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Book Review

ENVIRONMENTAL LAW IN SINGAPORE[1]

by Joseph Chun & Lye Lin Heng

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1 The publication fills the gap for a long-needed textbook on environmental law in Singapore. Not only because of the importance of the subject on a global basis including Singapore but its dynamic nature has made it difficult to track all the areas in one convenient form. In the Singapore context, the development of modern environmental law can be said to have its roots in 1972 with the Stockholm Declaration of the Human Environment. Shortly after this, the former Prime Minister of Singapore, Lee Kuan Yew, set up the Pollution Unit in his office to better oversee issues of pollution, as Singapore had embarked on its ambitious journey of industrialisation. When industrialisation was being discussed in Parliament, Singapore started to prevent the tiny island state from being blighted, and the concept of the "Garden City" was conceived in the 1980s. When it experienced success in industrialisation, it paid more attention to turning it into a "City in a Garden". In more recent years, around 2010, it began to focus on climate change issues, which today has confronted the world with existential threats impacting on water, biodiversity, food security and all aspects of human environmental existence and quality of life. These trajectories underlie Singapore's progressive development in environmental law, not forgetting its role as a member state in the United Nations ("UN") and ASEAN (Association of Southeast Asian Nations). Singapore's environmental development was influenced and facilitated by the many multilateral environmental treaties and abundant soft laws emanating from these two organisations. This is not to say that there were no environmental laws in Singapore before the Stockholm Declaration in 1972. There were the traditional laws relating to rudimentary problems such as pollution (for example, air and wastewater), and wildlife protection (at that time even the word "biodiversity" was unknown), unlike the more complex environmental issues that confront Singapore today, that is, not only within Singapore but climate change and transboundary pollution from the so-called Indonesian "haze" from fires that have come upon us. Other issues have taken the world by storm, such as zoonotic diseases and also illegal trade

1 Academy Publishing, 2019.

in endangered species – this is a world-wide phenomenon but Singapore's geographical location has also made it a convenient transit route. It is obvious that what has been happening in other parts of the world could have an impact on Singapore as we live in an interdependent world – we share one atmosphere, one stratosphere and one world as it were, and much else besides. To respond to new and emerging environmental challenges and to update inadequate laws, knowledge and sound science as to how to tackle the issues are required before legislation can take place. The drafters of Agenda 21, in their wisdom, called for capacity building. Environmental law implementation and enforcement is undertaken not only by those legally trained experts on the environment but also administrators or others who are not legally trained. This publication caters not only to lawyers and law students but also to those not legally trained but who work on, or volunteer in, environment-related fields. To quote Joseph Chun, it is a "one-stop study guide or reference on the applicable laws on the subject".[2]

2 The approach is twofold. The first is a survey of the applicable laws which could include other relevant areas of law such as the law of torts. The second approach, as underlined by Lye Lin Heng, is from the view of good governance.[3] She pointed out that it is crucial that laws must be effectively implemented and enforced, as often the laws look excellent on paper except when it comes to enforcement. She noted that this entails a good government that is aware of the challenges and constraints and is able to formulate policies to resolve them – laws are only part of this management system. It would have been useful to include a section on the use of technology to enhance good governance, management and enforcement, particularly as Singapore is developing into a smart city. The potential of technology, which includes, for example, block chain, artificial intelligence ("AI"), data and digitalisation, to improve environmental governance and management is tremendous. For example, an aspect of good management and governance involves the collection, assembly and use of data (for example, to tackle climate change in food production – "green intelligence – leveraging technology to gather information about plants"),[4] as is the use of AI for better disaster management (for example, floods and other environmental or natural disasters). Indeed, Singapore, together with other ASEAN cities as well as others, is developing into a smart city and this, according to the UN, is an aspect of a sustainable city. Indeed, the use of technology has an impact on environmental

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2 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p vii.

3 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p xiv.

4 "Using green data to fight climate change" *The Straits Times* (19 December 2019) at p B4.

sustainability. Singapore has taken the initiative to further promote its sustainability concept to the next stage – "Smart Nation". This is in line with the global initiative, United for Smart Sustainable Cities ("UNSSC"), led by the International Telecommunication Union ("ITU") and the Economic Commission for Europe ("ECE") which was launched at the ITU–ECE Forum on "Shaping Smarter and More Sustainable Cities: Striving for Sustainable Development Goals" held 18–19 May 2016 in Rome. Singapore was among some cities selected by UNSSC for this initiative.[5]

3 The book is divided into seven parts.[6]

4 Part I (chs 1–4) – "General Introduction" covers what is environmental law; sustainable development; regulatory approaches; and environmental governance.

