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RECLAIMING NATURE: ECO-RESTORATION OF LIMINAL SPACES

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Past environmental damage is a major hindrance to sustainability, yet its restoration is a low priority of Australian environmental law compared to current and future impacts. The governance of eco-restoration is fragmented and incomplete, with little regulatory influence in regard to landscape or ecosystem-scale restoration. In many cases eco-restoration is not viable because of irreparable environmental damage, and in a few cases - wild areas - it is generally less necessary. But in the extensive liminal spaces that have suffered some damage, restoration and better governance of it is needed. Remediation of old mines or brownfield sites – the current focus of Australian eco-restoration law – is not a useful precedent for ecosystem restoration of liminal landscapes. A number of fascinating biodiversity-focused restoration projects are underway across Australia, but are without a coherent governance framework that would enable such projects to likely have a more decisive and widespread impact. Some reforms could be undertaken to improve the legal framework for eco-restoration in Australia, especially in regard to terminology, goals and tools.

I ENVIRONMENTAL LAW'S MISSING AGENDA

Past environmental desecration in Australia has left a wretched legacy that limits the scope for sustaining what is left. Mitigating new environmental impacts, rather than remedying previous ones, is the focus of our environmental laws and policies. This article scrutinises this missing agenda in Australian environmental law with an argument that environmental restoration (hereafter 'eco-restoration') of 'liminal spaces' (i.e., areas either not irreparably changed by humankind nor so substantially intact that restoration is not a priority or is unnecessary) should be elevated to a more fundamental status. The discussion is structured around three main themes: (i) to explain the rationale for eco-restoration and its contribution to sustainability; (ii) to review the ad hoc and sparse provisions in Australian legislation relevant to eco-restoration, and to illustrate their modest governance potential by reference to some examples of biodiversity and landscape restoration in liminal spaces; and (iii) to identify some policy and governance challenges and make recommendations for building better legal foundations for eco-restoration law in Australia. This brief foray into this hugely important subject will hopefully help guide future empirical research to evaluate eco-restoration governance in more detail and focus law reform.

In our planet with virtually no place unscathed by humankind, and indeed much of its ravaged in the name of 'progress', eco-restoration is crucial. It is especially so in Australia,

with a grim environmental record that is among the gravest of any country.[1] Without restoration, environmental conditions may incrementally slip, a phenomenon labelled the 'shifting environmental baseline' syndrome.[2] Coined by Daniel Pauly, [3] the syndrome expresses how successive human generations – specifically natural resource managers – tend to lose perspective of historic natural conditions because they use the state of the environment during their lifetimes as their reference point.[4] Its pernicious effect is to blind decision-makers to the magnitude of cumulative losses. Environmental law can perpetuate it when current standards do not take into account past disturbances. The pursuit of sustainability is jeopardised when prevailing environmental conditions serve as baselines for legal protections, because sustainability may require recalibrating baselines back to historic environmental conditions. Restricting clearance of native vegetation on properties that were once heavily logged may be futile in protecting remnant wildlife or preventing soil erosion without more ambitious reparation of past losses, to illustrate.

Curiously, Australian environmental law displays a rather insouciant attitude to past losses, at least apparently from the statutory texts to be canvassed shortly in this article. Governance of eco-restoration tends to be quarantined to discrete contexts where there are discernible temporal and spatial boundaries to the targeted problem, such as a recently closed mine or a brownfield site – distinct parcels of land with identifiable actors who can be obliged to remediate within manageable parameters.[5] The more ambitious task of restoring degraded ecological communities on a regional scale tends to be omitted from legislative mandates, which offer (if at all) just cursory or glib references to eco-restoration without elaboration of its purpose or methods.[6] Restoration work is commonly relegated to non-regulatory approaches including financial grants, voluntary agreements and community partnerships – all potentially very useful, so long as there is goodwill.

The latter may themselves, of course, be conceptualised as a form of 'governance', as scholarship on legal pluralism and regulatory theory suggests in regard to the social ordering capacities of non-state actors such as community groups or business enterprises.[7] Australia's tradition of landcare and other grassroots environmental stewardship has been an indelible dimension of community governance of rural landscapes. But reliance on non-state entities may inappropriately lead to the state relinquishing responsibilities in an area where more

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1 Stephen Dovers (ed), *Australian Environmental History: Essays and Cases* (Oxford University Press, 1994).

2 Frans Vera, 'The Shifting Baseline Syndrome in Restoration Ecology' in Marcus Hall (ed) *Restoration and History: The Search for a Usable Environmental Past* (Routledge, 2010) 98.

3 Daniel Pauly, 'Anecdotes and the Shifting Baseline Syndrome of Fisheries'(1995) 10 (10) *Trends in Ecology and Evolution* 430.

4 Ibid; See also Sarah Papworth et al, 'Evidence for Shifting Baseline Syndrome in Conservation'(2009) 2(2) *Conservation Letters* 93, 94.

5 Gerry Bates, *Environmental Law in Australia* (LexisNexis Butterworths, 8th ed, 2013) 589. And see more generally Marie-Louise Larsson (ed.), *The Law of Environmental Damage: Liability and Reparation* (Martinus Nijhoff Publishers, 1999).

6 This is also a deficiency of eco-restoration law in other jurisdictions: e.g, David Hughes. 'Land Conservation and Restoration: Moving to the Landscape Level' (2002-2003) 21 Virginia Environmental Law Journal 115.

7 Bettina Lange, 'Regulatory Spaces and Interactions: An Introduction' (2003) 12(4) *Social & Legal Studies* 411; Brian Tamanaha, 'Understanding Legal Pluralism: Past to Present, Local to Global'(2008) 30 *Sydney Law Review* 375.

national leadership and accountability are so important in the midst of deteriorating environmental performance indicators. Recent cuts to landcare and associated programs by the federal government suggest Australia is drifting even further behind its eco-restoration challenges.[8]

One may speculate as to why eco-restoration is so marginalised in our legal system compared to sustainable development, a concept lavished with attention. Possibly, restoration is perceived by regulators as beyond their capacity for reasons of insufficient resources, the impossibility of the task (as for extinct species or landscapes buried under houses and roads) or the greater political salience of current environmental threats and greater political obstacles to coercing landowners to repair degradation. The legislative insouciance may also reflect policy-makers' lack of awareness about the enormity of past losses.

Whatever the reasons – which this article does not seek to decipher – in order to understand how eco-restoration should be better governed and contribute to sustainability, we need some insight into the contested issues of restoration, particularly relating to terminology, purpose and methods. Three specific concerns are:

(i) *Undefined terminology*. Environmental legislation typically omits mention of eco-restoration, and even where it does acknowledge it, the concept is left undefined. The presence of inconsistent language such as 'remediate', 'repair' or 'restore' can be confusing. This absence of statutory guidance may diminish public accountability for eco-restoration projects as well as foster diverse and potentially counter-productive practices.

(ii) *Unclear goals*. Further, the purpose of eco-restoration is generally not explained, except in limited circumstances such as to repair environmental damage created by a nominated statutory offence. Without knowing the goals of restoration, it may be difficult to define when it is feasible and worth funding. For instance, eco-restoration sometimes must be linked to an historic environmental baseline that serves as the reference point – a contentious scientific issue given the choices available as well as the difficulty of accounting for background environmental change and accommodating future change in the rehabilitated area.

(iii) *Inadequate tools*. Legislation also lacks adequate mechanisms to facilitate and govern restoration in a strategic and comprehensive manner. Regulations touching restoration tend to be confined to ad hoc, discrete situations, such as conditions attached to mining permits. To tackle the more important and challenging task of restoring biodiversity and functionality to entire ecological communities, reliance is placed on a miscellany of conciliatory mechanisms such as conservation covenants, tax incentives and financial grants. They tend to involve high transaction costs, are difficult to enforce and often rely on uncertain cooperation with numerous stakeholders.

It is perhaps unsurprising that environmental law is not particularly attentive to healing past environmental losses when its conceptual focus is mainly spatial rather than temporal. Environmental law approaches its subject matter around static spatial dimensions, as articulated most strongly through legal doctrines on property rights and jurisdiction, and the emphasis on management of the physicality of ecological problems.[9] To the extent that it explicitly conceptualizes time, the law is prospective rather than retrospective,[10] a stance that

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8 Tony Allan, 'Landcare and research cuts in Budget' *ABC Rural* (Online) 13 May 2014 <http://www.abc.net.au/news/2014-05-13/budget-overview/5441510>.

9 Jane Holder and Carolyn Harrison (eds), *Law and Geography: Current Legal Issues 2002*, (Oxford University Press, 2003) vol 5; Robert Verchick, 'Critical Space Theory: Keeping Local Geography in American and European Environmental Law' (1999) 73(3) *Tulane Law Review* 739; David Grinlinton and Prue Taylor, *Property Rights and Sustainability* (Brill, 2011).

10 Richard Lazarus, *The Making of Environmental Law* (University of Chicago Press, 2004), ch 1; Barton Thompson Jr, 'The Trouble with Time: Influencing the Conservation Choices of Future Generations'

has been described as a 'present future' orientation.[11] It focuses on how present actions may have future adverse effects, such as global warming.[12] Environmental impact assessment and land use planning law epitomise this approach. The notion of sustainable development, environmental law's temporal ballast, reinforces this future bias via its focus on intergenerational environmental responsibilities.[13] In downplaying the past, the 'present future' outlook may obfuscate our understanding of anthropogenic ecological changes that are rooted in historic conditions. Hence, declines in wildlife populations such as koalas may appear troublesome from the vantage of recent decades, but catastrophic over a longer time frame of a century.[14] Perception of environmental degradation may also be temporally warped by the tendency to look at proximate causes when the primary origin may be much older. The disappearance of a creature might be attributed to a new invasive species, when in fact climatic shifts, which enable such intruders to thrive, may better explain the loss.

There are other elements of environmental law, and the legal system more generally, that work against respect for natural history. The principle of non-retroactivity, another temporally significant contrivance, can thwart accountability for past errors that enjoyed the imprimatur of legality.[15] Statutes of limitations can similarly curb environmental accountability for historic harms by limiting the period in which to pursue legal action.[16] 'Grandfather' clauses, which shield long-standing resource users or polluters from transitions to more stringent regulatory standards, likewise blunt responsibility for past harms.[17]

This future stance of environmental law embodies a particular theoretical approach to time. Academics have theorised various models of temporality,[18] of which the dominant, and the one reflected in much environmental law, is the linear progression of time. It depicts time's arrow as marching forward, implying that the past can never be retrieved or fades into irrelevance.[19] The main rival model portrays time's movement as 'cyclical', it being associated with infinitely repeated events and processes - diurnal, lunar and seasonal rhythms, along with the predictable daily habits of eating and sleeping, and life and death of individual creatures.[20] These distinctions reflect the subject-matter of this article: eco-restoration evokes

(2004) 44 *Natural Resources Journal* 601; John Applegate, 'The Temporal Dimension of Land Pollution: Another Perspective on Applying the Breaking the Logjam Principles to Waste Management' (2008) 17 *New York University Environmental Law* 757.

11 Lisa Heinzerling, 'Environmental Law and the Present Future' (1999) 87 *Georgetown Law Journal* 2025.

12 Edith Brown Weiss, *In Fairness to Future Generations* (Transnational Publishers, 1989).

13 De Manila and Peter Brandon, 'The Time Horizon in the Evaluation of Sustainable Development' (2012) 6(3) *Journal of Civil Engineering and Architecture* 344.

14 Jeremy Hsu, *Overfishing Goes Back Centuries, Log Books Reveal* (25 May 2009) <http://www.livescience.com/5445-overfishing-centuries-log-books-reveal.html>.

15 Charles Sampford et al, *Retrospectivity and the Rule of Law* (Oxford University Press, 2006).

16 Gary Milhollin, 'Long-Term Liability for Environmental Harm' (1979) 41(1) *University of Pittsburgh Law Review* 1.

17 Heidi Robertson, 'If Your Grandfather Could Pollute, So Can You: Environmental "Grandfather Clauses" and Their Role in Environmental Inequity' (1995-96) 45 *Catholic University Law Review* 131.

18 Penelope Corfield, *Time and the Shape of History* (Yale University Press, 2007); John Brough and Lester Embree (eds), *The Many Faces of Time* (Kluwer Academic, 2000); L. Nathan Oaklander and Quentin Smith (eds), *The New Theory of Time* (Yale University Press, 1994).

19 Peter Coveney and Roger Highfield, *The Arrow of Time: A Voyage Through Science to Solve Time's G reatest Mystery* (Ballantine Books, 1992).

20 Diane Hughes and Thomas Trautmann (eds), *Time: Histories and Ethnologies* (University of Michigan Press, 1995), passim.

time's cycle while the sustainability framework manifests time's arrow.[21]

The challenge addressed by this article, to improve the legal framework for eco-restoration, is thus ensconced in a larger challenge to advance a better 'timescape' for environmental law and policy that respects nature's history and the interrelationships between the past, present and future. The next section of this article canvasses some examples of current landscape restoration projects in Australia, in order to give some insight into recent practices and their potential, before examining the existing statutory provisions for eco-restoration so that the extent of the challenge to be overcome through legal reform can be appreciated.

II ECO-RESTORATION PROCESS

Eco-restoration is becoming popular in Australia, perhaps counter-intuitively to its sparse legislative framework. Many projects are underway through the efforts of community groups, environmental nongovernmental organisations (NGOs) and other stakeholders. Many such efforts aim to revegetate landscapes, restore extirpated wildlife and create connectivity corridors between fragmented, remnant bushlands. Examples include Arid Recovery (South Australia), Gondwana Link (Western Australia) and Kosciusko2Coast (New South Wales). [22] It is worthwhile to convey a few details of some, before looking at the legislative context, in order to understand their aspirations and limitations.

A *Arid Recovery*

Australia's arid zone has been severely blighted by weeds, livestock, rabbits, cats and foxes since European settlement, and urgently needs rehabilitation. Medium-sized desert mammals have suffered gravely. Arid Recovery is thus an interesting initiative, aiming to restore the depleted biodiversity of a patch of South Australian outback.[23] Launched in 1997, the 'recovery' centres on a 123km^2 fenced reserve about 550 km north of Adelaide that aims to exclude numerous feral pests. Part of the enclosure, one of the largest of its kind in Australia, is used as a dingo pen experiment to determine whether cats and foxes can be controlled naturally using dingoes. Arid Recovery also encompasses a larger 200 km² buffer area where less intensive feral animal control methods are trialled. Several locally extinct mammal species have since been successfully reintroduced to the reserve.

