Editorial

Anthropogenic marine impacts, reform of environmental governance in China, and biopiracy in Southeast Asia

1 *APJEL* IN THE ASIA PACIFIC REGION

This is the first issue of *APJEL* in the 2020 volume, and it features articles on environmental subjects relevant both to particular states and to the Asia Pacific region generally. The three articles in this issue follow the 13 in the 2019 volume, which concerned a range of individual jurisdictions and comparative articles addressing Australia, Australia and China, Bangladesh, Bangladesh and China, Indonesia, the Maldives, New Zealand, Papua New Guinea, the South China Sea region, and Thailand as well as a jurisprudential contribution relevant to the region.

That there is increasing scholarly interest in environmental law and policy in the Asia Pacific region is clear. Our 2018 volume included articles on Australia, China, Fiji, India, Indonesia, Japan, Solomon Islands, and Thailand. Before that, our 2017 volume included articles on aspects of environmental law in Australia, China, India, Japan, and The Republic of Korea as well as on general issues affecting environmental governance in the Asia Pacific region.

We trust that *APJEL* continues to make a strong contribution toward advanced environmental law scholarship in the region.

We welcome both submissions of general environmental relevance and submissions on specific, focused issues, if both are of relevance to the Asia Pacific. *APJEL*'s goal remains the publication of insightful research on a broad range of environmental law issues across the Asia Pacific, believing that much can be learned from comparisons and contrasts with and between states and regions facing similar realities, constraints, and opportunities. The real core of quality scholarship is to be found in deep analysis of specific environmental law developments in specific jurisdictions, and the articles we seek to publish will always demonstrate this.

2 THE ARTICLES IN THIS ISSUE

2.1 Anthropogenic underwater noise pollution

Three decades ago, in *Last Chance to See*,¹ Douglas Adams and Mark Carwardine recorded their trip to China to attempt to see the Yangtze river dolphin² or *baiji*. After explaining that the Yangtze is a turbid river and that the *baiji* had evolved to rely on acute hearing and echolocation to find prey and communicate, they described the volume of noise in the Yangtze today – stemming especially from ‘the engines of rusty old tramp steamers, container ships, giant ferries, passenger liners and barges’³ – and explained that

1. Douglas Adams and Mark Carwardine, *Last Chance to See* (Heinemann, 1990).
2. *Lipotes vexillifer*.
3. Adams and Carwardine (n 1) 148.

this presented a nightmare scenario for the *baiji*. As the authors put it: '[t]he dolphins are continually being hit by boats or mangled in their propellers or tangled in fishermen's nets'; and then conclude that as '[a] dolphin's echolocation is usually good enough for it to find a small ring on the sea bed, [] things must be pretty serious if it can't tell that it's about to be brained by a boat'.⁴ Although still listed by the International Union the Conservation of Nature (IUCN) as 'critically endangered',⁵ the *baiji* is now generally considered to have become extinct⁶ – and noise in the river, along with other causes such as pollution and bycatch, to have contributed to its extinction.

Considerable attention is now being paid by those interested in marine animal conservation to the effects of underwater noise, in specific local areas and as a global issue.

As the International Whaling Commission (IWC) has explained it:

Anthropogenic ocean noise is highlighted as one of the priority threats in the Strategic Plan of the IWC Conservation Committee, and work continues at the Scientific Committee to better understand the impact of noise on cetaceans, and the effectiveness of different approaches to reducing exposure. In 2018, the Commission agreed by consensus, a Resolution recognising the increasing concern over ocean noise, and clarifying next steps in order to better understand and manage the threat.⁷

The IWC explains further that it is 'raising the profile of this issue in other international fora', such as the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea⁸ and the International Maritime Organisation (IMO)⁹ where the IWC is 'actively engaged in IMO discussions on means to reduce underwater noise from shipping'.¹⁰

In the first article in this issue, by **Guy Dwyer and Tristan Orgill**,¹¹ the authors explain that anthropogenic underwater noise pollution (AUNP) is generated by numerous causes, such as commercial shipping, military exercises, and the use of sonar and seismic surveys, and that it has increased dramatically since the early 1950s. This has, the authors indicate, caused or contributed to both deaths and ongoing suffering of marine animals.