5 In ch 1, "What is Environmental Law?", it is explained that for the "purpose" of the book, the chapter takes the definition of "law" in the Constitution of the Republic of Singapore.[7] Here it is defined as "includ[ing] written law and any legislation of the United Kingdom or other enactment or instrument whatsoever which is in operation in Singapore and the common law in so far as it is in operation in Singapore and any custom or usage having the force of law in Singapore".[8] In the context of environmental law, there are numerous "soft laws" in the context of international and regional environmental laws emanating from the UN (see ch 5 on "International Environmental Law", and ch 6 on "ASEAN Environmental Law"). It would be appropriate to cross-reference the discussion of soft laws in ch 5 as one of the sources of environmental law[9] mentioned above. The usefulness of soft laws in the environmental context has not been easily understood. They can be standard-setting and over time could also evolve into customary laws. There are also many reasons why they are rife in the environmental context.

6 Chapter 4, "Environmental Governance: Public Participation and Environmental Assessment" rightly deals with public participation and environmental decision-making such as environmental impact

5 See Koh Kheng Lian, "Singapore Smart City and ASEAN Smart City Network – A Different Style of Sustainability" in *Environmental Rule of Law in Asia* (Rose-Liza Eisma Osorio & Linda Yanti Sulistiawati eds) (University of Cebu – Konrad Adenauer Stiftung, 2019) at pp 41–66.

6 There is a typographical error at p 11 as it is stated that it is divided into "five parts".

7 1985 Rev Ed, 1999 Reprint.

8 Constitution of the Republic of Singapore (1999 Reprint) s 2(1).

9 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p 97.

assessments ("EIAs"). Elsewhere in the two prefaces, the word "governance" is used interchangeably with "management". For example, Lye in her preface states: "I Iook at the environment from the viewpoint of good governance … The environment of a country … needs a good environment management system." She does not draw a distinction. Though some consider the two words to be the same, others draw a distinction. Be that as it may, many writers do draw a distinction between the two (see also the preface by Chun).[10] As to "public participation", no mention is made of the important "feedback" mechanism. Singapore has used the mechanism of "feedback" which may be less effective than active participation where there is face-to-face discussion. In "feedback", a written evaluation of the project is made – the Government may accept or reject it without giving a reason.

7 Environmental institutions are very important. It would be useful to include a narrative or chart indicating the various ministries and agencies as well as other platforms dealing with the environment in Part I, though some selected ministries and statutory boards relevant to the environment are discussed in Part II.[11] It cannot be gainsaid that institutions play an important role in the governance process and it would be useful to understand which agencies make decisions, which are enforcement agencies, *etc*.

8 Part II (chs 5–10) – "Cross–sectoral Laws" discusses: international environmental law; ASEAN environmental law; legal system; constitutional environmental rights and judicial review of environmental decisions; torts and environmental protection; and urban planning and development control.

9 Part III (chs 11–18) – "Pollution Prevention and Control" discusses: air pollution control; noise pollution control; water pollution control; land pollution control; land pollution control and contamination remediation; hazardous substances and organic pollutants; marine pollution control; and radiation protection.

10 Part IV (chs 19–26) – "Waste Management" discusses: what is waste; infrastructure; littering and dumping; industrial waste and toxic industrial waste; transboundary movement of hazardous waste; waste minimisation and waste hierarchy; and sustainable consumption and the law. In more recent times, the Government has been focusing of food

10 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p viii.

11 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at pp 138–140.

waste – one way is to minimise food waste and the other is to recycle. Also, the problem of plastic pollution should be given more weight than just a mention.

11 Part V (chs 27–30) – "Water Resource Management" covers: water infrastructure; water conservation; drinking water; and recreational water.

12 Part VI (chs 31–34) – "Nature Conservation and Wildlife Protection" covers: nature conservation and biodiversity management; protecting and creating nature sites; and wildlife protection.

13 Part VIII (chs 34–35) – "Climate Change and Ozone Depletion" discusses: climate change mitigation and adaptation; and ozone depletion.

14 Chapter 5, "International Environmental Law", and ch 6, "ASEAN Environmental Law", are classified as "cross–sectoral laws" in Part II. Though many of the topics in these chapters are cross-sectoral, it seems more logical to classify them under a separate part as "International and Regional Environmental Law". This makes it clear that although these laws emanated from outside of Singapore, nonetheless, they can be ratified or the national laws could be aligned with those laws, whether hard or soft. It would make for clearer analysis of Singapore's role as a member of the UN (most of the multinational environmental agreements ("MEAs") emanate from the UN); in the case of ASEAN, it facilitates the implementation of MEAs as well as tackles environmental issues common to the region, as in the Indonesia haze. Also, as ASEAN is forging together to build an ASEAN community by 2025, the harmonisation of some of its laws may also contribute to this evolution. Due to its wider role, and as some environmental issues cannot be solved by each individual member state but either together with ASEAN or the world, the "whole-of-the world approach" can be seen in the co-operation and disaster risk management.