Arid Recovery is an advanced multi-stakeholder partnership between a business corporation, the state government, University of Adelaide and community environmentalists. The involvement of a business entity is unusual for voluntary eco-restoration in general, but essential in this specific context because the fenced reserve is situated partly on the Olympic Dam Mine Lease and adjoining pastoral properties leased by BHP Billiton. Arid Recovery's success also owes to financial assistance from the state and federal governments, the South Australian Arid Lands Natural Resource Management Board and the Natural Heritage Trust respectively.

Though Arid Recovery might be dismissed as a trivial gesture relative to the enormity of degraded outback lands needing restoration, it has wider positive ramifications because it

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21 Marcus Hall, 'Introduction: Tempo and Mode in Restoration', in Hall, above n 2, 4.

22 For more examples, see Stuart Whitten, A Compendium of Existing and Planned Australian Wildlife Corridor Projects and Initiatives, and Case Study Analysis of Operational Experience (CSIRO, 2011), viii.

23 The discussion of Arid Recovery draws on <http://aridrecovery.org.au>.

generates transferable information and techniques for broad scale landscape management of Australia's arid zone, and also because of its demonstration of how mining, pastoralism and conservation organisations can collaborate to achieve ecological outcomes. The Arid Recovery reserve now has five times as many small native mammals compared to the outside areas, and its vegetation has recovered significantly since the purging of rabbits.[24]

The critical question is whether and how the Arid Recovery model could be replicated in other areas in the absence of such goodwill among stakeholders. It is doubtful that a mining company would altruistically agree to set aside land for conservation that would otherwise offer it lucrative financial returns. It is also improbable that the crucial government funding provided to Arid Recovery can be extended on a broad scale throughout the vast desert tracts needing restoration. But it is also likely that coercive regulation to require the kind of intensive care provided by Arid Recovery could not be imposed on private landowners on a large-scale without a severe political and community backlash.

B *Kosciuszko2Cost*

Kosciuszko2Coast (K2C) seeks to restore ecologically significant landscapes in southeast NSW and some adjacent areas in the ACT and Victoria,[25] and K2C itself is a subcomponent of the mammoth Great Eastern Ranges initiative.[26] The main drivers for launching K2C were habitat loss and habitat fragmentation from agriculture, human settlement and forestry, coupled with the threat of climate change. In NSW, 88 percent of the state is privately owned and the remainder under various forms of Crown land, a distribution that makes it imperative to mobilise lands in private hands towards nature conservation and restoration.[27]

The K2C initiative unites 12 organisations (including land care groups and Greening Australia) and numerous landowners to conserve and recover grasslands, woodlands, riparian and wetland areas and their inhabitants especially small bush birds and arboreal mammals. The creation of the corridor linking the national parks in the Southern Alps with the coast has centred on selective acquisition of key stepping stone properties, such as the 1300 hectare 'Scottsdale' property bought by Bush Heritage Australia, and placing conservation covenants on other lands remaining in private hands. Other components of K2C include the Landscape Links for Small Bushland Birds (LLSBB) project, which erects a sequence of 'exclosures' in grazed paddocks to recouple remnant vegetation enclaves.

Unlike Arid Recovery, the K2C has additional challenges because of the large region it covers and the numerous stakeholders it engages. K2C relies on collaborations, community mobilisation, ad hoc grants, public education, and voluntary mechanisms. It has little public law undergirding, apart from some potential support from municipal and state land use planning schemes. Private law mechanisms based on contracts and conservation covenants are used to formalize some of the conservation commitments, but these commitments require goodwill and voluntary support at the outset.

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24 Barry FitzGerald, 'Olympic Dam Haven Pays Off for Endangered Local Wildlife' *The Australian* (Sydney) 20 September 2014.

25 This discussion draws on the Kosciuszko2Coast website, <http://k2c.org.au>.

26 Office of Environment and Heritage, *Great Eastern Ranges Initiative: A Report to the NSW Environmental Trust describing funded activities from 2007 to 2011*, (2012) available at <http://www.greateasternranges.org.au/>.

27 Data (from 1993) from Geoscience Australia, <http://www.ga.gov.au/scientific-topics/geographic-information/land-tenure>.

C *Gondwana Link*

In what one international authority heralds as 'one of the most concerted efforts to resurrect nature ever attempted',[28] Gondwana Link is repairing a vast 1000 km swathe in south western Australia that has suffered catastrophic land degradation from farming.[29] It is also a biodiversity 'hot spot', being one of the world's 34 internationally recognised such areas and the only one in Australia.[30] Began in 2002, the project's vision is: '[r]econnected country across south-western Australia, from the Karri forests of the far [southwest] to the woodlands and mallee bordering the Nullarbor Plain, in which ecosystem function and biodiversity are restored and maintained'.[31] Its method is outright purchase or conservation covenants on private properties that are then subject to restorative interventions and ongoing better management. Land purchases are typically made where the extent of eco-restoration is considered 'just too massive to achieve through the largesse of any one landholder, or group of landholders, particularly farmers. It is unfair to expect farmers to carry the main burden of achieving landscapes'.[32] The project is backed by funding and technical support from a diverse cohort of private and public sponsors.

Interestingly, Gondwana Link cultivates a business case for eco-restoration. It emphasizes working with farmers to focus on turning degraded soils into more viable and profitable farming opportunities through restoration of native vegetation. It is also supporting ecologically and economically beneficial enterprises such as sandalwood growing, a small tree that produces a valuable food crop and essential oils. Planting sandalwood also aids carbon sequestration, thereby providing potential future revenue from businesses wanting to offset their carbon emissions.

Another distinctive feature is the project's collaboration with local Aboriginal communities and other stakeholders beyond the standard ensemble of land care and environmental NGOs found in many eco-restoration initiatives. Gondwana Link negotiated a memorandum of understanding with Aborigines holding native title in the area in order to foster cooperative land management and to incorporate the Noongar people's history and culture into the restoration practices. Local artists are also engaged by the project. MIX Artists, from Albany, have collaborated since 1999 to foster innovative art activity in the region. The MIX Artists have worked in local communities through workshops and exhibitions to highlight the natural wonders of areas targeted by Gondwana Link in order to stir the public's environmental awareness and respect for its eco-restoration work.

Gondwana Link is impressive for its ambition and collegiality, and although it will likely be some years before its full impact is appreciated, early signs are encouraging.[33] The relevant question is whether and how its objectives might be facilitated by a more direct and comprehensive legal presence beyond private law techniques (conservation covenants) and funding contracts with state agencies. If Gondwana Link's activities were incorporated into local and regional land use planning systems it might be more effective. More flexible legal

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28 Caroline Fraser, *Rewilding the World: Dispatches from the Conservation Revolution* (Picador, 2009) 327.

29 See <http://www.gondwanalink.org>.

30 Virginia Jealous, 'Gondwana Filling the Gaps' *The Australian* (Sydney) 5 February 2011.

31 Gondwana Link, 'Vision', <http://www.gondwanalink.org/abouts/vision.aspx>.

32 Gondwana Link, 'Work We Directly Support', <http://www.gonwanalink.org>.

33 Lisa Morrison, 'Gonwana Links to Success: Survey' The Western Australian (12 February 2014)

arrangements for negotiating legal covenants and extension of legal protections to key linkage areas, not just core enclaves, might also be useful, as recommended by some literature.[34] It is thus worthwhile now to catalogue and assess existing federal and state legal provisions that may support eco-restoration in such liminal spaces.

III LEGISLATIVE PROVISIONS

A *Environmental Legislation*

Despite Australia's environmental losses, the subject of eco-restoration receives sparse explicit legal recognition. The principal statutes largely omit restoration from their core mandates or purposes, while acknowledging the subject only in isolated contexts such as sanctioning pollution offenders or sequestering financial assurance from resource operators to enable future site remediation. Unhelpfully, the concept of eco-restoration or related terminology is usually not defined, and nor are criteria set for where it should be undertaken or which liminal spaces should be a priority. Based on a cursory reading of the legislation, anyone not familiar with Australia's environmental history could be excused for believing there has been little trauma.

The most elaborate eco-restoration provisions inhabit legislation governing remediation of contaminated lands and restoration of derelict mines. Western Australia contains representative examples in its *Contaminated Sites Act 2003* (WA) and the *Mining Rehabilitation Fund Act 2012* (WA). Likewise, similar provisions are found in New South Wales' *Contaminated Land Management Act 1997* (NSW) and the *Mining Act 1992* (NSW). Such laws are useful for mitigating particularly degraded or polluted properties, but they cannot support the large scale landscape restoration work found in Gondwana Link or K2C, which involve 'reactivating simultaneous natural processes in astonishingly complex living systems that include plants and insects, water, soil and sunlight'.[35]

The lodestar environmental management and protection statutes, where one could expect to find such provisions, are disappointing. The *Environment Protection and Biodiversity Conservation Act 1999* (Cth), Australia's premier legislative gesture in this field, lacks explicit reference to eco-restoration or related terms, even within its statement of objects and its definition of 'ecologically sustainable development'.[36] The closest acknowledgement is in the Act's provisions for 'recovery' of threatened species, but these are far too narrow to support comprehensive eco-restoration projects.[37]

At the state level, the *Environmental Planning and Assessment Act 1979* (NSW) and the *Protection of the Environment Administration Act 1991* (NSW), the principal environmental statutes in this jurisdiction, likewise overlook eco-restoration except in regard to the exceptional provisions for biobanking.[38] The promisingly entitled *Environmental Restoration and Rehabilitation Trust Act 1990* (NSW) is not a regulatory instrument but rather creates a financial trust 'to encourage and support restoration and rehabilitation projects in both the

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34 Ian Pulsford, James Fitzsimons and Geoff Wescott (eds), *Linking Australia's Landscapes: Lessons and Opportunities from Large-scale Conservation Networks* (CSIRO Publishing, 2013).

35 Marcus Hall, *Earth Repair: A Transatlantic History of Environmental Restoration* (University of Virginia Press, 2005) 3.

36 *Environment Protection and Biodiversity Conservation Act 1999* (Cth) ss 3,3A.

37 Ibid s2(e)(i), pt 13 div 5.

38 *Environmental Planning and Assessment Act 1979* (NSW) ss 891,115ZC(2)(c).

public and private sectors'.[39] Extraordinarily, not even this legislation defines the terms restoration or rehabilitation. Victoria's principal law, the *Environment Protection Act 1970* (Vic) also generally ignores the subject except in limited circumstances such as for addressing offences that precipitate environmental damage.[40] Western Australia's main environmental decree, the *Environmental Protection Act 1986* (WA), is bereft of any substantial provisions for facilitating eco-restoration, with its only reference also confined to the Act's compliance and sanctions provisions.[41]

Among other states, Tasmania's *Environmental Management and Pollution Control Act 1994* (Tas) is notable for designating eco-restoration among its statutory objectives,[42] along with the routine mention of it in the compliance sections.[43] However, the legislation lacks specific mechanisms to give effect to eco-restoration. Queensland's *Environmental Protection Act 1994* (Qld) is interesting because, although it has few relevant provisions,[44] it requires that the quadrennial state of the environment report must, inter alia, 'review significant programs, activities and achievements of persons and public authorities about the protection, *restoration* or enhancement of Queensland's environment'.[45]

Perhaps the most ambitious language sits in the objects clause of South Australia's *Environmental Protection Act 1993* (SA), which include that 'proper weight should be given … to environmental protection, *restoration* and enhancement' and 'to ensure that all reasonable and practicable measures are taken to protect, *restore* … the environment having regard to the principles of ecologically sustainable development'.[46] As in Queensland, this legislation also requires information about eco-restoration efforts to be included in state environmental reports.[47]

Nature conservation legislation offers few references to eco-restoration. Encouragingly, the *National Parks and Wildlife Act 1974* (NSW) provides that the objectives of a management plan for each park will 'take into consideration' the *rehabilitation* of landscapes and the reinstatement of natural processes',[48] although the Act does not define 'rehabilitation' (a term more commonly associated with former mining sites than restoration of landscapes or ecosystems). On the other hand, where the government declares a 'wild river', the Act prescribes 'restoration' (a more relevant term) among the governing management principles for such a place.[49] The Act also allows court orders to repair environmental damage created by offences.[50] Queensland's *Nature Conservation Act 1992* (Qld) lists some peremptory management principles that include, in relation to any declared 'special management area', 'the manipulation of the area's natural and cultural resources to … *restore* the area's natural or cultural values'.[51] It also empowers a court to order costs for any necessary rehabilitation

39 Ibid s 6.
40 *Environmental Protection Act 1970* (Vic) ss 62A, 67AC.
41 *Environmental Protection Act 1986* (WA) s 99X.
42 *Environmental Management and Pollution Control Act 1994* (Tas) subs-ss 3(d), (j).
43 Ibid s 63.
44 *Environmental Protection Act 1994* (Qld) ss 274, 292, 501.
45 Ibid ss 5477(2)(c) (my emphasis).
46 *Environmental Protection Act 1993* (SA) ss 10(1)(a)(ii), 10(1)(b) (my emphasis). The Act contains numerous other references to 'rehabilitation'.
47 Ibid sub-s 112(3)(c).
48 *National Parks and Wildlife Act 1974* (NSW) s 72AA(1)(h) (my emphasis).
49 Ibid s (61)5.
50 Ibid s 200.
51 *Nature Conservation Act 1992* (Qld) sub-s 17(1A)(a)(i) (my emphasis).

work.[52] Such a provision is also the only acknowledgement of restoration in the Northern Territory's *Parks and Conservation Act 2006* (NT).[53]

Despite the paucity of legislative provisions, some states are leveraging eco-restoration through broad, omnibus statutory powers. The NSW government is planning to reintroduce about ten mammals that are presumed extinct in the state, such as the numbat and golden bandicoot.[54] Victoria may soon release Tasmanian Devils into the Wilsons Promontory National Park in an attempt to re-establish an ecological balance between feral cats, foxes and native wildlife.[55] But with explicit legal provisions governing such biodiversity restoration, such actions might happen more quickly and widely.

Many Australian waterways need restoration. Rivers and lakes are usually Crown assets, although the surrounding water catchments may straddle a range of property tenures. Eco-restoration in such contexts may thus require collaboration with many stakeholders over a significant area. Tasmania's *Water Management Act 1999* (Tas) provides that a 'riverworks district' may be declared by the government, whose purposes may include to 'repair' watercourses and lakes.[56] The *Water Management Act 2000* (NSW) has a more emphatic approach, as its objects include: 'to protect, enhance and *restore* water sources, their associated ecosystems, ecological processes and biological diversity and their water quality'.[57] Water management plans prepared under this Act also refer to restoration,[58] as do the equivalent provisions under the federal *Water Act 2007* (Cth).[59] But one can also readily find statutes that omit such provisions, such as the *Water Resources Act 1997* (SA).

