authorities in huge numbers at the local level who exercised their powers to issue licenses for use of natural resources, which trumped environmental concerns.¹⁷ In addition,

¹⁴ India, Singapore, Thailand, Republic of Korea, Uzbekistan, UAE and Saudi Arabia are the ICCWC partners with regional hubs: 'Our response to environmental crime', *Interpol* (Web page, 2018) <<https://www.interpol.int/en/Crimes/Environmental-crime/Our-response-to-environmental-crime#pt-7>>.

¹⁵ The top Asian countries in order are: 1. China 2. Japan 3. India 4. Korea 5. Indonesia: 'World Economic Outlook', *International Monetary Fund* (Report, April 2019) <https://www.imf.org/external/datamapper/NGDPD@WEO/OEMDC/ADVEC/WEO_WORLD/APQ>.

¹⁶ 'Valuing the ecosystem of the Indonesian rainforest', *Green Facts* (Web page) <<https://www.greenfacts.org/en/indonesian-forests/1-2/index.htm>>.

¹⁷ 'Environment and Natural Resource Management in a Time of Transition', *World Bank* (Report, February 2001) <<https://web.worldbank.org/archive/website00903F/WEB/PDF/INDONE-2.PDF>>.

Indonesia is facing a significant cut in its forest cover especially, palm oil plantations and consequent emission of greenhouse gases (fifth largest¹⁸) due to clearing through burning.¹⁹

While Indonesia has legislation in place to fight these environmental issues, its implementation, as discussed later, is lackluster. The Environmental Protection and Management Act, 2009 (EPMA) is the governing law on environment protection and regulation in Indonesia.²⁰ The Act itself mentions that it is different from the prior law of 1997, by placing focus on good governance which is inspired by aspects of transparency, participation, accountability and justice.²¹ Additionally, there are sectoral laws on industry, plantations, marine affairs among others. There are also sub-national environment laws at the district or provincial level.²²

The position of law in dealing with environmental crimes prior to the 2009 law created a favourable mechanism for companies to pollute the environment. The heart of the law required an administrative violation for an environmental crime to be established. For instance, a company can simply pollute the environment if all their permits are in order, because there is a lack of administrative violation in this instance.²³ The 2009 law changed this position which allowed charges against companies even if permits, for instance, are in order. However, to the fear of environmental activists, the 2018 proposed revision to the criminal code in Indonesia will bring back the prior 2009 position which will make environment law enforcement a hard nut to crack.²⁴

The Ministry of Environment and Forest (after a merger in 2014 of the Environment Ministry and Forest Ministry) is the main administering body, along with governors, mayors/regents and

¹⁸ 'Forests and Landscapes in Indonesia', *World Resources Institute* (Web page) <<https://www.wri.org/our-work/project/forests-and-landscapes-indonesia>>.

¹⁹ Paul J Burke and Budy P Resosudarmo, 'Survey of Recent Developments' (2012) 48(3) *Bulletin of Indonesian Economic Studies* 299, 311.

²⁰ *Environmental Protection and Management Act* (Law No. 32/2009 Indonesia).

²¹ *Ibid* elucidation I[7].

²² Emma Lees et al (eds), *The Oxford Handbook of Comparative Environmental Law* (Oxford University Press, 2019) 236.

²³ Hans Nicholas Jong, 'Activists fear for environmental protection under Indonesia's revised Criminal Code', *Mongabay* (Web page, 11 April 2018) <<https://news.mongabay.com/2018/04/activists-fear-for-environmental-protection-under-indonesias-revised-criminal-code/>>.

²⁴ *Ibid*.

technical implementation units in 5 units across Indonesia.²⁵ The enforcement approach is through precautionary principle wherein the officials issue warnings, sanctions and revoke permits.²⁶ The government records also show actions taken against such crimes during this period. Some of the actions are as follows: 393 administrative sanctions, consisting of 189 formal warnings, 23 reprimand letters, 156 coercions, 21 license suspensions, and 3 revocations of permission.²⁷ A special task force is in place in Indonesia to prevent and combat illegal, unreported and unregulated overfishing in the marine sources.²⁸ Along with the investigation conducted by police forces, a category of officials called the civil servant investigators also conduct investigation into the violations/ environmental crime.²⁹

According to WWF Indonesia, environmental crimes are getting recognized as serious crimes. In 2017, it was reported that Ditjen Gakkum KLHK (Directorate General of Law Enforcement of the Ministry of Environment and Forestry) was able to resolve 75 cases that came before it.³⁰ The period 2015-2017 witnessed various environmental crimes. Indonesia lost 7.090 m³ of land due to illegal logging, around 4.2 million hectare (ha) from land clearing, and 11.636 units of wild plants and animals trafficking, to name a few.³¹

Indonesian Forum for the Environment (Walhi) executive director, almost a year ago brought out the lack of implementation of the law that is put in place in Indonesia to fight environmental crimes. The main causes for the same were the lack of awareness of the government officials – one, about the protocol and second, the channels to initiate immediate action.³² For instance, while

²⁵ Indonesia: Environment and Climate Change Law 2019, *ICLG* (Web page, 2019) <<https://iclg.com/practice-areas/environment-and-climate-change-laws-and-regulations/indonesia>>; *Environmental Protection and Management Act* (Law No. 32/2009 Indonesia) art 72.

²⁶ Indonesia: Environment and Climate Change Law 2019, *ICLG* (Web page, 2019) <<https://iclg.com/practice-areas/environment-and-climate-change-laws-and-regulations/indonesia>>.

²⁷ Diah R Sulistiowati, Training of Investigative Journalism to Disclose Environmental Crimes, *WWF Indonesia* (Web page, 21 December 2017) <https://www.wwf.or.id/en/news_facts/new_articles/news_forest.cfm?63082/Training-of-Investigative-Journalism-to-Disclose-Environmental-Crimes>.

²⁸ *Task Force for combating Illegal Fishing*, President Regulation No. 115 of 2015.

²⁹ *Environmental Protection and Management Act* (Law No. 32/2009 Indonesia) art 94.

³⁰ Sulistiowati (n 27).

³¹ Sulistiowati (n 27).

³² 'Indonesia needs to act faster against environment crimes: Bodies', *The Jakarta Post* (8 June 2018) <<https://www.thejakartapost.com/news/2018/06/08/indonesia-needs-to-act-faster-against-environment-crimes-bodies.html>>.

placing restrictions on burning, the EPMA recognizes local wisdom. The Act also elucidates the same to mean maximum size of two hectares per head of family.³³ However, these communal allocations can be purchased by big corporate for private exploitative purposes. Such loopholes are not identified by officials and often get overlooked while addressing environmental crimes.

Law Enforcement Director General Rasio Ridho Sani at the Environment and Forestry Ministry said in 2018 that majority of the cases that finally reach the courts do not involve corporations but individuals.³⁴ There was an open admission that bringing corporations to the court has been difficult because of the imbalance in resources that they can employ to fight the cases and adduce favourable expert evidence.³⁵ There are reports which claim that the loopholes in Indonesian corruption law add to the peril of perpetuation of environmental crimes in Indonesia.³⁶

Citizens can bring suits against government or officials for alleged violations of environmental protection norms or abuse of power in administrative courts. In addition to this, environmental crimes can proceed in general courts as general civil or criminal cases. The Constitutional Court can enforce the Constitutional right relating to environment. Functioning of these courts is considered to be ineffective, wherein instances of succeeding in an environmental protection case for the victim and consequently enforcing it, is rare in number.³⁷

Moreover, the punishment given after court proceedings in environmental crime cases are very low sanctions. For instance, in 2015 there were 25 cases before the Supreme Court on environmental crimes. Out of this just one case resulted in a punishment above 3 years. The rest either found the accused not guilty or provided a very low imprisonment period.³⁸

Amidst proposals by civil society to introduce environmental judicature or special environment court, the Indonesian government relied on certified environmental judges.³⁹ The approaches by

³³ *Environmental Protection and Management Act* (Law No. 32/2009 Indonesia) art 63 and elucidation.

³⁴ Indonesia needs to act faster against environment crimes: Bodies (n 32).

³⁵ Indonesia needs to act faster against environment crimes: Bodies (n 32).

³⁶ 'How loopholes in Indonesia's corruption law let environmental crime persist', *Mongabay* (9 April 2018) <<https://news.mongabay.com/2018/04/how-loopholes-in-indonesias-corruption-law-lets-environmental-crime-persist/>>.