15 In the chapter on ASEAN environmental law, there is a section on "Organisational Structure".[12] As the chapter focuses on environmental law in ASEAN, the narrative should focus on the various organs that deal directly or indirectly with the environment. And, for reasons of limited "space", a chart may be useful. The chapter focuses on some areas in ASEAN that are of direct relevance to Singapore and the authors have chosen the Heritage Parks and Reserves and the ASEAN Wildlife Enforcement Network – it is not clear why these two topics are classified

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12 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p 130.

under "Institutions" together with the ASEAN Centre for Biodiversity.[13] Then under another section, some instruments in other areas are classified, that is, nature conservation, access and benefit sharing, and transboundary haze pollution. In 2003–2005, Singapore was badly affected by zoonotic diseases and ASEAN dealt with the problem of SARS and avian influenza – this topic should have been included.

16 One more word on the ASEAN section before moving on. Under "soft law",[14] the authors comment that such laws are more than aspirational in nature as they reinforce an integrated approach to environmental policy and management. The reviewer would go further and say that they can be standard-setting and over time crystallise into customary law or hard law. And critics may not realise why in the context of the environment there oftentimes are good reasons to frame soft rather than hard laws, apart from the blurring at times of their effectiveness.

17 The book not only deals with the laws themselves but critiques the applicable legal principles, legislative provisions and cases. This approach goes beyond the traditional textbook approach which generally gives a narrative, without analysis (or minimum) of each subject. As modern environmental law in Singapore is relatively recent and as many areas are new and the traditional environmental laws such as pollution are outdated and inadequate to meet new challenges, the method adopted is welcomed. Moreover, no one suit fits all and the experiences of other countries need to be tailored. Also, it is in the nature of things that change and, more so, radical changes do not come by easily, and in the context of the environment, political systems the world over are slow to change for the obvious reason that they need to show growth if they are to survive another term. Most have opted for "business as usual". But this is slowly changing, and we can see this being reflected in the history of the progressive development of environmental law in Singapore. Even then there may be fast forwarding, then backtracking, and adaptation. Nowhere is this more clearly illustrated than in ch 4, "Environmental Governance: Public Participation and Environmental Assessments".[15] The chapter gives a fascinating account of the chequered history of environmental assessment laws in Singapore, from various stages starting in the 1990s and how the development has been influenced by the international and regional instruments. It traces various cases turning on the lack of or only an "internal assessment" instead of public participation. Cases such

13 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at pp 118–120.
14 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p 125.
15 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at pp 41–89.

as the "Lower Peirce Reservoir" case of the proposed construction of a golf course, Chek Jawa, the Malaysia/Singapore reclamation projects in Tuas and Pulau Tekong, Bukit Brown and other cases. In the analysis, the conclusion was: "Two steps forward, one step back?".[16] This summarises well the uncertainty as to what direction should be taken. The call for "Time for a Rethink"[17] is appropriate after the long journey. Many calls have been made to adopt an environmental assessment law, not the least from Ambassador Tommy Koh, Singapore's Chair to the UN Conference on Environment and Development ("UNCED") at Rio de Janeiro and protagonist and defender of the environment. Supporting the call for an environment assessment law, the chapter concludes: "It is time for Singapore to take the next bold step to further its environment governance and management." Here and in other areas in the book there was a constant plea to amend the laws and also, as to "lessons to be learned" when indicating gaps in the law or inadequate drafting, to amend and make the legislative intent clearer. It may not be surprising as knowledge and sound scientific evidence are required.

18 In other parts of the world bold steps are being taken to forge boundaries hitherto not ventured beyond by traditional approaches. As events have now come to pass, the younger generation, led by a 16-year-old Swedish girl, Greta Thunberg, are getting impatient that their future generation will be deprived of sustainable development, as also the existential resistance movement that are campaigning for more effective action to be taken by governments to tackle climate change. There is a growing impatience not only among the young but the passing generation. This is reflected in the book in the context of the traditional "standing" in the case of judicial review (the Aarhus Convention on Public Participation and Access to Justice); a cry that "the time has now come for Singapore to review its law and practice".[18]

19 Even now, many political systems in most parts of the world, including Singapore, still need to be convinced of the serious ecosystem consequences if development does not pay heed to nature. In Singapore, this attitude has been slowly changing over the years, but it is still a process that needs constant convincing as Singapore has to grapple with land shortage to make way for development. A careful balance has to be made – this is the approach of the Government. So again, a critical

16 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p 750.