Australia's vast marine waters provide an even more daunting challenge for eco-restoration, and although management of marine waters might seem more straightforward because they are under Crown control, marine ecosystems can be blighted by distant terrestrial activities. The Great Barrier Reef, for instance, is saturated by farm runoff and has reportedly lost about 50 per cent of its coral since 1985 despite being in a protected area.[60] The *Great Barrier Reef Marine Park Act 1975* (Cth) addresses eco-restoration only in regard to offences causing damage to the reef.[61] The limitation of this provision (like other legislative examples canvassed in this article) is that it does not empower or oblige the Minister to initiate eco-restoration when no offence has occurred. Some state marine conservation laws acknowledge eco-restoration. Western Australia's *Conservation and Land Management* Act *1984* (WA) states that the 'reservation of a marine nature reserve shall be for the … *restoration* of the natural environment',[62] but the lack of specific implementation tools or performance targets

52 Ibid s 168.

53 *Parks and Conservation Act 2006* (NT)s 118.

54 Office of Environment and Heritage, *A Project to Reintroduce Locally Extinct Mammals – Questions and Answers* Office of Environment and Heritage <http://www.environment.nsw.gov.au/savingourspecies/mammalprojfaqs.htm>.

55 Nardine Groch, 'Scientists Call for Tasmanian Devils to be Reintroduced as Mainland Predators to Combat Feral Cats' *ABC News* (Online) 12 October 2014 < http://www.abc.net.au/news/2014-10-12/tas-devils-to-prey-on-feral-cats-holder/5806242>.

56 *Water Management Act 1999* (Tas) s 193(j).

57 *Water Management Act 2000* (NSW) s 3(b) (my emphasis).

58 Ibid sub-s 46(1)(a).

59 *Water Act 2007* (Cth) sub-ss 3(d)(ii), 21(2)(b) ,28(1)(d).

60 Juliet Eilperin, 'Great Barrier Reef has Lost Half its Corals Since 1985, New Study Says' *Washington Post* (Washington DC) 1 October 2012.

61 *Great Barrier Reef Marine Park Act 1975* (Cth) s 61A, s 61AHA, for instance

62 *Conservation and Land Management Act 1984* (WA) sub-s 13A(1)(a) (my emphasis). See also Ibid ss 13B,56.

in the legislation renders such provisions as just aspirational without the capacity to hold regulators accountable.

Forestry legislation accommodates eco-restoration to some extent, albeit for the purpose of perpetuating resource harvesting rather than restoring the full panoply of ecological functions of a forest. The Regional Forest Agreements negotiated between the Commonwealth and the states in the late 1990s contain miscellaneous provisions for 'regeneration' of forests for such purposes.[63] Climate change policy is also facilitating some projects to regenerate forests and other vegetation as a means of offsetting greenhouse gas emissions. The federal *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth) is promoting the development of carbon offset markets through reforestation.

B *Other Legislative Contexts*

Australia's belated legal recognition of Aboriginal people's rights in the land and sea can provide a framework for eco-restoration.[64] State legislation such as the *Aboriginal Land Rights Act 1983* (NSW) may facilitate such outcomes. Federally, the *Native Title Act 1993* (Cth) process for recognising Aboriginal land claims can enable the restoration of Aboriginal environmental practices on lands returned to the traditional owners. The Act's provisions for negotiation of Indigenous Land Use Agreements (ILUA) can also leverage this outcome.[65] Some 50,000 years of active land management by Aboriginal peoples, particularly through strategic use of fire, fundamentally altered the continent's vegetation and the wildlife that inhabits it.[66] The loss or decline of much biodiversity, especially in the outback, has been attributed to the curtailment of Aboriginal fire burning practices.[67] The restoration of these landscapes socialised by Aboriginal peoples can be crucial for rebuilding biodiversity and abundance, and is already an important facet of Gondwana Link.[68]

As remarked at the outset of this article, much of the governance of eco-restoration is articulated through non-regulatory processes that rely on financial grants, tax breaks and cooperative mechanisms with landowners such as conservation covenants. The *Income Tax Assessment Act 1997* (Cth) can incentivize restoration and conservation work where it provides eligible deductions against taxable business income, such as soil protection, fencing of regenerating vegetation and similar land care operations.[69] A tax deduction is also available to businesses that plant forests for sequestering carbon dioxide, and for businesses that remediate polluted or degraded land in order to return it to economic production. Such incentives are most beneficial to farmers and other economic developers, while of little value

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63 See Department of Agriculture, (7 August 2015) Regional Forest Agreements <http://www.agriculture.gov.au/forestry/policies/rfa>.

64 Damien Short, *Reconciliation and Colonial Power: Indigenous Rights in Australia* (Ashgate, 2008).

65 An ILUA is a voluntary agreement between a native title group and other persons about the use of land and waters and may apply to places not yet determined to have native title: Donna Craig, 'Native Title and Environmental Planning: Indigenous Land Use agreements' (2000) 17 *Environmental and Planning Law Journal* 440.

66 Bill Gammage, *The Biggest Estate on Earth. How Aboriginies Made Australia* (Allen & Unwin, 2011).

67 Ibid.

68 Neil Burrows, Andrew Burbidge and Phil Fuller, *Integrating Indigenous Knowledge of Wildland Fire and Western Technology to Conserve Biodiversity in an Australian Desert,* Millenium Ecosystem Assessment, <http://www.milleniumassessment.org/en/Bridging.Proceedings.aspx>.

69 Margaret McKerchar and Cynthia Coleman, 'The Australian Income Tax System: Has It Helped or Hindered Primary Producers Address the Issue of Environmental Sustainability' (2003) 6 *Journal of Australian Taxation* 201.

to land owners who hold vacant land purely for conservation purposes. Moreover, the tax system contains some perverse incentives for environmentally damaging industries, such as the fossil fuel sector, in effect subsidising further environmental harm that eventually needs repair.[70]

Direct financial aid for eco-restoration, which can be most helpful to entities not earning taxable income, is available via the *Natural Heritage Trust Act 1997* (Cth). The Act's Natural Heritage Trust (NHT) was set up by the federal government in 1997 to help restore and conserve Australia's natural treasures, primarily by channelling financial assistance. The Act lists several environmental initiatives whose objectives include restoration. For instance, the stated objective of the 'National Vegetation Initiative' includes 'restoring, by means of revegetation, the environmental values and productive capacity of Australia's degraded land and water'.[71] The Act's helpful definition of 'environmental protection' includes 'conserving or restoring Australia's biodiversity'.[72] The NHT ceased on 30 June 2008, with is functions incorporated into the 'Caring for our Country' funding programme until this initiative was effectively axed by the Abbott Government's 2014 budget. Other related federal funding schemes, past or ongoing, include the National Action Plan for Salinity and Water Quality, National Landcare Programme and the Environmental Stewardship Programme.

Such financial assistance is sometimes given to private land owners who place their properties under a conservation covenant, a tool of small but increasing importance for nature conservation given the constraints to expanding Crown protected areas.[73] Covenants have been particularly important for K2C and Gondwana Link. In Tasmania, to illustrate their extent, there were 760 covenants covering about 96,142 hectares as of December 2014,[74] compared to approximately 2.5 million hectares in the state's reserve system (i.e., about 3.5 per cent of land under covenant).[75] In theory, covenants can efficiently allow additional lands to be brought under stricter conservation controls without the expensive financial outlays of outright acquisition of the land. The negotiation of conservation covenants is an interesting form of contractual governance in which environmental protocols are negotiated between the state and private actors, and sometimes with assistance from intermediaries such as the Tasmanian Land Conservancy or the Nature Conservation Trust of NSW.

From the perspective of eco-restoration, covenants may help provide greater legal security for landowners and environmental groups that make investments in restoring natural values. The expenditure to labour and money on replanting trees, whose lifespan may exceed 100 years, will benefit from legal safeguards to ensure that such expenditure is secured in perpetuity. There may be a disincentive to provide financial assistance or other kinds of support if a landowner is at liberty to remove the replanted trees after a short period of say 10 or 20 years, as is found in some short-term conservation contracts.

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70 Chris Ready and Mark Diesendorf, 'Financial Subsidies to the Australian Fossil Fuel Industry' (2003) 31(2) *Energy Policy* 125.

71 *Natural Heritage Trust Act 1997* (Cth) s 10(c).

72 Ibid s 15(c).

73 Vanessa Adams and Katie Moon, 'Security and Equity of Conservation Covenants: Contradictions of Private Protected Area Policies in Australia' (2013) 30(1) *Land Use Policy* 114.

74 Tasmania Department of Primary Industries, Parks, Water and Environment, *The Running Postman,* (7 December 2014) <http://dpipwe.tas.gov.au/Documents/Running%20Postman%20December%202014.pdf>.

75 Tasmania Parks and Wildlife Service, *Reserve Summary Report* <http://www.parks.tas.gov.au/file.aspx?id=28768>.

Conversely, covenants may have several limitations, though not limitations that are relatively more problematic than that affecting public reserves. First, covenants primarily emphasise negative obligations, such as prohibitions on clearing vegetation, mustering stock or building infrastructure, while positive duties to revegetate, restore soil or other environmental improvements are acknowledged less prominently. Legislation enabling such covenants generally does not refer to eco-restoration,[76] though their provisions are broad enough to encompass restorative work.[77] A second possible limitation is that covenants tend to be utilised for properties safe from serious environmental threats because such areas are unsuitable for resource harvesting (e.g., forestry or agriculture).[78] This is not an intrinsic limitation of covenants, but rather a limitation of any *voluntary* approach to nature conservation. Thirdly, conservation covenants are vulnerable to poor compliance. Landowners' positive duties are usually qualified by discretionary language such as to use 'best endeavours' or 'if feasible' (e.g., for eradicating weeds or feral animals).[79] Government officials also rarely have enough time to be vigilant in monitoring compliance; in Tasmania, only two staff are assigned to oversee the state's some 760 covenanted properties, with contact with each landowner limited to one telephone call per year and (in theory) one site visit every five years.[80] On the other hand, management of conservation reserves under direct government control is also often poorly resourced and implemented. Where a covenant is under the custody of a committed landowner, it may be much better managed on a day-to-day basis than any large park.[81] An example of such committed land stewardship in the private domain is the 'Blue Mountain View' eco-sanctuary in southwest Tasmania.[82]

Further considerations relevant to an assessment of the role of covenants or other legal techniques are the available resources and expertise for private landowners. Some may quite understandably lack the necessary expertise to be restorationists. Though covenants typically provide for technical advice from government, it may not be significant for the same reason government monitoring of the implementation of covenants is not robust. A further hindrance is that an assortment of covenanted properties, even within the same region, may lack sufficient spatial connection to provide an integrated and comprehensive framework for management and restoration of a landscape. No landowner can be coerced to accept a covenant, and consequently gaps in landscape protection can arise. The foregoing considerations do not imply that covenants are not useful; indeed, they make a valuable contribution to nature conservation and eco-restoration, but covenants alone cannot provide the complete legal framework for such efforts on private tenures.

In conclusion, the foregoing survey of Australian environmental law reveals a smattering of provisions that speak directly or indirectly to eco-restoration, but without any clarity on what is meant by 'restoration' nor guidance on where it should be undertaken, what are its goals or how eco-restoration relates to the broader agenda of promoting sustainable development. The absence of a robust statutory framework has not precluded environmental NGOs taking the initiative to restore some of Australia's liminal spaces, but their voluntary efforts, however

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76 See, e.g., *Nature Conservation Act 2002 (*Tas) ss 34-9; *Nature Conservation Act 1992* (Qld) s 51.

77 E.g., *Nature Conservation Trust Act 2001* (NSW) s 10.

78 Covenants, however, can usefully protect scenic coastal landscapes open for residental development and subdivision.

79 E.g., Tasmanian Land Conservancy (TLC), Nature Conservation Plan for 199 Rosedale Road, Bicheno (TLC, June 2013), 17.

80 Personal Communication, Tasmanian Land Conservancy, 15 November 2014.

81 Personal communication, former staff member of the Tasmanian Forest Practices Authority, 15 June 2015.

82 See <www.bluemountainview.com.au>.

successfully implemented, require further efforts in order to meet the challenge posed by over two centuries of environmental ruin.

IV IMPROVING ECO-RESORATION GOVERNANCE

A *Terminology*

What is 'environmental restoration'? The foregoing legislative survey reveals no clear answer, but potentially filling this gap are definitions developed by scientists. A description of eco-restoration in any form must recognise that it is not simply a scientific phenomenon but also a human practice where governance is a 'key operational component of the definition'.[83] In other words, the practice of restoring natural places should be seen as embedded within a legal framework that determines what is it, when it should done, and how it should be undertaken. In the manner that Australian legislation has elaborated principles for 'ecologically sustainable development', so too it should specify a legal template for eco-restoration. Two particularly crucial definitional issues to clarify – as previously noted in this article –are whether to choose an historic baseline as the reference point for restoration, and whether and how to accommodate any culturally significant human modifications to the environment.[84] A 'liminal space' to restore this implies some degree of human modification, but not irreparable change. A clear statutory definition of eco-restoration will thus help ensure improved implementation and accountability of regulators and other parties involved in restorative work.

Eco-restorationist scientists have forged a rich language, spanning the traditional terms of 'remediation' and 'rehabilitation' to colourful additions such as 'regardening', 'renaturing' and 'rewilding'.[85] The diverse nomenclature reflects the variety of goals and methods of eco-restoration, and thus behoves legislators to issue guidance to differentiate and prioritise terms so that persons undertaking restoration understand what variant they are working within. According to the Society of Ecological Restoration (SER), the peak international body for professionals working in this area, 'ecological restoration' means 'an intentional activity that initiates or accelerates the recovery of an ecosystem with respect to its health, integrity and sustainability'.[86] An ecosystem is considered 'restored' when it can 'sustain itself structurally and functionally', showing sufficient 'resilience to normal ranges of environmental stress and disturbance'. [87] This approach thus defines eco-restoration in a manner that encompasses broad ecological services and functions, as would be relevant to projects such as K2C and Gondwana Link. But it still leaves unclear what 'ecosystem' means and how one interprets 'stress and disturbance'. The point is that legislative provisions could probably never cover all potential permeations of a definition of eco-restoration, and so a process for providing supplementary guidance would be valuable.

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83 Anastasia Telesetsky, 'Ecoscapes: The Future of Place-based Ecological Restoration Laws' (2013) 14 *Vermont Journal of Environmental Law* 494, 503.

84 For example, some restorationists identify rural, farmed landscapes as important to protect both for their cultural and biodiversity values: David Sprague and Nobusuke Iwasaki, 'Reflooding the Japanese Rice Paddy', in Hall, above n 2, 171.

85 Hall, above n 2, 2-3.

86 Society for Ecological Restoration (SER) International Science & Policy Working Group, *The SER International Primer on Ecological Restoration* (SER, 2004).