³⁷ Lees (n 22) 245.

³⁸ Mahkamah Agung, 'Supreme Court Annual Report 2015' (Jakarta 2015) 111.

³⁹ Supreme Court Decree No. 134/KMA/SK/IX/2011 (Indonesia).

the court have also been discretionary and not uniform in applying principles. In *Dedi et al v PT Perhutani*,⁴⁰ the Court applied precautionary principles to establish strict liability for environmental damage. In 2015, the court adopted a ‘nature favour’ approach to impose liability and order compensation by evaluating loss from burning forests using scientific evidence.⁴¹ On the other hand, the judges of the constitutional courts have given importance to human rights and environmental protection goals, but have failed to explain the decision leading to lack of clarity in enforcing the order.⁴²

There have also been attempts to undermine the decisions of courts through subsequent regulations. While the court recognized the community rights to manage forests,⁴³ the government regulation excluded community consultation for forest zonation.

Overall, the implementation of the legislative frameworks has been far from satisfactory. To combat environmental crimes further and strengthen its mechanisms, Indonesia has committed to reducing greenhouse gas emissions by 29% below business-as-usual projections by 2030 and 41% with international support.⁴⁴

Singapore

Singapore is one of the smallest countries in the world located at the tip of the Malay peninsula. Lacking natural resources, the country focused on its location to flourish trade and services. At the same time, it never divorced environmental policies from economic development which has paved way for Singapore to create a healthy environment and earn the tag of ‘City in a Garden’.⁴⁵

⁴⁰ Supreme Court Decision No. 1794 K/PDT/2004 (Indonesia).

⁴¹ *Ministry of Environment v PT Kalista Alam*, Supreme Court Decision No. 651/K/PDT/2015 (Indonesia).

⁴² Lees (n 22) 250.

⁴³ Constitutional Court Decision No. 35/PUU-II/2012 (Indonesia); *Amendment to Forest Zone Designation*, Regulation of Forestry Minister No. 62 of 2013.

⁴⁴ ‘Green Growth Policy Review Indonesia’, *Organisation for Economic Co-operation and Development* <https://www.oecd.org/environment/country-reviews/Green_Growth_Policy_Review_Indonesia.pdf> 9.

⁴⁵ Heng, L., ‘A Fine City In A Garden—Environmental Law And Governance In Singapore’, (2008) *Singapore Journal of Legal Studies* 68-117.

Environmental law in Singapore comprises of the national legislation and the common law principles.⁴⁶ In addition, the guidelines, regulations and rules issued by statutory bodies also govern the environmental regulation processes. The Environmental Protection and Management Act, 1999 (EPMA) is the overarching environment protection and resource conservation legislation. Additionally, the Environmental Public Health Act, 1987 governs waste management. There are various nature conservation laws in Singapore like the Trees and Parks Act, the Wild Animals and Birds Act⁴⁷ which strive towards conserving its natural areas. In addition to this, there are energy conservation laws⁴⁸

The EPMA requires special permit to carry on industrial emissions and it places compliance requirements from those entities.⁴⁹ More stringent measures are placed on dark smoke through the EMP (Air Impurities) Regulations.⁵⁰ Interestingly, Singapore allows tax incentives and tax deductions for adopting energy-efficient equipment as a step towards promoting environment-friendly methods.⁵¹ It also economically disincentivises vehicular ownership through hefty import taxes.⁵² On the other hand, Singapore recently introduced tax burdens as well to reduce carbon emission. Singapore has implemented a carbon tax from 2019.⁵³

Singapore has a Transboundary Haze Pollution Act of 2014, which aims to ‘punish those responsible for causing or condoning fires if the burning results in unhealthy levels of haze in Singapore’. The key highlight of the Act is that it brings the violator as well as the contributor before the law.⁵⁴ This also brings down the threshold requirement of burden of proof to proceed against such persons.

⁴⁶ Walter Woon, ‘The Applicability of English Law in Singapore’, in *The Singapore Legal System* (Kevin Y.L. Tan ed., 2d ed. 1999) 230, 238.

⁴⁷ *Wild Animals and Birds Act* Ordinance 5 of 1965, Cap. 351 (Singapore).

⁴⁸ *Energy Conservation Act 2012* (Singapore).

⁴⁹ *Environmental Protection and Management Act* s 6-9 (Singapore).

⁵⁰ *EMP (Air Impurities) Regulations* RG 8, S 595/2000 (Singapore).

⁵¹ *Income Tax Act* Ordinance 39 of 1947, revised edition 2014 (Singapore).

⁵² Lye, LH, ‘Environmental taxation in the regulation of traffic and the control of vehicular pollution in Singapore’ (April 2002) *Third Annual Global Conference on Environmental Taxation* 12-13.

⁵³ ‘Singapore Budget 2019 Full Coverage: GST going to 9%, duty free booze allowance cut, \$1.1b bicentennial bonus’, *Singapore Business Review* (Web page, 18 February 2019) <<https://sbr.com.sg/economy/news/full-singapore-budget-2019-carbon-tax>>.

⁵⁴ Jong (n 23).

Singapore also has an effective waste management system and draconian anti-littering laws.⁵⁵ Illegal dumping is a serious offence for which arrest can be made without warrant. On repeated offences, the law prescribes mandatory imprisonment.⁵⁶ Therefore, through stringent penalties and its deterrent effect, Singapore tries to imbibe a shift in the people's approach to natural resources and adopt an environment friendly way of life. However, Singapore does not have a law that mandates Environment Impact Assessments (EIA) or making such studies public. Nevertheless recently, there are steps to make such reports public in cases involving public interest.⁵⁷

The Ministry of Environment and Water Resources, along with its two statutory bodies the National Environment Agency and the Public Utility Board, monitors the implementation of the environment related laws. These bodies also work in association with the Ministry of National Development.

Criminal sanctions, administrative guidelines and civil sanctions are the three ways through which environmental law is enforced in Singapore, with criminal sanctions being the common means.⁵⁸ Jurisdiction for the different courts varies. It depends on the maximum sentence and the amount of the claim. As the laws that protect the environment usually carry fines not exceeding S\$20,000 and imprisonment not exceeding two years, infringements of these laws are heard by the Magistrates' Courts. Fines of up to S\$100,000 can be imposed for serious breaches of the law and these cases will be heard by District Courts.⁵⁹

There is a dearth of recent cases concerning environmental crimes in Singapore. This evidences the fact that Singapore has been successfully implementing its laws and creating a safe environment for its residents to live in. At present, the air and water quality in Singapore are well within US-EPA and WHO standards.⁶⁰ Without a doubt, the strict enforcement of the laws has

⁵⁵ *Environmental Public Health Act 1969* s18 (Singapore).

⁵⁶ Lees (n 22) 306.

⁵⁷ 'Parliament: Environment impact assessments to be made public unless there are security concerns, says Desmond Lee', *The Straits Times* (11 February 2019) <<https://www.straitstimes.com/politics/parliament-govt-to-make-environment-impact-assessments-public-unless-there-are-security>>.

⁵⁸ Kim Boon Foo, 'Environmental Criminal Law in Singapore', [1997] 9 *Singapore Academy of Law Journal* 294.

⁵⁹ Lye Lin Heng, 'The Judiciary And Environmental Governance In Singapore', (2010) 3(1) *Journal of Court Innovation* 133, 139.

⁶⁰ Lees (n 22) 297.

created deterrent effects within society. This could be a typical example of law leading a societal transformation.

United Arab Emirates

While the United Arab Emirates (UAE), like other Gulf countries, has become synonymous with oil-minted wealth and soaring skyscrapers, it is also home to a complex, beautiful yet fragile environment.⁶¹ Due to the rapid development, rising immigrant population, construction and mining activities and the effects of climate change, it is faced with huge challenges to its natural environment with these activities causing significant damage to the ecosystem.⁶² Realising the need for stricter protection laws, the UAE has a slew of statutes that deal with wide ranging environmental issues to create a strong protection regime, at least on paper.