AUNP must be adequately regulated through both international and national law if this form of transboundary and trans-jurisdictional pollution is to be adequately addressed. The article examines the two most comprehensive multilateral international conventions regulating the world's oceans and biodiversity – the 1982 United Nations Convention on the Law of the Sea and the 1992 Convention on Biological Diversity – and asks whether these two conventions adequately protect marine creatures from AUNP. It is argued that the existing regimes established under these

4. Ibid, 148–49.

5. IUCN Red List, 'Baiji', <www.iucnredlist.org/species/12119/50362206> accessed 11 February 2020.

6. For instance, see Society for Marine Mammalogy, '*Lipotes vexillifer*', <<https://marine.mammalscience.org/facts/lipotes-vexillifer/>> accessed 11 February 2020. This source notes that the last apparent sighting was in 2007.

7. IWC, 'Anthropogenic Sound', <<https://iwc.int/anthropogenic-sound>> accessed 13 February 2020.

8. See: <www.un.org/Depts/los/consultative_process/consultative_process.htm>.

9. See: <www.imo.org/en/Pages/Default.aspx>.

10. IWC (n 7).

11. 'Do the Conventions on the Law of the Sea and Biological Diversity adequately protect marine biota from anthropogenic underwater noise pollution?'.

conventions suffer from a number of inadequacies in that they do not sufficiently recognize AUNP as a form of pollution; provide comprehensive and binding direction on practical measures that might be used to prevent, mitigate or eliminate AUNP; and do not provide adequate regimes to enforce what law there is to enforce. To remedy such inadequacies, the article concludes by outlining a number of non-exhaustive recommendations for legal reform.

2.2 Reform of environmental governance in China

China has a relatively comprehensive set of enforcement laws, including norms and standards both for environmental protection and for environmental law enforcement. Enforcement of environmental law rests on several legislative foundations. First, there are provisions regarding environmental protection in the Constitution¹² which contains two Articles in Chapter 1 (General Principles) that are specific to environmental protection. These are Article 9, according to which:

[a]ll mineral resources, waters, forests, mountains, grasslands, unreclaimed land, beaches and other natural resources are owned by the State, that is, by the whole people, with the exception of the forests, mountains, grasslands, unreclaimed land and beaches that are owned by collectives as prescribed by law. The State ensures the rational use of natural resources and protects rare animals and plants. Appropriation or damaging of natural resources by any organization or individual by whatever means is prohibited.

And Article 26, in terms of which:

[t]he state protects and improves the living environment and the ecological environment, and prevents and controls pollution and other public hazards. The state organizes and encourages afforestation and the protection of forests.

Constitutional provisions will never, however, be sufficient in and of themselves to provide the environmental protections that modern environments and societies need, and the Chinese government has realized this.

In November 2012, according to McCallum, ‘retiring President Hu Jintao recognized environmental protection as a key development goal, incorporating “ecological progress” in his report to the 18th National Congress of the Chinese Communist Party (CCP)’.¹³ China, McCallum then explains, ‘has a complex network of environmental laws and regulations’;¹⁴ and has increasingly provided for civil society to play a role in enforcement, through public interest litigation.¹⁵

The second article in the present issue of *APJEL* is a combined effort by four authors: **Han Jiang, Patricia Blazey, Yan Wang and Hope Ashiabor**.¹⁶ This article presents a comprehensive consideration of the subject and is, unusually, written with perspectives from different traditions, including researchers and practitioners from both China and Australia.

12. Constitution of the People’s Republic of China, 1982, amended in 2004.

13. Kathryn McCallum, ‘Changing Landscapes: Enforcing Environmental Laws in China through Public Interest Litigation’ (2017) 20 *APJEL* 57–93, 58.

14. *Ibid*, 63.

15. *Ibid*, 83.

16. ‘China’s new approach to environmental governance and environmental public interest litigation’.