87 Ibid s 10.

'Rehabilitation' is another term found in some legislation, and it emphasises 'reparation of ecosystem processes, productivity and services, whereas the goals of restoration also include the re-establishment of the pre-existing biotic integrity in terms of species composition and community structure'.[88] The related term of 'reclamation' also appears in some laws and policies, and it commonly refers to the treatment of former mined lands or industrial areas in order to stabilise the terrain, remove pollutants and improve aesthetics. Neither concept is clearly broad enough to encompass restoration at the landscape level as discussed in this article.

The intriguing concept of 'rewilding' has entered the lexicon of eco-restoration in recent years, offering a highly emotive and symbolic ideal that is helping to galvanise popular interest in restoring nature's sovereignty. The movement arose from collaboration between David Foreman and Michael Soulé in the late 1980s, when they established the Wildlands Project to foster scientific and political support for enlarged networks of wilderness regions.[89] The Rewilding Europe Initiative, one prominent example, aims to 'restore missing species and function' to ten areas each of 100,000 hectares by 2020.[90] Rewilding emphasizes the pivotal role of keystone species, such as top carnivores, in regulating ecosystems, and advocates extensive terrain and habitat linkages for these species to thrive.[91] For globally vanished species, it may be necessary to translocate approximate 'taxon substitutes' – such as by substituting an Asian camel for an extinct North American equivalent. One effort is the Pleistocene rewilding campaign that is translocating some African and Asian mega-fauna to parts of North America and Siberia that have evolved without these species since the Pleistocene.[92] In some cases, rewilding has also entailed removal of human infrastructure such as dams and roads to enable wildlife habitat to improve.[93]

The concept of rewilding has garnered popularity in recent years as high-prolife environmentalists such as George Monbiot have lauded its virtues.[94] But the concept may be deficient in the sense that Monbiot uses it of letting nature 'run wild', because it ignores the need for human assistance in liminal landscapes. As the SER explains:

> the restored ecosystem often requires continuing management to counteract the invasion of opportunist species, the impacts of various human activities, climate change, and other unforeseeable events. In this respect, a restored ecosystem is no different from an undamaged ecosystem of the same kind, and both are likely to require some level of ecosystem management.[95]

Such an imperative has been articulated most strongly in the development of the associated

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88 Ibid.

89 Chris Sandom et al, 'Rewilding' in David MacDonald and Katherine Willis (eds), *Key Topics in Conservation Biology II* (John Wiley and Sons, 2013) 430, 431.

90 See Emma Marris, 'Reflecting the Past' (2009) 462 *Nature* 30, 31.

91 Dave Foreman, 'The Wildlands Project and the Rewilding of North America' (1998) 76 *Denver University Law Review* 535, 548.

92 Dustin Rubenstein et al, 'Pleistocene Park: Does Re-wilding North America Represent Sound Conservation in the 21st Century?' (2006) 132(2) *Biological Conservation* 232, 233.

93 Michael Blumm and Andrew Erickson, 'Dam Removal in the Pacific Northwest: Lessons for the Nation' (2012) 42(4) *Environmental Law* 1043, 1047.

94 George Monbiot, *Feral. Searching for Enchantment on the Frontiers of Rewilding* (Penguin, 2013).

95 Society of Ecological Restoration, SER International Primer on Ecological Restoration, <http://ser.org/resources/resources-detail-view/ser-international-primer-on-ecological-restoration>.

concepts of 'regardening' or 'conservation gardening', as advocated mainly by restorationists working in Europe, such as Chris Smout, who sees rewilding as impractical in liminal landscapes burdened by anthropogenic change.[96]

Clearly, eco-restoration is not a simple, one-dimensional ideal but rather is a cupola housing a variety of approaches for repairing ecological damage. Thus, shallow statutory provisions about restoration, as found in Australian environmental laws, are potentially misleading and unhelpful. All major federal and state environmental management and protection statutes should include eco-restoration among their stated goals and define the terminology precisely so that decision-makers and the general community can understand the parameters of eco-restoration, acknowledging the spectrum from remediation of discrete parcels such as former mines to expansive rewilding of liminal landscapes on a regional scale. Nuanced statutory definitions that capture such differences would thereby help to improve implementation and signal to stakeholders the importance of restoration.

B *Goals*

Just as key terminology needs legislative definition, the goals of eco-restoration need to be enunciated in law. Goals serve many purposes, including to efficiently channel efforts towards specific outcomes, provide motivations to achieve them and criteria for judging success and ensuring accountability. Glib statements about eco-restoration in statutory objects would hardly suffice, as we need legal guidance to identify the circumstances in which specific goals will be sought.

There are many reasons to practice eco-restoration, with the justifications coalescing around three primary considerations.[97] First, on scientific grounds, restoration is said to help rebuild natural capital, such as to restore wildlife populations, mitigate climate change, re-establish blunted evolutionary processes, and improve water and soil quality and other ecological services. The result can also be economic improvements such as more productive agriculture. This is the primary rationale for landscape restorations in Australia such as Gondwana Link. A second rationale has an ethical basis, affirming humankind's collective responsibility to restore ecosystems that we have damaged, even if previous generations, rather than our own, caused it. This perspective is not particularly evident in Australian eco-restoration, but rather is largely an academic viewpoint. The third basis is an aesthetic one, which identifies value in the beauty and spiritual dimensions of wilderness, separated from human presence. The wilderness movement is one of the oldest strands of environmentalism, and its reverence of primeval wild places also provides a powerful driver for some rewilding campaigns, such as in regard to Tasmania's dammed Lake Pedder.[98]

All of these rationales may have a role in articulating the case for eco-restoration by appealing to the variable interests of different stakeholders and the different contexts in which restoration may occur. The legal system can help articulate these rationales by

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96 Chris Smout, 'Regardening and the Rest', in Hall, above n 2, 111.

97 See the diverse rationales explained in David Foremen, *Rewilding North America: A Vision for Conservation in the 21St Century* (Island Press, 2004); Francisco Comin (ed), *Ecological Restoration: A Global Challenge* (Cambridge University Press, 2010); James Boyce, Sunita Narain and Elizabeth Stanton (eds), *Reclaiming Nature: Environmental Justice and Ecological Restoration* (Anthem Press, 2007).

98 Benjamin Richardson, 'Rewilding Tasmania's Lake Pedder: Past Loss as Nature's Lex Ferenda'(2014) 33(2) *University of Tasmania Law Review* 194.

structuring different approaches to eco-restoration. If climate change mitigation is the aim, the law can create a framework for landowners to participate in reforestation to earn marketable carbon credits, in the manner sought by the *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth) (though a flawed statute in its execution because of the burdensomely high compliance costs for participating landowners).[99] Restoration purely for carbon farming may also be suitable in a wide variety of environments including places that would not otherwise be considered 'liminal' because of the gravity of ecological change and decline: revegetation may be feasible even in densely inhabited urban areas. Alternatively, the law may seek to restore biodiversity on private land, and articulate that purpose by expanding existing conservation covenant schemes to make them more attractive to landowners. The point here is that the governance framework for eco-restoration should explicitly enunciate its aims, and recognise that distinct laws may be needed to further distinct aims.

Another reason to differentiate eco-restoration goals in legislation is the outcomes sought may infer different historic baselines to work from. Reforestation to sequester greenhouse gases does not necessarily need to be done with reference to any historic benchmark, whereas it is likely to be crucial for a biodiversity recovery project that aims to re-establish the fauna and flora of a bygone era. As already noted, choosing a historic reference point can be contentious because, as restoration ecologist Eric Higgs explains, '[t]here is no original condition for an ecosystem in any meaningful sense; one cannot fix a specific point in time'.[100]

Just as law should define when to undertake eco-restoration, it may need to discourage it when an ecosystem cannot be returned 'to its historic trajectory'.[101] Some ecological damage is effectively irreparable, as in regard to heavily urbanised and intensely farmed landscapes: these are not 'liminal' spaces. The theory of 'novel ecosystems' advanced by Australian academic Richard Hobbs and others suggests that some landscapes have undergone such fundamental changes in their species composition and ecological processes that rehabilitation to their former state is effectively impossible.[102] While most restorationists recognise that '[t]he restored ecosystem will not necessarily recover its former state, since contemporary constraints and conditions may cause it to develop along an altered trajectory',[103] the 'novel ecosystems' theory goes further to contend that some places have undergone a 'threshold shift' that 'in practice is irreversible',[104] or what has been analogised as trying to put the toothpaste back into the tube.[105] Much of rural Australia could be characterised as having shifted to a novel state, because of the massive land clearance and decimation of native plants and animals by invasive weeds and feral pests. Yet, some native species can adapt to new conditions that can continue to provide equivalent ecological function, such as providing

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99 Penny van Oosterzee, 'Carbon Farming Initiative Will Fail Farmers and Rural Communities' The Conversation (8 July 2014), <http://www.theconversation.com/carbon-farming-initiative-will-fail-farmers-and-rural-communities-28276>.

100 Eric Higgs, *Nature by Design* (MIT Press, 2003), 38.

101 Society of Ecological Restoration, above n 94.

102 Richard Hobbs, Eric Higgs and Carol Hall (eds), *Novel Ecosystems: Intervening in the New Ecological World Order* (Wiley-Blackwell, 2013).

103 Society of Ecological Restoration, above n 94.

104 Lauren Hallett et al, 'Towards a Conceptual Framework for Novel Ecosystems' in Hobbs, Higgs and Hall, above n 101, 17-18.

105 Joseph Mascaro, 'Origins of the Novel Ecosystems Concept', in Hobbs, Higgs and Hall, above n 101, 51.

habitat and food for bird species.[106] For a novel ecosystem, the focus of law shifts from eco-restoration to management of the area's ecological functions with the goal of achieving equivalent ecosystem services such as clean water, fertile soils and habitat for wildlife.

Liminal spaces, or what some commentators call 'hybrid' ecosystems, which have undergone some changes in their species composition and/or abiotic conditions, but potentially can be returned to an approximation of their historic states, are thus realistically the principal objects of eco-restoration.[107] Outside of these liminal zones are areas ravaged by irreparable environmental changes (for which eco-restoration is now probably unfeasible) and areas that substantially retain their original ecological qualities (for which eco-restoration is less necessary or not a priority). The liminal or in-between spaces are where environmental law needs to target resources to reclaim nature, and science has a crucial role to inform regulations and standards to determine which places fall within this category. The legal system needs to direct policy-makers to work out which parts of Australia are 'liminal' as against 'novel' or 'wild', and then channel restoration efforts accordingly, though recognising that there will often be no bright line distinctions here but rather some overlap between these categories. Of course, ambitious legislative aspirations alone cannot ensure outcomes are met, which depends on a host of additional factors including well-designed tools and carefully allocated resources, but the starting point is at least to create a clear principled framework for eco-restoration.

C *Tools*

How should restoration of liminal spaces occur? It usually requires human intervention to allow natural processes to re-establish themselves, although as rewilders assert, some degree of regeneration can happen without human assistance through natural ecological succession (as notably evident, for instance, in the New England region of the United States where forests have regrown vociferously in the past half century following the cessation of agriculture).[108] But more often some human aid is necessary, such as to eliminate weeds, replant trees and remove infrastructure, tasks that are evoked by the notion of 'regardening' that has become fashionable in the restorationist literature.[109]

The degree of 'regardening' varies greatly, depending on the ecological impacts to overcome, the size of the area and the number of stakeholders. Eco-restoration governance at a landscape level requires tools that can incentivise, discipline and coordinate numerous actors over large areas. The context and ensuing challenges are unlike the remediation of a former mined site, involving a relatively small parcel with few actors. In more challenging landscape restorations, no single tool can possibly address all the multi-faceted dimensions, with the optimal combination of tools likely depending on a variety of variables such as ownership of the property to be restored, the actors involved, the financial resources available and the ecological issues to be addressed.

Within the Crown estate, especially in protected areas, eco-restoration is relatively straightforward. Despite the paucity of explicit statutory provisions in conservation

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106 Hallet et al, above n 103, 21 (referring to Carnaby's black cockatoos in Western Australia relying on pine seeds).

107 Ibid 17.

108 Alexander Plaff, 'From Reforestation to Deforestation in New England, United States' (2000) 2 *World Forests* 67.

109 Smout, above n 95.

legislation, as observed earlier in this article, park agencies enjoy broad plenary powers to manage places under their auspices and may undertake eco-restoration through, for instance, recovery plans for endangered species and bush regeneration programs. Legislative direction is still needed, however, in order to make eco-restoration a priority for Crown agencies, which should be inculcated through performance targets subject to judicial review.

Eco-restoration is a more daunting task on privately owned or managed land, both because of the often deeper history of intensive land use (farming, logging or settlement) as well as the legal obstacles that flow from the nature of the land tenure. One major Australian study of wildlife corridors and connectivity projects observed that '[g]overnance and institutional arrangement for such cross-jurisdictional corridor initiatives will always be a challenge because there is such a diversity of tenures, partners and stakeholders'.[110] So far, an assortment of policy tools have been utilised, including biodiversity offsets, vegetation clearance controls, conservation covenants, land purchases, contractual agreements and tax concessions. Many of these examples are non-regulatory in character, relying on education, negotiation and financial assistance to communities and property owners – which reflects the political difficulties in governing private land use. The eco-restoration examples discussed in this article tend to rely on such approaches for the same reason. We lack empirical research on which tools are most effective for eco-restoration, and whether this ensemble is adequate at all and whether the smorgasbord approach is too inefficient and confusing for stakeholders. But already we can discern that private property rights are the likely common impediment to eco-restoration that these mechanisms try to navigate.

Property law hinders eco-restoration for three reasons. First, the concept of ownership in the common law emphasises the rights and entitlements enjoyed by landowners rather than their custodial duties of its stewardship. The relationship between people and places is proprietary, in which the ecological integrity of the land is subordinate to the economic or other utilitarian interests of the landowner. As Nicole Graham, an Australian legal scholar who specialises in this subject explains, '[l]aws of ownership that fail to enquire, understand and accept the capacities and limits of the earth's systems fail to achieve the ultimate purpose – to regulate viable land and water use practices on an enduring basis'.[111] In this common law paradigm, there is no legal duty on a landowner to restore the environment, even for damage caused directly by the landowner. Only a leaseholder is potentially liable to restore the land if damaged by his or her actions, and even here accountability is to the landlord rather than any larger public interest in a healthy environment. Property law thus constructs a relationship with the land that potentially condones maladaptive land use practices, and certainly does not address past damage by previous owners.[112]

The second problem with property law is that it embodies a temporally static view of the environment that fails to account for the need to alter legal entitlements in response to shifting environmental conditions over time. Because earth is a dynamic, living system – the climate changes, forests grow and species evolve – there should be a corresponding flexibility in those legal entitlements to take account of these changes over time. But property law per se lacks such flexibility and thus the legal entitlements it gives landowners can become environmentally dysfunctional. For example, if a landowner has a fixed water allocation from

110 Whitten, above n 22, vii.

111 Nicole Graham, 'Owning the Earth', in Peter Burdon (ed), *Exploring Wild Law: The Philosophy of Earth Jurisprudence* (Wakefield Press, 2011) 259, 262.