The UAE is a federation of seven emirates and the federal constitution allows for allocation of powers between the federal government and the emirates. As a result, the body of environmental laws too exists at both levels.⁶³ Since it is not possible to map out the entirety of these laws due to spatial constraints, we shall focus on the Federal laws. The primary legislation for environmental protection in the UAE is Federal Law No. 24 of 1999 for the protection and development of the environment.⁶⁴

There are around twenty specific laws that deal with conservation of aquatic resources,⁶⁵ regulating hunting of birds and animals,⁶⁶ waste management,⁶⁷ air pollution, agricultural protection, mining activities and others. The categories of environmental laws in UAE can be

⁶¹ Kanishka Singh, 'Environmental Law Regime in the United Arab Emirates: An Investor's Guide to Environment Compliance in the Construction Industry', (2014) 2 *Electronic Journal of Islamic and Middle Eastern Law* 83.

⁶² Ibid.

⁶³ Environmental Practice in United Arab Emirates: An Overview, *STA Law Firm* (Web Page, June 2017) <<https://www.stalawfirm.com/en/blogs/view/environmental-global-guide-2017-2018.html>>.

⁶⁴ Federal Law No. 24 of 1999 (United Arab Emirates).

⁶⁵ Federal Law No. 23 of 1999 (United Arab Emirates).

⁶⁶ Federal Law No. 9 of 1983 (United Arab Emirates).

⁶⁷ Federal Law No. 18 of 2018 (United Arab Emirates).

broadly be divided into ownership of dangerous animals, preservation of plant species, sea dumping and pollution, nature reserves.⁶⁸

These acts set out criminal and civil penalties for environmental offences which are enforced by the relevant authority depending on the type of offence.⁶⁹ Punitive fines ranging from AED 2000 to 20000 can be imposed on offenders and terms of imprisonment may vary from one to ten years.⁷⁰

Given the wide range of construction and mining projects, the laws mandate environmental impact assessments for projects that fall within the list released by the concerned environmental agencies. Non-compliance with these procedural requirements can result in punitive fines ranging from AED 1000 to AED 1 million with imprisonment of up to one year.⁷¹

The Federal Act No.24 defines the term environment as consisting of two elements - the natural element which includes human, animals, plants, other living species, natural resources of air, soil, and water, bio and non-bio materials, and natural ecosystems; and the artificial environment which includes all man-made constructions, i.e. roads, bridges, airports, transportation, industries and technologies.⁷² Similarly, it adopts a comprehensive definition of the term pollution; it defines “environmental pollution”⁷³ along with certain forms of pollution i.e. water and air pollution. The same approach was applied by the Act in defining the term “waste”.⁷⁴

While most of these pieces of legislation are old, in 2018 a new federal law was enacted to update the regulation of waste management.⁷⁵ While it does not impose imprisonment, it creates a number of offences with penalties ranging from AED 30,000 to 1,000,000.⁷⁶ These include actions like burning or burial of wastes in open spaces, public areas, water bodies and non-compliance with the provisions of the Act. The Federal Act No. 24 criminalises several acts like carrying hazardous

⁶⁸ Environmental Protection, *Official Portal of the UAE Government* (Web Page) <<https://www.government.ae/en/information-and-services/environment-and-energy/environmental-protection>>.

⁶⁹ Environmental Practice in United Arab Emirates: An Overview (n 63).

⁷⁰ Environmental Practice in United Arab Emirates: An Overview (n 63).

⁷¹ Environmental Practice in United Arab Emirates: An Overview (n 63).

⁷² Federal Law No. 24 of 1999 (United Arab Emirates), art 1.

⁷³ Federal Law No. 24 of 1999 (United Arab Emirates), art 1.

⁷⁴ Federal Law No. 24 of 1999 (United Arab Emirates), art 1.

⁷⁵ Federal Law No. 18 of 2018 (United Arab Emirates).

⁷⁶ Federal Law No. 18 of 2018 (United Arab Emirates), art 27-30.

substances,⁷⁷ wastes and pollutants in a marine vessel without permission,⁷⁸ spillage,⁷⁹ discharge of industrial effluents⁸⁰ without treatment, to name a few with a penalty of imprisonment.⁸¹

The UAE is a party to a host of regional and international conventions on environmental protection. As a result, its laws and judicial decisions reflect the principles of sustainability, precautionary principles, polluter pays principle and public participation.⁸² Both civil courts and criminal courts have jurisdiction to hear environmental matters and there is no specific environmental court. Their legal system is complex as core principles are drawn from Sharia and there is an influence of European civil law, Egyptian legal code, French system and common law.⁸³ Further, language acts as a huge barrier. Hence, we could not access the decisions and could not find statistics to track trends in arrests and convictions in cases of environmental crimes in UAE.

Japan

Japan comprises of four main islands and thousands of other small islands. This sovereign island nation is located on the Northern Coast of Pacific Asia. Surprisingly, only 18 % of Japan's land is suitable for settlement, which is a reason why the population of this great nation is clustered in the central cities.⁸⁴ This puts a lot of pressure on the environment. Further, being a developed country with high consumption rates, the waste generation is also quite high. It is also extremely vulnerable to coastal disasters.⁸⁵ Thus, the country places a lot of primacy on environmental protection.

⁷⁷ Federal Law No. 24 of 1999 (United Arab Emirates), art 25.

⁷⁸ Federal Law No. 24 of 1999 (United Arab Emirates), art 26.

⁷⁹ Federal Law No. 24 of 1999 (United Arab Emirates), art 28.

⁸⁰ Federal Law No. 24 of 1999 (United Arab Emirates), art 37.

⁸¹ Federal Law No. 24 of 1999 (United Arab Emirates), art 74-80.

⁸² Dr. Abdelnaser Zeyad Hayajneh, 'Legal Protection for the Environment in Jordan and the United Arab Emirates: Comparative Outline' (2012) 7(2) *British Journal of Humanities and Social Sciences* 64.

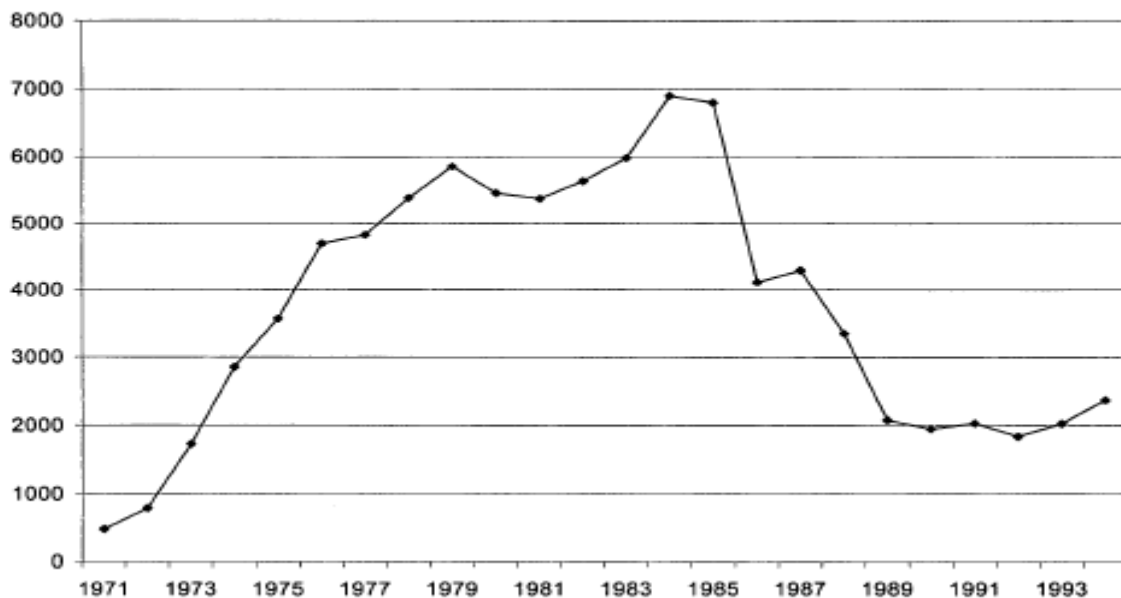
⁸³ Ahmed Aly Khedr and Bassam Alnuaimi, A Guide to United Arab Emirates Legal System, *NYU Law Globalex* (Web Page, June 2010) <https://www.nyulawglobal.org/globalex/United_Arab_Emirates.html>.

⁸⁴ Thomas Clark, An Overview of Environmental Issues and Policies in Japan, *APFED* (Web Page, 23 May 2017) <<https://www.apfed.net/overview-japans-environmental-issues-policies/>>.