17 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p 85.

18 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p 192.

analysis, "Towards a Biodiversity Enhancement Law",[19] has been included: it demonstrates that the law protecting biodiversity has evolved piecemeal. A recommendation is made for more proactive action to restore nature sites that have been or are being cleared to make way for infrastructure or other developments. A call to reinforce and reconnect the natural areas that can be salvaged and to establish newly created areas to replace the ones that cannot. This is now being addressed through the statutory requirement for specified new developments to set aside land for new green areas. The recommendation is that it be extended to all areas.

20 There is also critical analysis of cases. One such is *Public Prosecutor v Wong Wee Keong*[20] which is dealt with intensively.[21] Without going into the facts of the case, it turned on the interpretation of the Endangered Species Import and Export) Act[22] ("ESA") which regulates scheduled species in transit in Singapore. Section 2(2) of the ESA provides that "a scheduled species shall be considered to be in transit if, and only if, it is brought into Singapore solely for the purpose of taking it out of Singapore". The case turned on what constitutes "transit" as distinguished from "import". This had consequences for the defendants because if it was an "import", the defendants would have imported a scheduled species without a licence and would have committed the offence for which they had been charged, but if it was a transit, they would be acquitted of that offence, not having been charged for the separate offence of transiting a schedule species without the requisite documentation. The High Court considered the crucial question – were the goods in "transit", that is, whether the shipment of rosewood had been "brought into Singapore solely for the purpose of taking it out of Singapore". The court held that what was required to establish a "transit" was for the evidence to show that the trader has identified a final destination outside Singapore for the scheduled species and has plans to ship the scheduled species to its final destination outside Singapore within a reasonable time. In this regard there was no need to show finalised transport arrangements. One of the criticisms levelled at the decision of the court was the omission of the judge to properly consider the relevant requirements of the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora[23] ("CITES") provisions and recommendations of the CITES Conference of Parties Resolution 12.3 on the format and content for

19 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p 612.
20 [2015] SGDC 300; [2016] 3 SLR 965 (HC).
21 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at pp 682–691.
22 Cap 92A, 2008 Rev Ed.
23 993 UNTS 243 (3 March 1973; entry into force 1 July 1975).

CITES certificates in general which would have guided the interpretation of s 5(1) of the ESA. The analysis concluded:[24]

> A further lesson can be drawn from the omission of the judge to properly consider the relevant requirements of CITES provisions and recommendations of the Conference of Parties resolutions … and that is the need for legislation …, either by reference or by reproduction.

21 Apart from the above critique, another interesting point is the interpretation of environmental statutes. This case turned on the ESA which includes, as a component, the import or transit of listed species under CITES. So far, the traditional rules of statutory interpretation in the common law jurisdictions have not dealt with environmental law statutes or a component in a statute containing an environmental law element. Are there any special rules governing such interpretation? If, as it seems, it is not entirely clear and the interpretation could go either way, the judge can invoke an environmental principle. In this case, there is a recent environmental principle contained in the International Union for the Conservation of Nature and Natural Resources ("IUCN") World Commission on Environmental Law: IUCN World Declaration on the Environmental Rule of Law (the "principle" can be construed as not necessarily a substantive binding rule, but as a guide to interpretation) – this is found in "Principle 5: *In Dubio Pro Natura*" which states: "In cases of doubt, all matters before courts, … shall be resolved in a way, most likely to favour the protection and conservation of the environment …."

22 This Declaration was adopted at the IUCN First World Congress on Environmental Law co-organised by the IUCN World Commission on Environmental Law, the United Nations Environment, the Organisation of American States, the International Association of Judges, and other key partners in April 2016 in Rio de Janeiro. Although it is not a formally negotiated outcome, nonetheless, it is one of the emerging principles of environmental law. As environmental law forges ahead, new environmental principles and rules emerge and the principle of *in dubio pro natura* will strengthen the foundation of environmental law.

23 *Environmental Law in Singapore* is comprehensive and achieves its objectives – it caters both to legal experts as well as those without legal background. What is also useful is the inclusion of areas of law which are relevant to the understanding of environmental law and their interface. It also deals with laws that have been impacted by the environment. The book is readable even to those who have no legal training. For those who

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24 Joseph Chun & Lye Lin Heng, *Environmental Law in Singapore* (Academy Publishing, 2019) at p 691.

want to do research into an area, the book provides material for further research.

24 While the reviewer has pointed out some gaps and made some suggestions for improvements, these do not detract from the value of the book. It should be on the bookshelf of every stakeholder and environmental lawyer, including the comparative environmental lawyer.