112 Robert Goldstein, 'Green Wood in the Bundle of Sticks: Fitting Environmental Ethics and Ecology into Real Property Law' (1997-1998) 25 *Boston College Affairs Environmental Law Review* 347.

a river that flows through her land, that allocation should be adjusted during a drought. Likewise, an open entitlement to plant or remove vegetation should be considerate of shifts in the conservation status of the flora and fauna.

The third difficulty with property law for eco-restoration is that it fragments landscapes by disaggregating them into numerous, smaller and discrete parcels, which results in environmental management occurring parcel-by-parcel without the necessary degree of coordination and integration required for action on a landscape level. Eco-restoration becomes much harder to coordinate when numerous property owners must be shepherded towards a common effort. Important corridors for wildlife movement for example can become disrupted. When conservation covenants must be negotiated to protect and restore natural values over a landscape imprinted with a mosaic of legal tenures, such as requirements to protect trees and remove weeds, the implicit message is that property owners could lawfully do otherwise.

Of course, property law does not operate in a vacuum: 'property rights are defined by whatever legal instruments create and govern that right. Typically this will be a mixture of contracts and statue', explain experts Paul Martin and Miriam Verbeek.[113] In other words, the entitlements of property ownership are neither fixed nor innate but rather change with time and context. The activities of Australian landowners are subject to wide-ranging regulations, including land use planning schemes that govern building works, and controls on vegetation clearance, water use and a host of other environmental impacts. But the regulatory envelope that sequesters some of the traditional common law property privileges carries a significant political and resource burden on the state, so their enforcement is not easily assured. With academic research suggesting that regulation is more likely to succeed when it governs with a lighter touch, and thereby facilitating rather than dictating change,[114] the scope for inculcating environmental stewardship and restoration responsibilities within property law is perhaps most likely to be found in new incentive, flexible and collaborative approaches rather than traditional 'command-and-control' rules.

So, what legal reforms might facilitate eco-restoration of the genre exemplified in K2C or Gondwana Link? Of course, that requires some detailed empirical research that this article is not designed to provide, but some ideas can be briefly canvassed here to guide such research.

The current approaches to eco-restoration comprise of too many small and piecemeal accomplishments without a strategy for connecting these accomplishments into a larger self-sustaining governance approach. Such an approach is unlikely to be politically feasible or legally practicable if it peddles an idealistic vision of a pre-human world, both because in most of Australia there are existing land users who must be accommodated, and also prior to 1788 the Australian landscape was already actively managed by Aborigines in a manner that, after an initial wave of extinctions, reached an apparently healthy, biodiverse equilibrium. Also, reclaiming nature through landscape-level projects should also not be reduced to the problematic trend of disaggregating nature into a basket of marketable 'ecosystem goods and

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113 Paul Martin and Miriam Verbeek. 'Property Rights and Property Responsibility' in C. Mobbs and K. Moore (eds), *Property: Rights and Responsibilities. Current Australian Thinking* (Land and Water Australia, 2002) 1, 2.

114 Cameron Holley, Neil Gunningham, and Clifford Shearing, The New Environmental Governance (Routledge, 2013).

services',[115] such as water purification or carbon sequestration, because it risks losing perspective of the complex interrelationships and resulting in some ecological facets being relegated as less important. As environmental writer David Quammen once amusingly described the limitations of this approach, one large carpet is functionally very different compared to the same carpet cut into thirty-six small fragments.[116]

The first priority must be a more intelligent system of environmental planning scaled at a regional, landscape level that transcends the artificial political and juridical boundaries of state and local governments.[117] Bioregional planning must not only look to the future but also to the past. The federal *Water Act 2007* (Cth), which inter alia provides a framework for managing the Murray-Darling River Basin, is a positive step. Its statutory objects include: 'to protect, *restore* and provide for the ecological values and ecosystem services of the Murray-Darling Basin',[118] with further references to restoration in sections dealing with the development of management plans[119] (although regrettably without definition of key terms). To strengthen bioregional planning, governments should purchase private lands that are particularly critical to these frameworks, such as properties that link wildlife corridors, and fund such purchases (if necessary) by relinquishing Crown assets of less environmental importance. To limit further disaggregation of landscapes into small parcels that impede eco-restoration, planning subdivision controls must be tightened to not only stop further divisions but also to create financial incentives to 'reaggregate' land holdings.

Second, regulators could treat certain types of development proposals as not only an opportunity to address potential ecological impacts but also to consider how to heal past ones. This reorientation would entail looking at how some major proposals, such as those subject to environmental impact assessment procedures, could be redesigned or implemented to facilitate environmental restoration of past harm. A significant new economic development would in other words become an opportunity to achieve net environmental gains by restoring damage from past mistakes. To illustrate, a proposal to clear land for a new property subdivision could be tied to an assessment of how to restore other lands or waters of at least comparable ecological value. Offsetting, although controversial when used as a ploy to allow intensification of environmentally problematic development, can generate environmental gains if we shift its goal from 'offsets' to 'net gains'. The net gain could be satisfied, for instance, by assistance to landowners participating in eco-restoration projects such as those found in K2C and Gondwana Link. Australian legislation and policy already accommodates biodiversity offsets, but they tend to be used more narrowly, as a last resort when alternatives to avoid or mitigate impacts are impractical.[120] A better approach is reflected in the Victorian Government's 2002 policy on biodiversity offsets and net gains.[121]

Such a proposal, while potentially useful for large-scale projects, will not take us very far for routine and smaller scale land use activities. In this context, eco-restoration could be ramped

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115 Richard Norgaard, 'Ecosystem Services: From Eye-Opening Metaphor to Complexity Blinder' (2010) 69(6) *Ecological Economics* 1219.

116 David Quammen, *Song of the Dodo: Island Biogeography in an Age of Extinctions* (Scribner, 1996) 11.

117 Michael V. McGinnis (ed.), Bioregionalism (Routledge, 1999).

118 *Water Act 2007* (Cth) s 3(d)(ii) (my emphasis).

119 Ibid sub-ss 21(2)(b) and 28(1)(d).

120 Philip Gibbons and David Lindenmayer, 'Offsets for Land Clearing: No Net Loss or the Tail Wagging the Dog?' (2007) 8(1) *Ecological Management and Restoration* 26.

121 Department of Natural Resources and Environment, A Framework for Action: Native Vegetation Management in Victoria (Government of Victoria, 2002), 5, 14.

up by embedding within the definition of property rights, such as freehold tenure and leaseholds of Crown land, a duty of environmental stewardship and restoration measured against variable performance criteria articulated through land use planning schemes. To the extent that adverse land use changes are attributable to previous landowners, the duty should be matched with one on regulators to provide technical and financial assistance in the manner found in some conservation covenants. Properties under Crown leases are the easiest to target, and the Delbessie Agreement in Queensland is a seminal example.[122] This 2007 Agreement, which was abandoned in 2012 by the previous Newman government not particularly sympathetic to environmental concerns,[123] had partnered the Queensland Government, AgForce, and the Australian Rainforest Conservation Society to promote the sustainable utilisation of rural leasehold land, applying to approximately 1800 rural leases for agricultural purposes covering (in theory) about 86.6 million hectares (or about 50 per cent of Queensland's land area). The Agreement linked the maintenance of land condition and rehabilitation of environmental values (such as through the establishment of nature refuges) to extension of lease terms. The Delbessie Agreement was implemented through a package of measures and guidelines that were structured around the 'duty of care' in the *Land Act 1994* (Qld) to reduce land degradation[124] and a land management agreement negotiated between each leaseholder and the state government that outlined the leaseholder's natural resource management obligations. Guidelines for the development of such agreements advised that they could include measures to 'remediate degraded areas' through revegetation, soil amelioration and other measures.[125] The use of negotiated agreements here, while potentially carrying high transaction costs, should have been much more appealing to landowners than rigid regulations.

Because eco-restoration should not be constrained by a regulatory process that is only triggered when a new development is proposed, environmental law also needs a process for actively identifying areas suitable for restoration and to facilitate strategic thinking on a very large scale. The former Resources Assessment Commission (RAC), a Commonwealth entity that conducted major public environmental enquiries in the early 1990s, is the type of institutional model that might effectively support such a role.[126] Rather than scrutinise specific development proposals, the RAC was empowered to investigate natural resources conflicts and other agendas on a broad and regional scale.[127] Its ability to gather and sift through diverse scientific evidence, consult with the public and make recommendations for government action, suggest this model could be useful for building an eco-restoration strategy across Australia. Although resurrecting the RAC is probably unrealistic, a similar public inquiry process could still be initiated under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) or through the parliamentary committee of

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122 Queensland Department of Natural Resources and Water (DNRW), Delbessie Agreement: State Rural Leasehold Land Strategy (DNRW, 2007).

123 Amy Phillips, 'Delbessie Agreements Out the Door in Leasehold Review' ABC Rural 22 November 2012 < http://www.abc.net.au/site-archive/rural/qld/content/2012/11/s3638258.htm>.

124 *Land Act 1994* (Qld) s 199.

125 Queensland Department of Natural Resources and Mines, *Guide to Developing a Land Management Agreement* (Queensland Government, 2010) 13.

126 Established under the Resource Assessment Commission Act, 1989 (Cth).

127 E.g., Resource Assessment Commission, Coastal Zone Inquiry – Final Report (RAC, 1993); Resource Assessment Commission, Forest and Timber Inquiry – Final Report (RAC, 1992). See further on the role of the RAC and other such institutions, Benjamin J. Richardson and Ben Boer, 'Contribution of Public Inquiries to Environmental Assessment' (1995) 2(2) *Australian Journal of Environmental Management* 90.

inquiries. Concomitantly, state and federal sustainability plans should include a restorative strategy. These routes can help enshrine eco-restoration enshrined as a meta-norm to guide all environmental law in Australia.

V CONLUSION

The magnitude of human impacts on the natural world in the long term must be addressed through eco-restoration. Sustaining what we have will not suffice if we do not recover some of what we have lost. This article makes a modest contribution to a debate about how to reclaim and heal nature in those liminal spaces where nature has not been irreparably trashed. Law has an essential role in the implementation of restoration science because it is through regulation and other governance mechanisms that decisions are rendered about which species will be rescued, which land and seascapes will rehabilitated and which other ecological processes will continue to function. Private actors appear to be playing a significant role in promoting large-scale landscape restoration in Australia. Their efforts should be applauded and supported. But the apparent success in Gondwana Link and Arid Recovery and other projects should not become an excuse for government inaction and they cannot entirely or primarily substitute for it. Few legal scholars are talking about restoration as a guiding norm of environmental law and governance compared to the many that dwell on sustainable development.[128] The plethora of scientific research on this subject, as evident in the establishment of specialist journals such as *Ecological Management and Restoration*, *Restoration Ecology*, and *Restoration Ecology Journal*, has not been matched by similar advances in knowledge on the governance of eco-restoration, let alone advances in actual legal reform.

But in arguing for a more prominent legal framework for eco-restoration in Australia, this article is not naively suggesting that a swathe of legislation that coerces change will work. Rather, the legal system should be cognisant that restoration of liminal spaces requires 'collaboration, conversation, and commitment at all levels of public and private governance'.[129] Government funding can jumpstart eco-restoration, but its long-term success will depend on imaginative new ideals and tools that inspire landowners and other resource managers to make certain concessions and adjustments. At stake is the need for a new timescape of environmental law and sustainability that shifts our focus from the current or the future to the past as well.

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128 E.g., Joseph Sax, 'The New Age of Environmental Restoration' (2001) 41 *Washburn Law Journal* 1; Richardson, above n 97; Telesetsky, above n 82; Dan Tarlock, 'Slouching Toward Eden: The Eco-Pragmatic Challenges of Ecosystem Revival' (2003) 87 *Minnesota Law Review* 1173.

129 Telesetsky, above n 82, 548.

CLIMATE CHANGE AND THE FUTURE ROLE OF THE CONCEPT OF THE COMMON CONCERN OF HUMANKIND

DR LAURA HORN*

Climate change poses a serious threat to the Earth's environment particularly if tipping points are breached and irreversible changes occur. Cooperative action by all states is required to achieve effective mitigation of greenhouse gases (GHGs) and ensure that the adverse impacts of climate change are adequately addressed. Collective action is seen through the operation of the concept of the common concern of humankind (CCH) as all states have responsibilities to take action to prevent the adverse effects of climate change on behalf of the international community. It is argued in this article that the CCH concept operates as a guiding norm concerning the protection of the atmosphere.

The first section of this article discusses the findings about the CCH concept at the Legal Experts Meeting. The next section examines the views of legal commentators who consider that the CCH invokes legal implications for states and discusses the potential for further implications as a result of the links between the CCH concept with intragenerational and intergenerational equity. It will also be argued in this article that there is potential for extension to the legal implications from the concept of CCH in the United Nations Framework Convention on Climate Change (UNFCCC) to cover state responsibility for climate change displaced people and the interests of future generations.

I INTRODUCTION

Climate change poses a serious threat to the Earth's environment particularly if tipping points are breached and irreversible changes occur. The Intergovernmental Panel on Climate Change (IPCC) *Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (WG II Contribution to the Fifth Assessment Report of the IPCC) when assessing the risks of climate change stated that there are great risks if the temperature increases globally by four degrees Celsius or more (above preindustrial levels) including severe impacts on ecosystems, significant species extinction and lack of food security.[1]

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1 Intergovernmental Panel on Climate Change (IPCC), 'Summary for Policymakers' in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*

If the rate and extent of climate change is limited, the risks of adverse impacts of climate change can be decreased and potential dangerous tipping points may be avoided.[2] Cooperative action by all states is required to ensure effective mitigation of greenhouse gases (GHGs) is achieved and the adverse impacts of climate change are adequately addressed.[3] Collective action is demonstrated through the operation of the concept of the common concern of humankind (CCH) as all states have responsibilities to take action to prevent the adverse effects of climate change on behalf of the international community. This discussion about the duties of states to cooperate when taking action on climate change is timely, as states are in the process of negotiating a new international agreement on climate change in 2015 (and in force by 2020).[4] There is evidence that state negotiations for the 2015 draft agreement[5] are continuing to be influenced by the CCH concept. These negotiations have focussed on wording that climate change is a common challenge which requires collective action. It is likely the word 'collective' will be included in the final text.[6] The term 'collective action' is also mentioned in the provisions on transparency and global stocktaking in the 2015 draft agreement.[7] These provisions are likely to impact state governments and their reporting requirements on actions taken to meet their proposed commitments under the agreement consequently, increasing state reliance on international cooperation to deal with the threat of climate change. It is argued in this article that the CCH concept shapes the development of the 2015 draft agreement and operates as a guiding norm concerning the protection of the atmosphere.