⁸⁵ *Ibid.*

Japan was one of the first countries to create environmental offences in the 1970s, giving Japan one of the strictest anti-pollution laws in the world.⁸⁶ It criminalized acts of pollution that endangered human health.⁸⁷ It also created offences for regulatory non-compliance by penalising the responsible company officials.⁸⁸ The maximum number of arrests happened under Waste Disposal Law until the 2000s.⁸⁹ However, despite being a pioneer in environmental criminal law, it was implemented with differing intensities in different phases as illustrated in the figure below⁹⁰ and overall, the trend nowadays is for environmental litigation to be fought in administrative and civil courts than criminal courts.⁹¹

Figure 1. Police Arrests for Pollution Crimes in Japan, 1971-1994.



⁸⁶ Robert Kondratt, 'Punishing and Preventing Pollution in Japan: Is American Style Criminal Enforcement the Solution?', (2000) 9(2)*Pacific Rim Law and Policy Journal* 379.

⁸⁷ *Environmental Pollution Crime Law* (Law No. 142 of 1970, Japan), art 1. It governed industrial air and water pollution emitted in the course of entrepreneurial activities.

⁸⁸ *Water Pollution Control Law* (Law No. 138 of 1970, Japan); *Air Pollution Control Law* (Law No. 97 of 1968, Japan).

⁸⁹ Hiroshi Oda, 'The Role of Criminal Law in Pollution Control' in Shigeto Tsuru and Helmut Weidner (eds), *Environmental Policy in Japan* (1989) 183.

⁹⁰ Kondratt (n 86).

⁹¹ Shiro Kawashima, 'A Survey of Environmental Law and Policy in Japan' (1995) 20(2) *North Carolina Journal of International Law and Commercial Regulation* 1.

The current environmental law regime in Japan is the Basic Environmental Law, 1994 which sets out three basic principles for environmental conservation and the responsibilities of each sector of the society -- including the national and local governments, corporations, and citizens -- in living up to these principles and lays down environmental policies.⁹² This is supplemented by other key pieces of legislation dealing with specific subject matters like the Water Pollution Control Law, Air Pollution Control Law, Environmental Impact Assessment Law, Waste Disposal and Public Cleansing Law, Soil Contamination Countermeasures Law and Pollutant Release and Transfer Registers Law.⁹³ Each of these creates environmental offences. For example, non-compliance with effluent water standards and lack of clean-up could result in imposition of imprisonment and fines.⁹⁴

Similarly, individuals breaching air pollution emission standards can be imprisoned and fined.⁹⁵ Illegal waste disposal through any of the following means - be it operating without a license, installing waste disposal facilities without permission, violating orders to suspend business or take certain measures, illegal dumping or illegal incineration - attract one of the harshest punishments.⁹⁶ The same applies to soil contamination or use of substances like asbestos which affect public health.⁹⁷ Interestingly, non-compliance with environmental impact assessment does not attract punishment and the only disincentive, so to say, is not granting a license for those projects which do not fulfil the procedural requirements.⁹⁸ The following figure shows more recent data on arrests for environmental crimes.

⁹² The Basic Environment Law and Basic Environment Plan, *Ministry of Environment Government of Japan* (Web Page) <http://www.env.go.jp/en/laws/policy/basic_lp.html>.

⁹³ Hideaki Ozawa and Shogo Umeda, Environmental law and practice in Japan: overview, *Thomas Reuters Practical Law* (Web Page, 1 September 2015) <[https://uk.practicallaw.thomsonreuters.com/6-502-8920?transitionType=Default&contextData=\(sc.Default\)&firstPage=true&comp=pluk&bhcp=1](https://uk.practicallaw.thomsonreuters.com/6-502-8920?transitionType=Default&contextData=(sc.Default)&firstPage=true&comp=pluk&bhcp=1)>

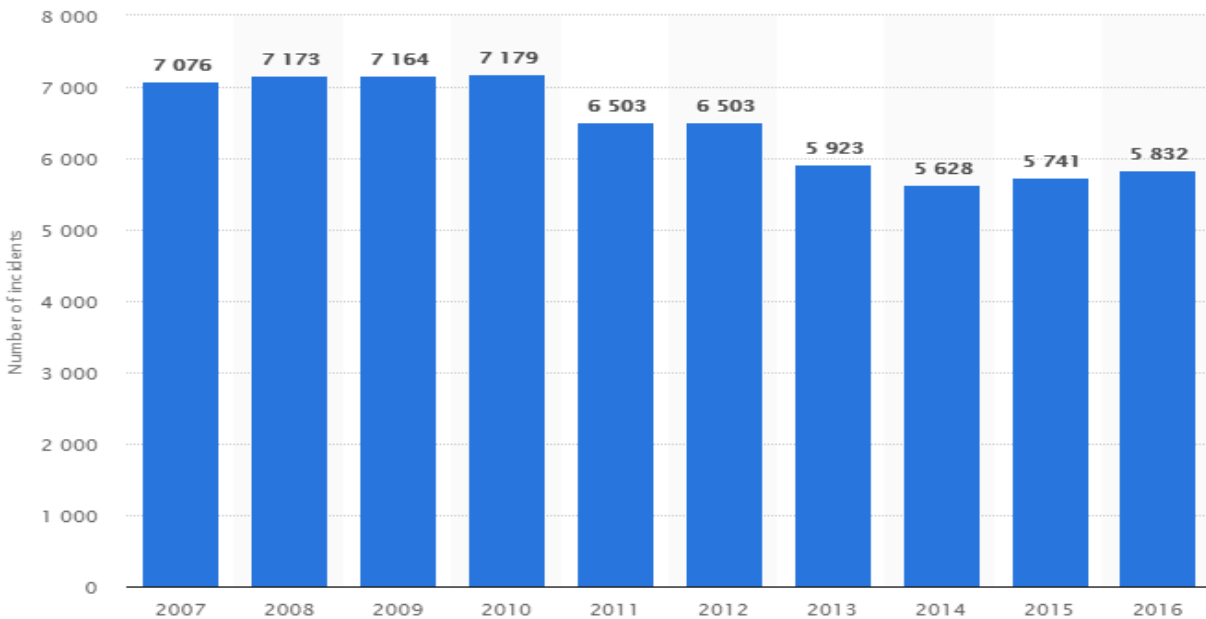
⁹⁴ *Ibid.*

⁹⁵ Ozawa and Umeda (n 93).

⁹⁶ Ozawa and Umeda (n 93).

⁹⁷ Ozawa and Umeda (n 93).

⁹⁸ Total Number of Arrests for Environmental Crimes in Japan from 2007 to 2016, *Statista.com* (Web Page, 11 April 2019) <<https://www.statista.com/statistics/710742/japan-number-of-environmental-crime-arrests/>>.



Despite these incident numbers, the Japanese seem to prefer to use alternative dispute resolution mechanisms or civil and administrative litigation as the number of cases in which the Japanese Supreme Court has rendered judgments is quite low till date.⁹⁹ Until 2000, there were only two environmental crime matters that reached the apex court and less than ten cases in any criminal court in which judgment had been rendered.¹⁰⁰

South Korea

South Korea stands comparatively behind when it comes to abundance of natural resources and minerals. It has also faced stripping of its forest covers despite active reforestation efforts being carried out.¹⁰¹ Korea follows a positive law approach, wherein statutes are enacted to address any of the environmental crisis that arises. Therefore, a command and control regulation system is

⁹⁹ Due to language barriers, we could not access the judgments themselves.

¹⁰⁰ Kondratt (n 86).