This article examines the comprehensive reform of the Chinese environmental governance system in recent years (since approximately 2010) after the goal of ‘constructing ecological civilization’ was integrated into China’s state policies. In an effort to improve environmental governance in China, juridical and legislative changes have been undertaken and protection reinforced to enable environmental challenges to be addressed through a revised public-interest litigation system. The authors explain that China’s current public-interest litigation system in the environmental field consists of civil and administrative environmental public-interest litigation and relies on procuratorates. They explain further that environmental non-government organizations are the main force driving environmental public-interest cases. A litigation system for ecological and environmental damage has also been established in order to recognize government agencies with standing to act to protecting environmental public interest.

2.3 Biopiracy in Southeast Asia

It has been suggested, by Rose, that ‘[a]s genetic research becomes more sophisticated, so does our ability to use plants and animals to develop new drugs or modify crops to meet food security needs’ and that ‘[o]ften, in the search for new biore-sources, researchers draw on local people’s traditional knowledge about the properties of a particular plant, animal or chemical compound’.¹⁷ If such traditional knowledge is then used without permission, or the culture from which it is drawn is exploited, the practice might be termed ‘biopiracy’ – and, as Rose suggests, this often involves ‘researchers or research organisations tak[ing] biological resources without official sanction, largely from less affluent countries or marginalised people’.¹⁸

‘Biopiracy’ has been defined as:

unethical or unlawful appropriation or commercial exploitation of biological materials (such as medicinal plant extracts) that are native to a particular country or territory without providing fair financial compensation to the people or government of that country or territory.¹⁹

This issue, in the context of the Southeast Asian region, is considered in the third article in this issue, by **Jinyup Kim**.²⁰

Biopiracy, the author records, is ‘largely defined as misappropriation of biological resources and associated traditional knowledge’ and is a practice that has occurred all around the world. The Southeast Asian region, one of the world’s biodiversity hot-spots, has been a victim of biopiracy in a number of cases. Despite the high occurrence of the exploitation of resources, the region has not, however, responded to the problem of biopiracy adequately.

One of the most important reasons for this lack of response to biopiracy, it is argued in the article, is the absence of a legally binding regional instrument. However, considering the factors that, first, biopiracy does not respect national borders; second, that most of the Southeast Asian states have ratified the Nagoya Protocol to the

17. Janna Rose, ‘Biopiracy: When Indigenous Knowledge is Patented for Profit’, *The Conversation*, 8 March 2016, <<https://theconversation.com/biopiracy-when-indigenous-knowledge-is-patented-for-profit-55589>> accessed 11 February 2020.

18. *Ibid.*

19. ‘Biopiracy’, Merriam-Webster Dictionary, <www.merriam-webster.com/dictionary/biopiracy> accessed 11 February 2020.

20. ‘Tackling biopiracy in Southeast Asia: the need for a legally binding regional instrument’.

Convention on Biological Diversity, 2010;²¹ and, third, that soft law instruments adopted so far have failed to tackle biopiracy, it is argued in the article that a legally binding regional regime should be established to tackle biopiracy in a consistent manner. Drawing on several biopiracy cases in the region, the article suggests reasons why a legally binding instrument would be desirable, or even necessary. Ways are suggested of how to improve current regional instruments pertaining to access and benefit sharing in relation to biological resources and associated traditional knowledge, based on analysis of instruments adopted to tackle biopiracy in other regions.

3 COMMENT

APJEL continues to publish rigorous scholarship in environmental law in the Asia Pacific region and the first three articles in the 2020 volume will, we believe, make a valuable contribution toward research and enhanced understanding. We already have a number of exciting articles in the editorial pipeline toward our second issue of 2020, and invite further contributions.

The editorial team would like also to take this opportunity to thank wholeheartedly the anonymous reviewers on whose precious time we have imposed, and from whose expertise we have drawn, to assess the articles in this and previous issues. We cannot thank them in print by name, but would like to acknowledge that their input strengthens significantly the scholarship contained in the articles we publish, and we are deeply grateful – we believe firmly that every article we publish represents a too seldom acknowledged relationship between authors, editors, publishers and anonymous reviewers.

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21. Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, 2010 to the Convention on Biological Diversity, 1992.