The commencing statement of the preamble to *United Nations Framework Convention on Climate Change* (*UNFCCC*) focuses on the CCH, 'acknowledging that change in the Earth's climate and its adverse effects are a common concern of humankind...'.[8] This article explores the legal implications flowing from the operation of the CCH in the *UNFCCC*. The implications of the concept of 'common concern' and its application to international environmental law were first debated at 'The Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of [Hu]mankind in relation to Global Environmental Issues' (Legal Experts Meeting) at the University of Malta in December 1990.[9] This debate occurred two years prior to the United Nations Conference on

(Cambridge University Press 2014) Intergovernmental Panel on Climate Change < http://ipcc.ch/report/ar5/wg2/ > 14 ('*WG II Summary for Policy Makers*').

2 Ibid.

3 IPCC, 'Summary for Policy Makers' in *Climate Change 2014, Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press 2014) Intergovernmental Panel on Climate Change <http://ipcc.ch/report/ar5/wg3/> 5.

4 UNFCCC, Conference of the Parties, *Report of the Conference of the Parties on its nineteenth session, held in Warsaw from 11 to 23 November 2013*, Decision 1/CP.19, 19th Sess, Addendum, FCCC/CP/2013/10/Add.1 (31 January 2014) 4 [2].

5 UNFCCC, Ad Hoc Working Group on the Durban platform for Enhanced Action ADP.2015.11 Informal Note *Draft Agreement and draft decision on workstreams 1 and 2 of the Ad Hoc Working Group on the Durban Platform for Enhanced Action* http://unfccc.int/documentation/documents/advanced_search/items/6911.php?priref=600008681 ('*2015 Draft Agreement*').

6 Raymond Colitt, Onur Ant and Arne Delfs, 'As Terrorism Unites G20, Climate Change Exposes Divisions' *The Australian Financial Review* (Sydney) 18 November 2015, 11.

7 *2015 Draft Agreement*, above n 5, arts 9,10.

8 *United Nations Framework Convention on Climate Change*, opened for signature 9 May 1992, 1771 UNTS 107, (entered into force 21 March 1994) ('*UNFCCC*') preamble.

9 David Attard (ed), *The Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in relation to Global Environmental Issues* University of Malta, Malta 13-15

Environment and Development (UNCED) which introduced the *Declaration of the United Nations Conference on Environment and Development* (*Rio Declaration*) and *Agenda 21: Programme of Action for Sustainable Development (Agenda 21).*[10] Two significant environmental conventions were adopted at the UNCED conference with the goals of facilitating protection of the atmosphere and conserving biological diversity. These conventions are the *UNFCCC* and the *United Nations Convention on Biological Diversity* (*CBD*).[11] The concept of common concern of humankind (CCH) is included specifically in the preamble of both of these conventions to emphasise the global responsibility of states to assist in the sustainable development of climate change and biological diversity.[12] It is possible that the CCH can be extended as a guiding norm to the protection of the global environment,[13] or to specific areas including the protection of Antarctica, the prevention of desertification and space pollution.[14]

The Legal Experts Meeting noted in its conclusions that the common concern of humankind was not a rule of law but could become customary law and develop as a principle of law in the future.[15] Clearly, there has been further progress on the application of this concept over time because many states are parties to the *UNFCCC* and the *Kyoto Protocol to the Framework Convention on Climate Change*[16] (*Kyoto Protocol*) leading to increased state actions to reduce greenhouse gas emissions.

The Note from UNEP Secretariat to the Legal Experts Meeting predicted that further development of the CCH is required in order for this concept to lead to legal implications:

> Joint efforts of governments, scientific community, scholars and public opinion are of crucial importance for the concept of 'common concern of [hu]mankind' does not rest as just a vague political formula, which could be used to legitimize lack of concrete actions by simply declaring an environmental concern. Only based on such efforts the concept may acquire necessary legal validity, thus transforming in a source of wide range of action-orientated

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December 1990 (UNEP, 1991). 'Humankind' is the gender neutral term for 'mankind' and this terminology is adopted as a gender neutral version of the 'common concern of mankind'.

10 *Declaration of the United Nations Conference on Environment and Development* (14 June 1992) UN Doc A/ CONF.151/26 (Volume 1), 31 ILM 874 ('*Rio Declaration*'); *Agenda 21: Programme of Action for Sustainable Development* United Nations Conference on Environment and Development (UNCED), (United Nations Publication, 1992).

11 *UNFCCC* preamble; *United Nations Convention on Biological Diversity*, opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993) ('*CBD'*) preamble.

12 Patricia Birnie, Alan Boyle and Catherine Redgwell, *International Law and the Environment* (Oxford University Press, 3rd ed, 2009) 130.

13 International Union for the Conservation of Nature and Natural Resources, *Draft International Covenant on Environment and Development* (4th ed, 2010) art 3 states 'the global environment is a common concern of humanity'. Note this document is a guide.

14 See Laura Horn, 'Globalisation, Sustainable Development and the Common Concern of Humankind' (2007) 7 *Macquarie Law Journal* 53,57.

15 Ambassador Julio Barbosa, 'Conclusions of the Meeting' in David Attard, ed, *The Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in relation to Global Environmental Issues* University of Malta, Malta 13-15 December 1990 (UNEP, 1991) 27, 28 ('*Conclusions of the Meeting*').

16 UNFCCC, *Status of Ratification of the Convention'* United Nations Framework Convention on Climate Change <http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php>. There are 196 parties to the *UNFCCC*; UNFCCC, *Status of Ratification of the Kyoto Protocol* United Nations Framework Convention on Climate Change <http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php>. There are 192 parties to *the Kyoto Protocol*. *Protocol to the Framework Convention on Climate Change*, opened for signature 11 December 1997, 37 ILM 22 (1998) (entered into force 16 February 2005) ('*Kyoto Protocol*').

> binding obligations. The development of the concept of 'common concern of [hu]mankind' would be not only of theoretical significance, but in the first place of practical viability of international lawmaking processes currently on the agenda.[17]

Given the prediction of the UNEP Secretariat that the CCH should lead to a 'wide range of action orientated binding obligations', it is likely that some of these legal implications have now been accepted by states due to the widespread ratification (resulting in almost universal acceptance) of the *UNFCCC*.

The first section of this article discusses the findings about the CCH concept at the Legal Experts Meeting. The next section examines the views of legal commentators who consider that the CCH invokes legal implications for states. This concept implies a duty by states to cooperate on climate change action and arguably, this duty to cooperate could extend to the fulfilment by states of commitments made in international agreements on climate change and to a responsibility to ratify subsequent agreements to the *UNFCCC*.

The following sections examine the potential for further implications as a result of the links between the CCH concept with intragenerational and intergenerational equity. Concepts at international law may be viewed as 'guiding norms that are implemented by principles';[18] this relationship is clear from the interaction of the CCH concept with other principles of international environmental law. It will also be argued in this article that there is potential for extension to the legal implications from the concept of CCH to cover state responsibility for climate change displaced people and the interests of future generations.

The conclusions of this Legal Experts Meeting about the CCH concept are summarised in the next section to set out the views that the legal experts held when they investigated this concept and the following sections discuss how the CCH has developed after this meeting.

II LEGAL EXPERTS MEETING ON CCH

The three dimensions of the CCH concept are pointed out in the Note from the UNEP Secretariat to the Legal Experts Meeting.[19] First, the spatial dimension of the CCH involves the cooperation of all states when responding to the environmental threat because the subject of the concern is of significance to the international community.[20] Second, the temporal dimension results from the long-term effects of major environmental problems, like climate change that affect the rights and obligations of present and future generations.[21] Thirdly, the social dimension of the CCH requires the engagement of all sectors of society including judicial and governmental organisations, business, nongovernmental organisations (NGOs), civil society and individuals.[22] Indeed, the CCH may also be viewed as a broad and holistic concept that can apply to all global environmental threats.[23]

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17 'Note from the UNEP Secretariat to the Meeting' in David Attard (ed), *The Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in relation to Global Environmental Issues* University of Malta, Malta 13-15 December 1990 (UNEP, 1991) 36, 47 ('*Note from the UNEP Secretariat to the Meeting*').

18 Pierre-Marie Dupuy and Jorge Vinuales, *International Environmental Law* (Cambridge University Press, 2015) 52.

19 *Note from the UNEP Secretariat to the Meeting*, above n 17, 37.

20 Ibid.

21 Ibid.

22 Ibid.

23 Ibid 43.

The commentators at the Legal Experts Meeting considered the potential for a broad application of the CCH to the environment. They noted the connection between the CCH and the precautionary principle and links in the temporal dimension of the CCH to present and future generations through intragenerational and intergenerational equity. Views were also expressed at the Legal Experts Meeting about the relationship between the concepts of the CCH and the traditional doctrine of sovereignty of states and the implications for human rights at international law. These issues are considered in the following paragraphs.

The commentators at the Legal Experts Meeting considered that the CCH could apply to environmental problems generally as well as to other areas of international law.[24] The implication of 'concern' when applied to environmental protection is that a state has responsibilities to the whole of the international community that are *erga omnes* because all states have legal standing to protect the environment.[25]

States have obligations to the international community concerning global environmental issues, such as climate change, because these issues are not confined to the domestic jurisdiction of states.[26] The International Court of Justice (ICJ) decision in the *Barcelona Traction Case (Second Phase)* considered that in certain circumstances states owe obligations to the international community as a whole, and where these commitments are important, states have *erga omnes* obligations or a legal interest in protecting these rights.[27] In the *Case Concerning the Gabčikovo-Nagymaros Project,* Judge Weeramantry considered that international environmental law should take into account 'the global concern of humanity as a whole.'[28] Even though there is potential for the *erga omnes* doctrine to permit states to have standing on behalf of the international community in cases of serious environmental degradation, there is some uncertainty about how this doctrine would apply.[29]

The Note from the UNEP Secretariat at the Legal Experts Meeting indicated that as the adverse effects on the environment often become evident only after a long period of time, states should adopt the precautionary approach to environmental threats.[30] The precautionary approach is preferable when dealing with serious environmental threats, because preventative action can be taken action before serious damage occurs. The application of the CCH concept shows that global responsibilities are to be carried out by states with a view to the precautionary approach when addressing the threat of climate

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24 Ibid 30.

25 *Barcelona Traction Case, Light and Power Co Ltd* (*Belgium-Spain*) (Second Phase) ICJ Rep (1970) 3, [33]; Birnie, Boyle and Redgwell, above n 12, 131.

26 Judge Manfred Lachs, 'Introduction to the Proceedings of the Meeting' in David Attard (ed), *The Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in relation to Global Environmental Issues* University of Malta, Malta 13-15 December 1990 (UNEP, 1991) 15, 17. ('*Introduction to the Proceedings of the Meeting*'); See Birnie, Boyle and Redgwell, above n 12, 131.

27 *Barcelona Traction Case, Light and Power Co Ltd* (*Belgium-Spain*) (Second Phase) ICJ Rep (1970) 3, [32].

28 *Case Concerning the Gabčikovo--Nagymaros Project* (*Hungary v Slovakia*) (Judgment) 37 ILM 162, (1988) 201, 217.

29 Malgosia Fitzmaurice, 'International Responsibility and Liability' in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007) 1010, 1021.

30 *Note from the UNEP Secretariat to the Meeting*, above n 17, 46.

change.[31] This is also evident from the adoption of the precautionary principle in the *UNFCCC*.[32]

The Legal Experts Meeting considered the CCH could apply to succeeding generations and to the concept of intergenerational rights, even though it is difficult to perceive of generations as subjects at international law.[33] The CCH is a different concept from the common heritage of humankind, which applied to the exploitation of resources in the sea-bed beyond jurisdiction,[34] to resources on the moon,[35] but not to climate change.[36] The CCH concept indicates that all states have an interest in ecological protection rather than an internationalisation of ownership of resources.[37] Indeed, the CCH focuses on the responsibilities of states to protect the environment rather than on the division of property.

The legal commentators at the Legal Experts Meeting considered the equitable sharing of burdens is an essential part of the CCH because the burden is on developed countries to take responsibility for their share of contributions to the emissions of GHGs to the atmosphere during the past and in the present.[38] So, the application of the CCH in the *UNFCCC* involves the consideration of intragenerational equity and the equitable balancing of responsibilities between developed and developing countries.[39]

The CCH provides a balance between the concept of sovereignty of states and the necessity for global legal protection of the atmosphere and biological diversity. Limitations to the reliance upon state sovereignty in areas subject to environmental protection were also noted in the *Declaration of the United Nations Conference on the Human Environment*.[40] The focus of the CCH concept is on the erosion of the traditional doctrine of sovereignty because state responsibility for environmental protection of the atmosphere is global and not confined to the area of jurisdiction of the individual state.[41] The international agreements concerning legal protection of the atmosphere require states to take national measures as well as international measures in cooperation with other countries.[42] This erosion of sovereignty continues to occur as a result of the negotiations for the 2015 draft agreement as more onerous obligations for mitigation of GHGs and reporting by states are likely to be introduced.[43]

Finally, the Legal Experts Meeting considered that 'A bridge between human rights protection and environmental protection should be established by the fundamental right to

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31 Birnie, Boyle and Redgwell, above n 12, 130.
32 *UNFCCC* art 3(3).
33 *Conclusions of the Meeting*, above n 15, 29.
34 *United Nations Convention on the Law of the Sea,* opened for signature 10 December 1982, 1833 UNTS 3 (entered into force 16 November 1994).
35 *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies,* opened for signature 27 January 1967, 610 UNTS 205 (entered into force 10 October 1967).
36 *Conclusions of the Meeting*, above n 15, 30.
37 Birnie, Boyle and Redgwell, above n 12, 198.
38 Ibid 130-131, *Conclusions of the Meeting*, above n 15, 30-31.
39 Birnie, Boyle and Redgwell, above n 12, 133.
40 *Declaration of the United Nations Conference on the Human Environment (Stockholm)* UN Doc A/CONF/48/14/REV.1 principle 21.
41 Birnie, Boyle and Redgwell, above n 12, 131.
42 Dupuy and Vinuales, above n 18, 86.
43 *2015 Draft Agreement*, above n 5, arts 3,9.

life and health in their wide dimension'.[44] The link between the two areas of international law, human rights and environmental protection is clear because human rights are likely to be violated if the environment is degraded. Arguably, the relationship between CCH and human rights can be applied to state protection of the human rights of people that are impacted as a result of the adverse effects of climate change.[45]

The strength of the links between the CCH and the precautionary principle as well as the concept of common but differentiated responsibilities provide arguments in favour of a duty by states to take action to cooperate on climate change in a timely manner. The views of three academic commentators who consider that the CCH has legal implications are considered in the next section, which is followed by a discussion of the duty to cooperate in the *UNFCCC*.