¹⁰¹ What Are The Major Natural Resources Of South Korea?, *World Atlas* (Web page) <<http://www.worldatlas.com/articles/what-are-the-major-natural-resources-of-south-korea.html>>.

prevalent in South Korea in addition to market based instruments like the Korean Emissions Trading Scheme introduced in 2015.¹⁰²

Korean environmental law has its foundations in constitutional provisions which recognise a right to a healthy and pleasant environment. The constitution also mandates that legislation be in place to exercise this right.¹⁰³ In pursuance of the same, the Framework Act on Environment Policy (FAEP) and the Environment Impact Assessment Act has established the polluter pay and precautionary principles in Korean environmental law. It recognizes environmental pollution, which causes damage to human health and environment, and environmental damage which is akin to natural resource damage.¹⁰⁴ The government has also introduced integrated licenses and permit systems in 2017 which allows the management of such permissions across sectors for businesses.¹⁰⁵

In addition to air, water and ocean preservation legislation, Korea is also home to the Soil Environment Conservation Act. This Act adopts a strict liability scheme for soil contamination with retroactive effect.¹⁰⁶ Adding to these efforts are the recycling legislation introduced in 2018¹⁰⁷ and the Natural Environment Conservation Act. The Act on Liability for Environmental Damage and Relief was enacted in 2014 to provide prompt and adequate relief. ‘Prior to the enactment of this Act, relief from environmental pollution was mainly covered by civil litigation, but for the grant of monetary awards a demonstration of the defendant’s intention or negligence, causation, illegality, harm done to the plaintiff etc. were needed, making recovery both time-consuming and expensive’.¹⁰⁸

The Korean Ministry of Environment works in tandem with the Public Prosecutor’s office for investigation and prosecution purposes. The criminal sanctions are determined along the lines of

¹⁰² Y Choi and Chao Qi, ‘Is South Korea’s Emission Trading Scheme Effective? An Analysis Based on the Marginal Abatement Cost of Coal-Fueled Power Plants’ [2019] 11 *Sustainability* 1.

¹⁰³ Constitution of Republic of Korea art 35.

¹⁰⁴ Lees (n 22) 346.

¹⁰⁵ Integrated Environmental Management Systems was introduced by the government.

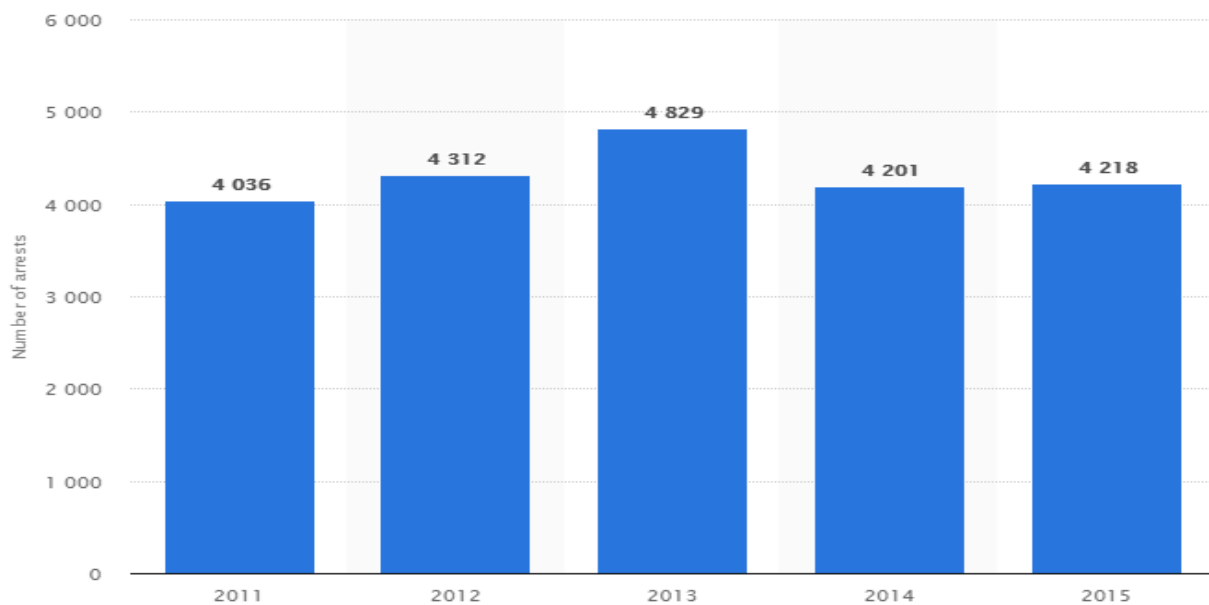
¹⁰⁶ Lees (n 22) 343.

¹⁰⁷ *Resources Recycling Framework Act* South Korean Law No. 14229.

¹⁰⁸ ‘Environment: Korea’, *Getting the deal through* (November 2018) <<https://gettingthedealthrough.com/area/13/jurisdiction/35/environment-korea/>>.

various specific statutes governing that sector and Act on the Control and Aggravated Punishment of Environmental Offences. The Korean Supreme Court has been reluctant in recognizing the citizens' constitutional right as being self-executing; that is, to question the government for lack of environment protection enhancing legislation. The Supreme Court has only recognized the 'legal interest' of the residents of an area which has potential to undergo environmental changes. This means that the court approaches such environment disputes on the basis of property rights.¹⁰⁹

Following is the list of arrests for environmental crimes in South Korea for 2011 to 2015:



110

The main issue that arises in reaching a sanction at the end of a criminal prosecution is the burden of proof for establishing knowledge.¹¹¹ Moreover, Korean law does not recognize citizen lawsuits and mandamus against government agents. This places judiciary in a passive role with respect to

¹⁰⁹ Lees (n 22) 338.

¹¹⁰ 'Number of arrests for environmental crime in South Korea from 2011 to 2015', *Statista* (16 November 2018) <<https://www.statista.com/statistics/629413/south-korea-number-of-arrests-for-environmental-crime/>>.

¹¹¹ Lees (n 22) 348.

scrutinizing environment law implementation¹¹² and undermines the significance of private enforcement of environmental law.

China

China, in its efforts for rapid economic growth, suffered repercussions on its environment and natural resources. One of the rising concerns in China is the air pollution consequent to emissions stemming from vigorous industrialization.¹¹³ To combat the same, several laws were enacted in China - Prevention and Control of Water Pollution, Law on the Prevention and Control of Air Pollution, Law on the Prevention and Control of Environmental Pollution by Solid Wastes, Marine Environment Protection Law, Forestry Law, Grassland Law, Fisheries Law, Mineral Resources Law, Land Administration Law, Water Resources Law, Law on the Protection of Wild Animals, Law on Water and Soil Conservation, and Agriculture Law.

The foundational law that governs environmental protection in China is the Environmental Protection Law, 2015. It is founded on the idea of coordinated development between economic construction, social progress and environmental protection.¹¹⁴

The Ministry of Environmental Protection (MEP) was created and gained huge importance as an essential department of the State Council. On the adjudication front, ‘there are now more than 130 such courts throughout China. The central government endorsed this effort by establishing an environmental tribunal within the Supreme People’s Court, the highest court in China’.¹¹⁵ However, the environmental courts were flexible, allowed strategies to pursue economic growth

¹¹² Ginsburg T, ‘Dismantling the “developmental state”? Administrative Procedure Reform in Japan and Korea’, (2001) 49(4) *The American Journal of Comparative Law* 585, 596.

¹¹³ Mehran Idris Khan and Yen-Chiang Chang, ‘Environmental Challenges and Current Practices in China — A Thorough Analysis’ (2018) *Sustainability* 1, 5.

¹¹⁴ ‘Environmental Protection in China’, *Permanent Mission Of The People's Republic Of China To The United Nations Office At Geneva And Other International Organizations In Switzerland* (Web page) <<http://www.china-un.ch/eng/bjzl/t176940.htm>>.

¹¹⁵ Zoe Loftus-Farren, ‘Is China Turning the Corner on Environmental Protection?’ *Earth Island Journal* (21 August 2014) <http://www.earthisland.org/journal/index.php/articles/entry/is_china_turning_the_corner_on_environmental_protection/>.

and served as a social awareness creating institution. It was in turn serving the political logic.¹¹⁶ Therefore, their role in implementing environmental protection measures is to be questioned.

Even though officials are equipped to issue fines on a daily basis, the law lacks in imposing liability based on the accountability that must be shown by an official. This raises questions about the strength of implementation.¹¹⁷ Continuing its efforts to fight the emissions and to create a deterrent effect, China introduced the 2017 Environmental Protection Tax Law which imposes tax burden for emission of pollutants.

In 2016, there were 2023 environmental violation cases with criminal charges. China arrested 15,095 people for environmental crimes in 2018. Authorities also prosecuted 42,195 people for a range of environmental offences in 2018.¹¹⁸ However, as pointed out previously, cases resulting in sanction after court proceedings remained inaccessible and without clarity.