III CCH AND LEGAL IMPLICATIONS

The application of CCH to the adverse impacts of climate change results in legal implications similar to those conclusions set out in the abovementioned Legal Experts Meeting. In this section, the views of Michael Bowman, Jutta Brunnée and Frank Biermann are discussed to determine what legal consequences flow from the CCH.

In summary, the 'reasonably specific legal consequences' of the common concern of humankind explained by Bowman are as follows: [46]

1) States must take into account the interests of the community in the subject matter of the concern.
2) The subject matter of the concern is a matter not just for domestic concern but for the international agenda.
3) States should establish an appropriate international forum and a body of rules and principles to provide a normative framework.
4) These obligations are *erga omnes* so all states can demand compliance with these rules and principles.[47]
5) The 'common concern' implies states will have responsibilities and there will be entitlements on the part of the international community.[48]
6) As the international community arguably now encompasses states as well as intergovernmental organisations and civil society, the views of all of the members of the international community should be taken into account when international arrangements about the subject matter of the concern are debated.[49]

Bowman adds the last point to reflect the changing nature of the international community as there has been more involvement in by intergovernmental organisations and civil society

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44 *Conclusions of the Meeting*, above n 15, 32.

45 Laura Horn and Steven Freeland, 'More than Hot Air: Reflections on the Relationship between Climate Change and Human Rights' (2009) 13 *University of Western Sydney Law Review* 101, 124.

46 Michael Bowman, 'Environmental Protection and the Concept of Common Concern of Mankind' in Malgosia Fitzmaurice, David Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (Edward Elgar Publishing Ltd, 2010) 493, 503.

47 Jutta Brunnée, 'Common Areas, Common Heritage, and Common Concern' in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007) 550, 566.

48 Bowman, above n 46, 503.

49 Ibid.

post 1990 (when the Legal Experts Meeting took place). Certainly, Bowman's conclusions support the predictions of the commentators at the Legal Experts Meeting and emphasise the duty of states to develop a legal framework for the subject matter of the concern.

Jutta Brunnée also identifies similar features to the Legal Experts Meeting which she considers are common to CCH regimes. The concept of common concern of humankind can be viewed as 'requiring, all states to cooperate internationally to address the concern.'[50] In order to determine whether a customary framework exists, Brunnée distinguishes the following common features from a number of different CCH regimes:[51]

> 1) There are limits to state action because the CCH focusses on certain resources that are deteriorating beyond the limits of jurisdiction and within jurisdiction that are of common concern.[52]
> 2) This concept has the potential to apply *erga omnes* obligations to areas in need of global environmental protection.[53]
> 3) The CCH can be viewed as requiring states to cooperate to protect the area of common concern. [54]
> 4) The CCH is linked to intragenerational equity through the principle of burden sharing.[55] So the CCH has links to the concept of common but differentiated responsibilities.

Frank Biermann also discusses the application of the CCH and advocates that this concept could form part of customary law.[56] Biermann considers the CCH could redefine the sources of international law when it applies to climate change because the threat to the Earth's atmosphere is very serious.[57] Potentially, the development of existing customary law (through the application of the CCH concept) could lead to the emergence of a rule where states are required to mitigate GHGs.

There is a rule of customary international law that states should not cause transboundary pollution to other states,[58] where the standard is one of due diligence.[59] An international standard on emission measurement, if established in a treaty or by an international institution, could give effect to the due diligence requirement.[60] If a state or a group of states delay their participation in international agreements on climate change, or fail to comply with their commitments to reduce emissions, these states (free riders) may have the advantage of the benefits of high carbon activities and could rely on others to incur greater costs of emission reductions.[61] Biermann argues that international standards of emission

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50 Brunnée, above n 47, 566.
51 Ibid.
52 Ibid.
53 Ibid.
54 Ibid.
55 Ibid.
56 Frank Biermann, *Saving the Atmosphere: International Law, Developing Countries and Air Pollution* (Peter Lang, 1995).
57 Ibid 86-87.
58 *Trail Smelter Arbitration* 33 AJIL (1939) 182; *Rio Declaration,* above n 10, principle 2; Birnie, Boyle and Redgwell, above n 12, 143.
59 Birnie, Boyle and Redgwell, above n 12, 147-148.
60 Ibid 149.
61 Shurojit Chatterji at al, 'Unilateral Measures and Enhanced Mitigation' in Nicholas Stern, Alex Bowen and John Whaley (eds), *The Global Development of Policy Regimes to Combat Climate Change* (World Scientific Publishing Co, Pte Ltd, 2014) 181, 182.

limitation should apply to states even if they are not parties to the international agreement. Indeed, the operation of the CCH could lead to free rider states becoming obliged to comply with international standards.[62]

> May countries thus lawfully oppose any standards of diligent conduct to which all other nations adhere - if 'common concerns of humankind' are at stake?'
>
> It is submitted that one of the implications of the notion of 'common concern' is a revised notion of the theory of the sources of international law; in the era of global climate change, this may prove to be necessary in the effort to adjust the international legal order from the independent nation States of the nineteenth century to the necessities of the progressively interdependent 'world society' of the twenty-first century'...
>
> Those new rules will certainly infringe on the sovereignty of the persistently objecting States, which will be forced to comply with standards of diligent conduct regarding the environment to which they have not agreed...
>
> The traditional doctrines are thus to be redefined, in order to allow a rule to enter into the *corpus* of general or customary law even if some States persistently object.[63]

So, Biermann extends the arguments to rules of customary international law in cases of serious environmental damage such as to the threat to the atmosphere from climate change and as a consequence of customary law and the application of the CCH, the obligations to mitigate GHGs extends to all states.

State conduct in conformance with the rule and *opinio juris* (the understanding that the acceptance of the rule is due to an acceptance of legal obligation by states) are both necessary to constitute a rule of customary law. A key difficulty with the determination of whether an environmental rule has formed part of international custom is the long time period of state practice required for *opinio juris*.[64] This is because international environmental law is a relatively recent phenomenon so it is difficult to establish consistent state practice over a period of time. Biermann argues that the long period of time should not apply to the development of customary rules that relate to severe environmental threats, as there would not be adequate time to prevent serious environmental damage from occurring.[65] Arguably, the development of customary law could lead to a rule, requiring adherence by states to international agreements on GHG reduction. Indeed, it is likely that these changes are already occurring through the development of the law-making role of the Conference of the Parties (COP) to the *UNFCCC*.[66]

Brunnée has similar views to Bowman and considers that legal implications follow as a result of the application of the CCH concept. The view of Brunnée that the CCH could require states to address the subject matter of the concern is appropriate in the circumstances of climate change.[67] The provisions in the *UNFCCC* indicate that it is the responsibility of states to cooperate at the international level to address the adverse effects of climate change and this duty is discussed in the next section.

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62 Biermann, above n 56, 87.
63 Ibid 86-87.
64 The *Statute of the International Court of Justice* art 38.
65 Biermann, above n 56, 85.
66 See Jutta Brunnée, 'COPing with Consent: Law-making under Multilateral Agreements' (2002) 15 *Leiden Journal of International Law* 1.
67 Brunnée, above n 47, 566.

IV DUTY TO COOPERATE

At international law states have a general duty to cooperate.[68] There are additional duties in international environmental law for state cooperation to protect the Earth's environment,[69] to develop the international law of sustainable development,[70] and these duties are specified in the *Rio Declaration.*[71]

The link between the CCH and the duty to cooperate is apparent in provisions of the *CBD* where 'the conservation of biological diversity is a common concern of humankind'.[72] Parties to the *CBD* are under a duty to cooperate to conserve biological diversity in areas beyond the limits of their jurisdiction and on issues of mutual concern.[73] The emphasis on cooperation is also evident in a number of articles in the *CBD.*[74] Similarly, parties to the *UNFCCC* acknowledge that the most extensive cooperation of all countries is necessary to deal with the threat of climate change and carry out a suitable international response to this threat.[75] So, in the context of climate change, parties to the *UNFCCC* have a duty to cooperate, and guidance about what constitutes the action necessary for fulfilling this duty is set out in the provisions of this convention.

There are also a number of general duties for example, parties to the *UNFCCC* are under a duty to cooperate to support an open economic system that provides sustainable growth for all parties, enabling them to address the problem of climate change.[76] Parties are to support research and observation particularly in developing countries and should cooperate to improve the capacity of developing countries to participate in data collection.[77]

The list of commitments in the *UNFCCC* is prefaced in the introduction to article 4, by general wording 'taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances.'[78] The parties agree that they shall publish national inventories of GHG emissions and measures to mitigate and adapt to climate change and provide this information to the COP.[79] Parties shall promote and cooperate concerning the following commitments:

- the transfer of technologies that reduce GHG emissions
- the conservation of sinks of GHGs
- in preparation for adaptation to the effects of climate change
- in research related to climate and the development of data related to the climate system
- in exchange of relevant information on the climate system and climate change
- in education and training about climate change.[80]

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68 *Charter of the United Nations*, 26 June 1945, Can TS 1945 No 7 art 1(3).
69 *Rio Declaration*, above n 10, principle 7.
70 Ibid principle 27.
71 Ibid principles 5, 13, 24.
72 *CBD* preamble.
73 Ibid art 5.
74 Ibid arts 8(m), 12(c), 13(b), 16 (5), 28(1).
75 *UNFCCC* preamble [6].
76 Ibid art 3(5).
77 Ibid art 5.
78 Ibid art 4.
79 Ibid art 4(1)(a)(b).
80 Ibid art 4(1)(c)(d)(e)(g)(h)(i).

Even though the terms in the *UNFCCC* are very broad, the word 'shall' in the introduction to article 4 indicates that the commitments made by the parties are obligatory. So, it is clear that the parties have a duty to cooperate on these matters and in fact, the common concern of humankind requires cooperation on the part of the parties to take action to address the adverse impacts of climate change. The commitments in article 4 of the *UNFCCC* are also closely linked to the concept of common but differentiated responsibilities. So, developed country parties to the *UNFCCC* are required to make additional commitments including to adopt policies on mitigation of GHGs.[81] Indeed, the parties have extensive requirements to fulfil their duty of cooperation under the provisions of the *UNFCCC* and these are supplemented in the provisions of the *Kyoto Protocol.*

According to *Kyoto Protocol,* parties in Annex I to the *UNFCCC* have responsibilities to cooperate to achieve the objectives of GHG emission reductions set out in article 2, to exchange and share information on the policies and methods of reducing GHG emissions,[82] There are provisions on the transfer of technology relevant to climate change where parties are to cooperate on finance for the transfer of environmentally sound technology to developing countries.[83] Parties are to collaborate in scientific research, and observations.[84] Further, parties are to cooperate in the development of education and training programs, national capacity building and access to information on climate change.[85] Even though these provisions are broadly worded,[86] the expectation in the wording of these multilateral agreements is that parties will act to further the objectives of these international agreements for the benefit of the international community.

If there is law-making intention with the support of a large majority of states or where there is consistent and widespread state practice over a period of time, these events may lead to the emergence of customary law.[87] So the duty to cooperate as set out in the general commitments in the *UNFCCC* and *Kyoto Protocol* is arguably customary law, however these duties are not very clearly expressed and it would be difficult to ascertain whether a specific breach of this general duty to cooperate in this convention and protocol has occurred because the wording of these provisions tends to be discretionary and this is likely to be the case as a result of the negotiations for the next international agreement on climate change.

The duty to cooperate is also likely to be a key aspect of the negotiations for the 2015 draft agreement which echoes concepts from the preceding agreements. Although the wording is not finalised it is possible that the parties will agree to take urgent action and cooperate to achieve the objective of the *UNFCCC* to reduce the increase in global average temperature.[88] There are other areas where cooperative action is likely to form part of this agreement including approaches to mitigation and adaptation, finance, technology, research

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81 Ibid art 4(2)(a).
82 *Kyoto Protocol* art 2(1)(b).
83 Ibid art 10(c).
84 Ibid art 10(d).
85 Ibid art 10(e).
86 Sumudu Atapattu, 'Climate Change, Differentiated Responsibilities and State Responsibility: Devising Novel Legal Strategies for Damage Caused by Climate Change' in Benjamin Richardson et al (eds), *Climate Law and Developing Countries* (Edward Elgar Publishing Inc, 2009) 37, 41.
87 Birnie, Boyle and Redgwell, above n 12, 25.
88 *2015 Draft Agreement*, above n 5, art 2.

and development, support for capacity of developing countries and transparency.[89] These approaches to international cooperation are similar to those in the earlier agreements, the *UNFCCC* and the *Kyoto Protocol.*

Customary rules apply to the global atmosphere however, it is difficult to determine the extent to which these rules can force states to make climate change action a priority, or require that states comply with international standards on mitigation.[90] It is arguable that the application of the CCH together with the precautionary principle change this position in circumstances where states are required to stop increasing emissions until it can be determined that no serious harm will occur.[91] So, arguably, there could be a duty on the part of states to cease increasing emissions.

The general duty to cooperate in the *UNFCCC,* the operation of the precautionary principle and the legal implication flowing from the CCH that states have the responsibility to develop a legal framework to deal with the threat of climate change, imply that states also have a duty to ratify subsequent international agreements to the *UNFCCC.* Due to the severity of the consequences of climate change, it is preferable that states should negotiate and ratify more detailed international agreements on the reduction of GHG emissions, together with an effective compliance system.

The issue of intragenerational equity is also linked to the CCH concept and to the question of how to involve developing states in climate change action. The advantage for developing states, when they contribute to action to implement the *UNFCCC*, is they may be eligible for assistance from the international community to take action against the impacts of climate change.[92] The issue of the role of equity in the concept of common but differentiated responsibilities and links to the CCH concept are explored in the next section.