Thailand

Thailand has a range of environment related issues that have led to an acute crisis. It was one of the first Southeast nations to adopt an industrialisation policy focused on attracting foreign investment. Unfortunately, this happened at the cost of environment related problems. In particular, Bangkok and its surrounding provinces, which contain over half of the factories and a fifth of the population, suffer from severe air pollution and grave water crisis due to untreated effluent discharge to name a few problems.¹¹⁹

The legal regime in Thailand to deal with these problems is quite elaborate. The Constitution itself enshrines the policy that exploitation of natural resources must not overrun conservation principles.¹²⁰ Until 1974, there were different statutes dealing with specific issues like forest,

¹¹⁶ Khan (n 113) 9.

¹¹⁷ Khan (n 113) 11.

¹¹⁸ ‘China environmental crime arrests up more than 50 percent in 2018: ministry’, *Reuters* (14 February 2019) <<https://www.reuters.com/article/us-china-environment-crime/china-environmental-crime-arrests-up-more-than-50-percent-in-2018-ministry-idUSKCN1Q30ZE>>.

¹¹⁹ Overview of Environmental Issues and Environmental Conservation Practices in Thailand, *Ministry of Environment Government of Japan* <<https://www.env.go.jp/earth/coop/oemjc/thai/e/thaie1.pdf>>.

¹²⁰ *Ibid.*

mineral, marine resources and health but the constitutional conservation principles were not incorporated in them.

Then came a unified environmental law titled the 'Enhancement and Conservation of National Environmental Quality Act' (NEQA) that was enacted in 1975. It created an advisory body called the National Environment Body and a central government agency to handle environmental problems. This statute was then overhauled and a new act with the same title was enacted in 1992 which is currently the primary legislation that governs the system.

The law now recognizes certain environmental rights and duties of Thai citizens to participate in government efforts to protect the environment and promotes public participation by allowing environmental citizen groups organized as juristic persons under Thai or foreign law to register as an environmental non-governmental organization in order to be eligible for certain government assistance and support.¹²¹

Further, an entire chapter of the Act prescribes a number of offences that are criminally punishable by imprisonment and/or fine.¹²² The penalty for each offence is quite severe. For example, an owner or a possessor of point source of pollution who refrains from having the wastewater or wastes treated properly or violates the environmental audit and monitoring requirement is subjected to imprisonment not exceeding 1 year or fine of not exceeding 100,000 Baht, or both.¹²³

In addition to this unified legislation, there are a few specialized laws like the Fisheries Act which too create environmental offences. For instance, Section 19 penalizes discharge of hazardous substances into fishable water with imprisonment up to 5 years and a fine up to 10,000 Baht.¹²⁴ Similarly, Section 119 of the Harbor Act criminalizes disposal of oil or chemical substances into “public navigable water” with imprisonment up to three years or fine of up to six thousand Baht,

¹²¹ Vipon Kititnasasorchai and Panat Tasneeyanond, 'Thai Environmental Law' (2000) 4 *Singapore Journal of International and Comparative Law* 1.

¹²² *Enhancement and Conservation of National Environmental Quality Act* (1975, Thailand), Part 8.

¹²³ *Enhancement and Conservation of National Environmental Quality Act* (1975, Thailand), sec 92.

¹²⁴ *Fisheries Act* (2015, Thailand).

or both.¹²⁵ Section 28 of the Public Irrigation Act punishes the same act with imprisonment up to two years or fine of not exceeding one hundred thousand Baht, or both.¹²⁶

Thailand also has the practice of mandatory environmental impact assessment reports before new developments are given the green signal. This has to be complied with by government agencies, private entities and the state. There are heavy fines to be paid for non-compliance.¹²⁷ In April 2018, an amendment was passed which modified the criteria, consideration processes and timing for environment impact assessment reports. It also imposed penalties and daily fines for development of projects without obtaining approval which was not provided for earlier.¹²⁸

Environmental violations in Thailand at the prosecution phase could be dealt with either civil, criminal or administrative courts on the basis of the fact matrix of each case.¹²⁹ The Thailand Supreme Court had established green courts at the different levels of the judiciary to help deal with these matters with greater expertise and efficiency. However, these mostly deal with civil litigation.¹³⁰ There has been an increasing feeling amongst civil society that the judicial system in Thailand is not succeeding at protecting victims of environmental damages and there have been arguments made for a separate specialized court to be set up.¹³¹ This seems justified by the numbers illustrated in the figures below.¹³²

¹²⁵ *Act on Navigation of Waters* (1947, Thailand).

¹²⁶ *People Irrigation Act* (1939, Thailand).

¹²⁷ *Enhancement and Conservation of National Environmental Quality Act* (1975, Thailand), sec 44(3),46.

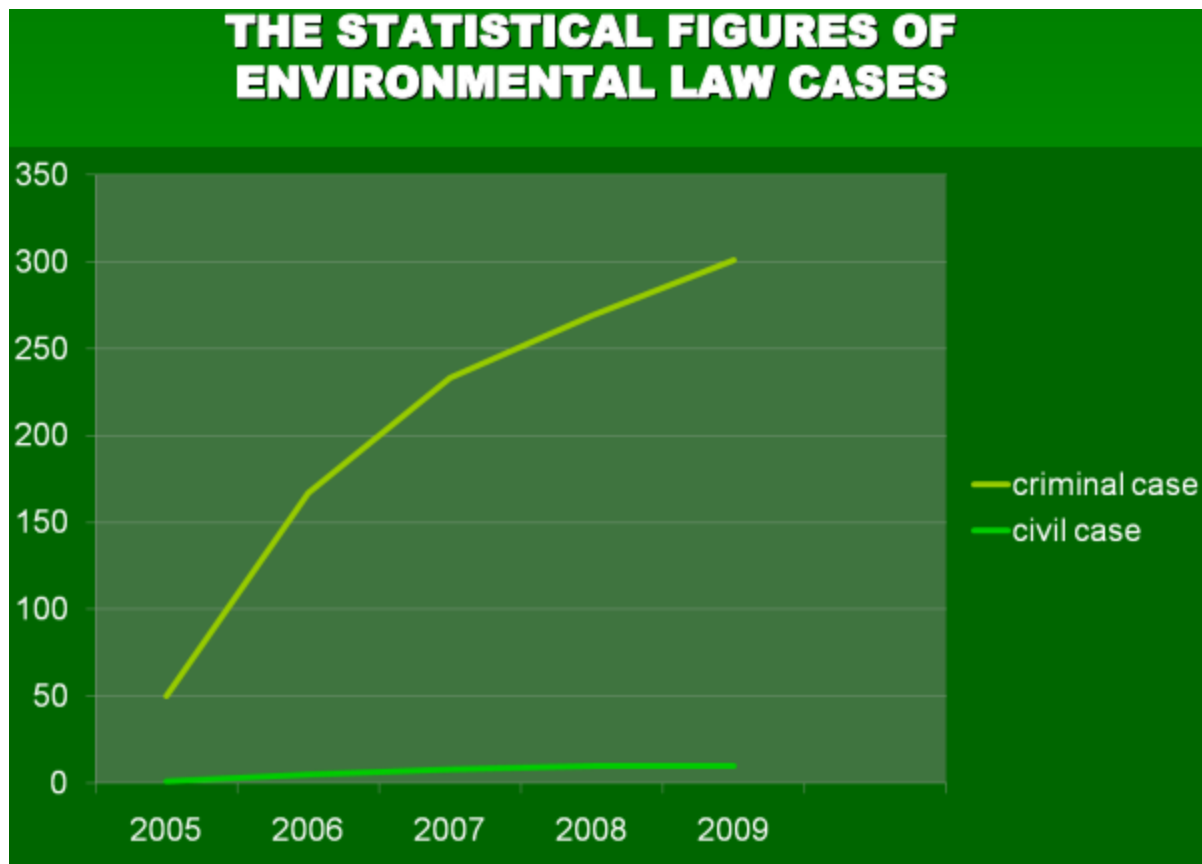
¹²⁸ Sorachon Boonsong and Sivapong Viriyabusava, Amendment to Environmental Act in Thailand: Penalties Imposed on Development without EIA, *Baker McKenzie* (Web Page, 3 May 2018) <<https://www.bakermckenzie.com/en/insight/publications/2018/05/amendment-to-environmental-act>>.

¹²⁹ Direk Borvornsakulcharoen *et al*, *Model of Environmental Law Knowledge for Undergraduate* (2015).

¹³⁰ 'Asian Judges: Green Courts and Tribunals, and Environmental Justice' (2010) 1 *Law and Policy Reform* <<https://www.adb.org/sites/default/files/publication/27654/2010-brief-01-asian-judges.pdf>>.

¹³¹ Narong Kiettikunwong, 'The Green Bench: Can an environmental court protect natural resources in Thailand' (2019) 21 *Environmental Development and Sustainability* 385.

¹³² Winai Ruangsri, Environmental Law in Thai Supreme Court Green Bench (28 July 2010) <<https://www.ajne.org/sites/default/files/event/2052/session-materials/winai-ruangsri-environmental-law-in-the-thai-supreme-court-green-bench.pdf>>.



In a new development, it appears that the National Reform Committee’s recommendation has been accepted and Thailand’s first environmental court will start functioning in 2022 with its first task being asserting the quantum of financial losses caused by environmental violations.¹³³

India

India is a large country with a lot of diversity in natural relief forms. It also has one of the largest populations in the world which puts significant pressure on the natural environment and the need for resources. The biggest problem that is plaguing India currently is the air pollution in the national capital of Delhi. Apart from this, there are different acute crises in different parts of the country including mining mafia in Gujarat, coastal regulation violations, deforestations, non-compliance with environmental impact assessments for large projects to name a few.

¹³³ Apinya Wipatayotin, New Court to Assess Crimes Against Nature, *Bangkok Post* (Web Page, 17 April 2018) <<https://www.bangkokpost.com/thailand/general/1447186/new-court-to-assess-crimes-against-nature>>.

The Constitution under Part IVA casts a duty on every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures.¹³⁴ Further, the Constitution of India under Part IV stipulates that the State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.¹³⁵

India has a lot of pieces of legislation which govern specific environmental issues, the six major ones being the Air (Prevention and Control of Pollution) Act, 1981, the Water (Prevention and Control of Pollution) Act, 1974, the Environment Protection Act, 1986, the Hazardous Waste Management Regulations, The Wildlife Protection Act, 1976 and the Indian Forest Rights Act 2006.

Each of these creates multiple environmental offences with heavy penalties including imprisonment and fines which can be very harsh. For instance, in case of any non-compliance or contravention of the Environment Act, or of the rules or directions under the Act, the violator will be punishable with imprisonment up to five years or with fine up to Rs 1,00,000, or with both. In case of continuation of such violation, an additional fine of up to Rs 5,000 for every day during which such failure or contravention continues after the conviction for the first such failure or contravention, will be levied. Further, if the violation continues beyond a period of one year after the date of conviction, the offender shall face imprisonment for a term which may extend to seven years.¹³⁶ They also create Pollution Control Boards and other nodal bodies under the statutes to specifically regulate and ensure compliance. The aggrieved parties can pursue litigation if they find their interests violated.

The National Green Tribunal (“NGT”) was established by the Ministry of Environment and Forests in 2011.¹³⁷ It can entertain cases raising “substantial questions relating to the environment” which arise from the implementation of seven laws, including those on air pollution, water pollution, environment protection, and bio-diversity. It not only has appellate jurisdiction but also has

¹³⁴ *Constitution of India* (1950), art 51A.

¹³⁵ *Constitution of India* (1950), art 48A.

¹³⁶ *Environment Protection Act* (1986, India), sec 15.

¹³⁷ *National Green Tribunal Act*, (No. 19 of 2010, India).

original jurisdiction to decide certain categories of cases. Further it is empowered to award compensation and direct restitution of damaged ecology and property.¹³⁸

In the case of *Paryavaran Suraksha Samiti v. Union of India*,¹³⁹ the NGT directed the Central Pollution Board to come up with a formula for calculating compensation of environmental damages. In 2019, the Board submitted a report laying down a formula which recommends imposition of penalty up to Rs. 1 crore based on various categories under a Graded Response Action Plan.¹⁴⁰

Since the NGT was established, the number of cases recorded by the police seems to have fallen while court cases filed have soared.¹⁴¹ Criticism against it has been levelled on the grounds that it has overreached its mandate and behaves like the apex court of the land.¹⁴²

¹³⁸ Shibani Ghosh, Environmental Litigation in India, *Hindu Business Line* (Web Page, 31 January 2012) <<https://www.thehindubusinessline.com/opinion/Environmental-litigation-in-India/article20390746.ece>>.

¹³⁹ Writ Petition (Civil) No. 375/2012, National Green Tribunal (Principal Bench).

¹⁴⁰ Under this, the industries are categorized into Red, Orange, Green based on a cumulative Pollution Index and the environmental compensation is a product of the pollution index, the number of days of the violation, the factor for scale of operation and the factor for location.

¹⁴¹ *Ibid.*

¹⁴² Armin Rosencraz and Geetanjoy Sahu, 'Assessing the National Green Tribunal after Four Years', (2015) 5 *Journal of Indian Law Society* 191.

ALL Crimes - 2014-2016 (Concluded)

S. No.	Crime Head	2014		2015		2016	
		Incidence	Crime Rate	Incidence	Crime Rate	Incidence	Crime Rate
		3	4	5	6	7	8
H. Other Regulatory & Enforcement - Acts							
21	Gambling Act, 1867	125494	10.1	130134	10.3	149004	11.7
22	Electricity Act, 2003	64034	5.1	97591	7.8	127910	10.0
23	Lotteries (Regulation) Act, 1998	2147	0.2	3390	0.3	3178	0.2
	Total (H)	191675	15.4	231115	18.4	280092	22.0
I. Environment - Related Acts							
24	Forest Act, 1927	4901	0.4	3968	0.3	3715	0.3
25	Wildlife Protection Act, 1972	770	0.1	829	0.1	859	0.1
26	Environmental (Protection) Act, 1986	101	0.0	299	0.0	122	0.0
27	Air (Prevention & Control of Pollution) Act, 1981	48	0.0	50	0.0	25	0.0
28	Water (Prevention & Control of Pollution) Act, 1974	15	0.0	10	0.0	11	0.0
	Total (I)	5835	0.5	5156	0.4	4732	0.4

While the above chart shows the official numbers, a lot of criticism has been levelled against them stating that they grossly underrepresent the actual extent of environmental crimes¹⁴³ by presenting a very strange picture where 75% of the violations are recorded in 2 out of 30 states¹⁴⁴ and that the figures show that the pollution control boards prefer to issue civil notices even in situations of blatant commissions of crime and most of the charges are slapped against forest dwellers for acts like collection of firewood which they are actually legally entitled to.¹⁴⁵ In an attempt to rectify this situation, in early January 2019 in the state of Maharashtra there have been talks of creating a special environmental crimes unit in the police force to tackle the problem of Coastal Regulation Zone and mangrove protection laws.¹⁴⁶ There has also been attempt by the government to adopt a

¹⁴³ Jaideep Hardikar, Environmnet Crimes Show Decline: Activists Cite Under reporting, *Mongabay* (Web page, 5 January 2018) <<https://india.mongabay.com/2018/01/environment-crimes-show-decline-activists-cite-under-reporting/>>.

¹⁴⁴ Mayank Agarwal, NCRB releases Data on Environmental Crimes, *Livemint* (Web Page, 19 August 2015) <<https://www.livemint.com/Politics/VIMxSwZSv0077KiaZySmmJ/NCRB-releases-data-on-environmental-crimes.html>>.

¹⁴⁵ Samriddhi and Geetanjoy Sahu, Off the mark: National Crime Records Bureau data gives a misleading picture of environmental crime, *Scroll.in* (Web Page, 2 January 2018) <<https://scroll.in/article/863087/off-the-mark-national-crime-records-bureau-data-gives-a-misleading-picture-of-environmental-crime>>.

¹⁴⁶ Set Up Green Police to Stop Environmental Crimes, *Times of India* (Web Page, 2 January 2019) <<https://timesofindia.indiatimes.com/city/navi-mumbai/set-up-green-police-to-stop-environmental-crimes-activists/articleshow/67341914.cms>>.

softer approach to help restoration and afforestation through the National Afforestation and Eco-Development Board which was set up under the Ministry of Environment and Forests.

TRENDS ACROSS NATIONS AND THE HUMAN RIGHTS NEXUS

Across these eight countries, which are located in different regions of Asia, have different political and legal systems and are performing vastly differently economically, the biggest commonality is that not one country is safe from environmental issues. While it is trite to highlight the transboundary quality of environmental pollution and climate change,¹⁴⁷ the fact that it is a concern featuring all countries' radars is important to note.

Further, across all these countries, we could see that criminal law had been deployed in some manner in order to deal with environmental issues. This in itself does not bear many similarities as there are countries like India which have a huge case backlog and countries like Japan and Thailand where the courts rarely entertain such matters. We have higher number of arrests than actually gets adjudicated in latter countries while arrest numbers are actually underrepresented in the former and the officials are reluctant to file charges.

We found that the broad legislative approach of all these countries is similar to a general legislation supported by subject specific legislation. Further, we can see that these pieces of legislation are increasingly realising the role of corporations in environmental litigation, like in Indonesia, and are amending it to take care of it while they still continue to try and maintain a balance with the developmental activities and inflow foreign flow and, conservation of the environment.

We found that overall there is a move towards specialised treatment of environmental issues with creation of either green benches in courts or entirely independent environmental law courts. There is, however, a huge variation in the imposition of penalties and the severity and in the powers of the Courts. For instance, South Korean courts cannot grant mandamus or help realise the rights of the parties effectively. Understandably, this varies with the particularities of each nations' crisis –

¹⁴⁷ Harmful Effects of Transboundary Pollution Cites as Key to Proposed Law to Govern International Liability, *United Nations* (Web Page, 30 October 2003) <<https://www.un.org/press/en/2003/ga3241.doc.htm>>.

for instance, UAE penalises oil spills and marine incidents extremely highly while Japan treats pollution of water and treatment of fish rigorously.

There is also a difference in the tactics employed by each nation when it comes to compliance. Singapore follows an incentives system using tax benefits instead of penalising for non-compliance with environmental impact assessment. Japan instead requires mandatory assessment and clearance before setting up of a project but offers neither incentives nor punishments. On the other hand, all the other countries offer some form of penalty for non-compliance.

Another primary similarity is that a few environmental offences are punished disproportionately heavily to the harm that they actually cause. This includes examples from India like trespass into forest land and Singapore like littering. These make one reconsider the boundaries of criminal law itself and how to locate it within environmental jurisprudence which we shall explore shortly.

Before that, it would be useful to look at the various ways in which environmental criminal law and human rights are interrelated. Prima facie there are three aspects which have been identified by the UN: *first*, the environment is a pre-requisite for the enjoyment of human rights.¹⁴⁸ This implies that human rights obligations of States should include the duty to ensure the level of environmental protection necessary to allow the full exercise of protected rights. *Second*, certain human rights, especially access to information, participation in decision-making, and access to justice in environmental matters, are essential to good environmental decision-making.¹⁴⁹ This implies that human rights must be implemented in order to ensure environmental protection. *Finally*, the right to a safe, healthy and ecologically balanced environment as a human right in itself.¹⁵⁰

Since some countries locate their responsibility in the Constitution itself, like India and Thailand do, any violation of the environment is a violation of human rights itself, which is justification enough for a criminal law approach. As seen in the survey above, countries that criminalize environmental offences consider most of them to be regulatory offences, *malum prohibitum*, which

¹⁴⁸ Human Rights and the Environment, *United Nations Environment Programme* (Web Page) <<http://web.unep.org/divisions/delc/human-rights-and-environment>>.

¹⁴⁹ Ibid.

¹⁵⁰ Human Rights and the Environment (n 148).

means that coercive measures are limited, and sanctions are low. A few are included in criminal law as *malum in se*. However, as evidence from these countries show, their enforcement is still lacking.¹⁵¹

Thus, it can be argued that in some respect, environmental criminality relates to the broader concept of serious human rights violations and positive duties for states to protect life and living quality standards, including those of minorities who live in areas with a great potential for natural resources to be exploited. In other words, this recognition by the State that there is a mix of criminal offences, human rights violations and societal harm at stake.¹⁵² However, as we touched upon it earlier, this intermix gives rise to deeper connections between environmental crimes and human rights at the very level of drawing the definitions and boundaries of the former.

One of the leading voices in environmental crime scholarship, Rob White makes a compelling case regarding this. He argues that this interrelationship finds place in the longstanding issues relating to how ‘harm’ and ‘crime’ are to be defined in criminological terms, and of what the responses to harm should consist.¹⁵³ Throughout this paper, we adopted the strict legal-procedural approach to defining harm as we only looked at those acts which were criminalised by the states’ statutes. On adopting a more critical and broader socio-legal approach, we start seeing how while the former depends upon legal definitions that proscribe certain action in law, the latter allows for investigation of phenomenon such as white-collar crime and denial of human rights through reference to conceptions of harm which are not limited to definitions solely generated by the State.¹⁵⁴ It also allows us to examine existing offences with reference to these conceptions of harm.

As it is evident, environmental criminal law deals with concerns across a wide range of environments, be it land, air or water, and issues, be it fishing, pollution or toxic waste. When we look at all these pieces of legislation and assess them from a multidisciplinary strategic perspective,

¹⁵¹ John Vervaele and Daan van Uhm, Criminal Justice and Environmental Crime: how to tackle organized crime and ecocide?, *Reinforce Utrecht University* (Web Page, 16 February 2017) <<http://blog.reinforce.eu/index.php/en/2017/02/16/criminal-justice-and-environmental-crime-how-to-tackle-organized-crime-and-ecocide/>>.

¹⁵² Ibid.

¹⁵³ Rob White, *Crimes Against Nature: Environmental Criminology and Ecological Justice* (William Publishing, 1st edn., 2008) 84.

¹⁵⁴ Ibid.

we can see that most of what is deemed to be ‘criminal’ or ‘harmful’ are instances of harm arising from imperfect operation such as pollution spills.¹⁵⁵

On the other hand, systemic harm which is created by normatively sanctioned forms of activity such as clear felling of the Indonesian forests is not. This results in exacerbating the global environmental problem despite increasing number of regulatory mechanisms. White attributes this partly to the way in which environmental risk is categorised into specific events that attract sanction while the broader legislative policy may allow more ecologically harmful practices to continue.¹⁵⁶

Another way in which the legally defined environmental offences can be categorised are as primary crimes that result directly from the destruction and degradation of the earth’s resources through human actions, or secondary crimes that arise out of the non-compliance with rules that seek to regulate environmental disasters. Thus, we can see that what an environmental crime is, is socially constructed both through definitional processes and by the ways in which environmental law enforcement is carried out in practice.¹⁵⁷

Thus, our measurement of crime is intertwined with our definition and these are stumbling blocks in any study trying to determine trends in this area.¹⁵⁸ Those harms that are not legally criminalised go undocumented or unacknowledged as environmental crimes and cannot be measured. It is also difficult to gauge institutional biases inherent in this definitional and implementation drives. It is equally important to keep in mind those who are victimised by environmental criminal law.¹⁵⁹

This is stark even from the brief survey of the eight countries that we undertook. For the longest while, Indonesia did not even extend environmental criminal law to corporations. Japan and Singapore still do not extend it in the case of environmental impact assessments, though arguably general criminal law might apply instead. Singapore has draconian waste management laws and India’s Forest Rights Act and Wildlife Protection Act end up criminalising acts of livelihood of

¹⁵⁵ White (n 153).

¹⁵⁶ White (n 153).

¹⁵⁷ White (n 153).

¹⁵⁸ White (n 153).

¹⁵⁹ White (n 153).

traditional communities. Such a critical approach to these laws and the numbers of arrests on analysis demographics shows how Franz Fanon's idea of limiting what is defined as "violence"¹⁶⁰ applies to what constitutes harms against the environment are mediated by non-environmental considerations like economy, ease of doing business, politics and culture to name a few.

CONCLUSION

Eight Asian countries (Indonesia, Singapore, UAE, Japan, South Korea, China, Thailand and India) were studied to understand the legal-procedural frameworks in these nations to fight environmental crimes. Later, the effectiveness in its implementation coupled with the government responses to such crimes was analysed to comprehend the attention given to combating environmental crimes in Asia. For this, a legal and sociological perspective was adopted to mark the trends in environmental crimes in this region. The way each of these nations compartmentalise environmental risk is influenced by the inherent biases in definitional and implementation practices. This stems from the particularities of a state – its national goals, priorities, economic progress and culture. Therefore, what is construed as environmental harm or violence is greatly motivated by non-environmental inspirations and "aspirations".

¹⁶⁰ Franz Fanon, *Wretched of the Earth* (1961).