V INTRAGENERATIONAL EQUITY AND COMMON BUT DIFFERENTIATED RESPONSIBILITIES

'Intragenerational equity' in the context of international law, takes into account equity (the notion of justice and fairness) both within states and between states.[93] These concerns about equity are in set out in the principles of the *UNFCCC* as parties should protect the climate for present and future generations.[94] Factors to be taken into account in order to achieve intergenerational and intragenerational equity, include 'common but differentiated responsibilities' and that 'developed countries should take the lead'.[95]

The concept of common but differentiated responsibilities is included in a number of international environmental agreements including the *Rio Declaration*.[96] Given the extensive ratification of the *UNFCCC* and the *Kyoto Protocol to the United Nations Framework Convention on Climate Change* (*Kyoto Protocol)*,[97] it is arguable that there is a general acceptance by states of 'common but differentiated responsibilities' as applied to

89 Ibid arts 3, 4. 6, 7, 8, 9.
90 Birnie, Boyle and Redgwell, above n 12, 340.
91 Ibid.
92 Bowman, above n 46, 504.
93 Diana Shelton 'Equity' in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007) 639, 640.
94 *UNFCCC* art 3(1).
95 Ibid.
96 *Rio Declaration*, above n 10, principle 7.
97 UNFCCC, *Status of Ratification of the Kyoto Protocol* above n 16.

global environmental protection of the atmosphere.[98] However, the legal status of the concept, 'common but differentiated responsibilities' is uncertain.[99] One commentator, Philippe Cullet argues that this concept is part of international environmental law and should be included in trade and economic international agreements.[100] Jutta Brunnée considers that even though the concept of common but differentiated responsibilities is referred to in many treaties, it is hard to determine whether this concept is part of customary international law because there is much controversy about the interpretation of this concept.[101] Birnie, Boyle and Redgwell view this concept as a general principle rather than a rule of customary law.[102]

Even though the legal status remains unclear,[103] as the concept of common but differentiated responsibilities has been included in the provisions of the *UNFCCC,* this concept will be influential in the negotiations for the 2015 international agreement on climate change.[104] If developed countries consider that developing states should actively participate in achieving GHG mitigation, developed countries should take the lead.[105] Two key elements of the sharing of burdens are, first, the duty of states to protect the environment for the benefit of present and future generations and, secondly, the differentiated responsibilities of states. Principle three of the *UNFCCC* draws attention to the necessity to take into account the particular circumstances of developing countries especially those that are most vulnerable and bear a heavy burden under this convention.[106] The next section explores the interrelationship between the concepts of CCH and common but differentiated responsibilities.

VI COMMON BUT DIFFERENTIATED RESPONSIBILITIES AND CCH

The notion of 'common' in 'common but differentiated responsibilities' is similar to that of 'common' in CCH and this common responsibility involves protection of the environment not only within the jurisdiction of the state but also responsibility at regional and international levels.[107] There are two additional aspects to common but differentiated responsibilities, first, the application of different standards for developing states and secondly, the transfer of technology and financial assistance from developed states.[108] A state's historical contribution to the development of a particular environmental problem may also be taken into account (including the past high contribution to levels of greenhouse gas emissions by developed countries).[109] So, the link between the CCH and common but differentiated responsibilities indicates the capacity of developing states to address the threat, will be taken into account when determining the degree to which commitments can

98 Birnie, Boyle and Redgwell, above n 12, 132.
99 Shelton, above n 93, 657.
100 Philippe Cullet, 'Common but Differentiated Responsibilities' in Malgosia Fitzmaurice, David Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (Edward Elgar Publishing Ltd, 2010) 161, 178.
101 Brunnée, above n 47, 567.
102 Birnie, Boyle and Redgwell, above n 12, 27.
103 Dupuy and Vinuales above n 18, 75.
104 Colitt, Onur above n 6, 11.
105 *UNFCCC* art 3(1).
106 *UNFCCC* art 3(2).
107 Philippe Sands*, Principles of International Environmental Law* (Cambridge University Press, 2nd ed, 2003) 286.
108 Birnie, Boyle and Redgwell, above n 12, 133.
109 See *UNFCCC* preamble. *Conclusions of the Meeting*, above n 15, 30.

be achieved and the timetabling for the implementation of commitments by developing countries to *UNFCCC.* The level of commitments by developing states may be dependent upon actions by developed states to contribute finance and technical assistance.[110]

The operation of the CCH concept shows there should be a sharing of burdens by states to take into account intragenerational equity.[111] Philippe Cullet also notes the requirement for cooperation between developed and developing countries when dealing with the problem of global warming (taking into account their differing responsibilities) is reflected in the concept of common concern.[112]

So, the emphasis on state cooperation to deal with the threat of climate change reinforces the concept of common but differentiated responsibilities, because developed states have the responsibility of providing financial and technological assistance to assist developing states implement their commitments in accordance with the provisions of the *UNFCCC.*[113] These responsibilities on the part of developed states are discussed in the following section.

1 *UNFCCC and Common but Differentiated Responsibilities*

Developed states, parties to the *UNFCCC* should contribute financial assistance,[114] provide technological transfer[115] and agree to take the lead by substantially reducing GHG emissions and promoting GHG sinks and reservoirs.[116] The carrying out of these responsibilities by developed parties is important for two reasons, first, developed states should provide financial assistance and transfer of technology as agreed in *UNFCCC* otherwise, developing countries, may lack the capacity to mitigate emissions of GHGs, leading to a failure of the parties to the *UNFCCC* to achieve stabilisation of GHG emissions.[117] Secondly, if high GHG emitting developed countries fail to take the lead and reduce their GHG emissions, it is likely that the objective of the *UNFCCC* will not be achieved.[118]

Many developing countries and countries vulnerable to climate change, lack financial means and are limited in their capacity to manage adaptation and mitigation action. One of the key barriers is the lack of access to technology which could assist with more effective mitigation and adaptation actions. Provisions in the *UNFCCC* encourage the transfer of technology to developing countries,[119] however, there have been problems implementing these provisions because of a failure to agree on their meaning and the difficulty of determining the technology requirements for these countries.[120] Another problem is the lack of clarity about the classification of 'developed' and 'developing' states and these countries could be further

110 Brunnée, above n 47, 567.

111 A.A. Cancado Trindade and David Attard, 'Report on the Proceedings of the Meeting' in David Attard (ed), *The Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in relation to Global Environmental Issues* University of Malta, Malta 13-15 December 1990 (UNEP 1991) 19, 23.

112 Cullet, above n 100, 169.

113 *UNFCCC* art 4(5)

114 Ibid art 4(3).

115 Ibid art 4(5).

116 Ibid art 4(2).

117 Ibid art 4(7).

118 Ibid art 2.

119 Ibid art 4 (1)(c), 4(3), 4(7), 4(8), 4(9).

120 Siobhan McInerney-Lankford, Mac Darrow and Lavanya Rajamani, *Human Rights and Climate Change* (The World Bank, 2011) 62.

differentiated. Developing countries (such as India, China and Brazil) with large populations and the ability to successfully industrialise, due to their increasing GHG emissions, should be placed in a different category to other states in the next climate change agreement.[121]

The *Kyoto Protocol* also contains provisions promoting the transfer of technology and provision of finance for the technology required by developing country parties.[122] Recently, three additional organisations have been established to facilitate these objectives: the Technology Transfer Mechanism, the Green Climate Fund and the Warsaw International Mechanism for Loss and Damage (WIM).

2 *The Technology Mechanism*

The Technology Transfer Mechanism facilitates technology transfer to developing countries and is composed of two organisations, the Technology Executive Committee (TEC) and the Climate Technology Centre and Network (CTCN).[123] The TEC reviews technology needs, identifies procedures for enabling the transfer of technology and barriers to technology transfer. In response to the request from developing countries, the CTCN may provide technological assistance, the opportunity to develop technology projects for mitigation of GHGs or for adaptation to climate change.[124] The CTCN also fosters appropriate climate change strategies to reduce GHG emissions or promote appropriate adaptation strategies.[125]

Another major development is the agreement by states to raise more funds to assist developing countries to take action on climate change and to support a new financial assistance institution, the Green Climate Fund.

3 *The Green Climate Fund*

The Climate Fund operates independently of the Global Environmental Facility (established in 1991) which provided funding to assist developing countries with projects relating to climate change as well as for other areas of environmental concern such as loss of biodiversity and the deterioration of land.[126] Developed countries are seeking to raise funds of US $100 billion (from a variety of sources including public and private) by 2020 to assist developing countries.[127] A major part of this funding will pass to the Green Climate Fund for adaptation initiatives.[128] The goal of the Green Climate Fund is to assist developing countries mitigate greenhouse gas emissions and adapt to climate change impacts with special regard to developing countries that are particularly vulnerable to the impacts of

121 Atapattu, above n 86, 42.

122 *Kyoto Protocol* arts 3(14), 10(c), art 11(2)(b).

123 UNFCCC, Subsidiary Body for Implementation, *Joint Annual Report of the Technology Executive Committee and the Climate Technology Centre and Network for 2013,* 39th Sess, FCCC/SB/2013/1 (11-16 November 2013) [6]-[7].

124 Ibid [8].

125 Ibid.

126 UNFCCC, *Finance Portal for Climate Change* United Nations Framework Convention on Climate Change <http://www3.unfccc.int/pls/apex/f?p=116:45:4296018917928482>.

127 UNFCCC, Conference of the Parties, *Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010,* 16th Sess, Addendum Part Two, FCCC/CP/2010/7/Add.1 (15 March 2010) [98]-[99].

128 Ibid [100].

climate change.[129] Developing countries may be able to apply for funds to support mitigation or adaptation action, transfer of technology, capacity building and the preparation of national reports on climate change including national adaptation plans (NAPs), nationally appropriate mitigations actions (NAMAs) and national adaptation plans of action (NAPAs).[130]

These developments in financial assistance have been actioned as a result of the application of the 'common but differentiated responsibilities' principle in the *UNFCCC*.[131] The same objective led to the establishment of the WIM.

4 *The Warsaw International Mechanism for Loss and Damage*

The WIM was established in November 2013 to assist developing countries that are particularly vulnerable to climate change impacts.[132] The aim is to strengthen support for these countries and improve the administration of financial support.[133] The executive guides the functions of this mechanism and reports to the COP of the *UNFCCC*.[134] There are limitations on the operation of this mechanism because of the difficulties of assessment of damage for countries vulnerable to climate change and because of the lack of consultation amongst states about how to deal with the issue of compensation for those countries that are likely to suffer serious damage, even though their GHG emissions are low.

The establishment of these three international mechanisms indicates that collective action by states is necessary to transfer finance and technology and deal with issues of loss resulting from the impacts of climate change. These international initiatives further erode the traditional doctrine of sovereignty of states and provide evidence of the operation of the CCH concept.

It is possible that common but differentiated responsibilities will be incorporated in the 2015 draft agreement depending upon the terms agreed to by the negotiating states. The provisions which may be influenced by the balancing of common but differentiated responsibilities include those dealing with nationally determined contributions to GHG mitigation, programs containing measures to mitigate climate change and articles concerning adaptation and transparency.[135]

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129 UNFCCC, *Green Climate Fund Governing Instrument for the Green Climate Fund* United Nations Framework Convention on Climate Change <http://www.gcfund.org/fileadmin/00_customer/documents/pdf/GCF-governing_instrument-120521-block-LY.pdfhttp://www.gcfund.org/fileadmin/00_customer/documents/pdf/GCF-governing_instrument-120521-block-LY.pdf > [2].

130 Ibid [35]-[36].

131 UNFCCC, *Focus: Climate Finance* United Nations Framework Convention on Climate Change <http://unfccc.int/focus/climate_finance/items/7001.php>.

132 UNFCCC, *Warsaw Outcomes* United Nations Framework Convention on Climate Change <http://unfccc.int/key_steps/warsaw_outcomes/items/8006.php>.

133 Ibid.

134 Ibid.

135 *2015 Draft Agreement*, above n 5, arts 3, 4, 9.

VII CLIMATE CHANGE DAMAGE

Generally, countries identify the areas at risk of loss or damage from climate change through the development of reports such as NAPAs.[136] Limited annual budgets and lack of institutional development render long term planning for climate change impacts by countries vulnerable to climate change a very challenging task.[137] Losses may not be manageable at the country level and trust funds may be inadequate because impacts from climate change are increasing as a faster rate than originally anticipated.[138]

Some long term impacts affecting countries that are vulnerable to the slow-onset impacts of climate change are difficult to address in future planning because of lack of knowledge about the implications of these events and potential tipping points.[139] Damage resulting from impacts such as ocean acidification, sea level rise and the permanent loss of biological diversity are long term and may result in permanent loss for future generations. Methods for dealing with slow onset events include:

> land zoning; integrated water management; integrated coastal zone management; utilizing indigenous and community knowledge; transferring and sharing risk through the possible development of new types of insurance measures; using financial instruments such as social and environmental bonds; and enhancing regional collaboration, such as integrated regional coastal management and integrated water resource management, among others.[140]

Some small island developing nations have been unable to access insurance because of high premiums and the failure by insurance companies to cover assets in these countries for climate change events.[141] Small island developing nations have requested that an international mechanism be set up to deal with some of these specific issues concerning loss and damage.[142] The focus on the ability of individual countries to prepare themselves, is inadequate. Serious climate change impacts may create a multiplying effect upon the region extending to the international community, leading to the necessity of international action.[143]

Unfortunately, the WIM does not address the degree of assistance that should be provided by developed countries to help developing countries that are vulnerable to the effects of climate change. Lack of financial resources is a problem for developing countries as there are costs involved in the preparation of the risk assessment of likely damage as well as addressing the actual losses to the country.[144] Even more significant issues have not been adequately considered, for example if sea water inundates a country, what are the

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136 UNFCCC, Subsidiary Body for Implementation, *Report on the Expert Meeting on Assessing the Risk of Loss and Damage Associated with the Adverse Effects of Climate Change*, 36th Sess, FCCC/SBI/2012/INF.3 (14–25 May 2012) [72(a)].

137 UNFCCC, Subsidiary Body for Implementation, *Report on the Regional Expert Meetings on a Range of Approaches to Address Loss and Damage Associated with the Adverse Effects of Climate Change, including Impacts Related to Extreme Weather Events and Slow Onset Events*, 37th Sess, FCCC/SBI/2012/29 (26 Nov- 1 Dec 2012) [54].

138 Ibid [35].

139 Ibid [24].

140 Ibid [28].

141 Ibid [42].

142 Ibid [79].

143 Ibid [78].

144 UNFCCC, Subsidiary Body for Implementation, *Report on the Expert Meeting on Assessing the Risk of Loss and Damage Associated with the Adverse Effects of Climate Change*, 36th Sess, FCCC/SBI/2012/INF.3 (14–25 May 2012) [37].

implications of loss of a country's sovereignty, or losses to the economic region.[145] These questions are matters of international concern because states that have been high GHG emitters are the primary cause of these problems.

Philippe Cullet considers that 'common but differentiated responsibilities' reflects a 'sense of partnership' by states when addressing global environmental threats.[146] So, the involvement of developing states in mitigation of GHGs depends upon these equitable considerations and the contributions to mitigation of GHGs from those developed countries responsible for large amounts of emissions in the past.[147] Indeed, the success of the application of the common concern is likely to depend upon the acceptance of the sharing of burdens in an equitable manner based upon common but differentiated responsibilities.[148] This is evident from the slow progress of negotiations for the next international agreement on climate change. Indeed, the success of these negotiations will depend upon how to resolve problems concerning the differentiated responsibilities of states.[149]

The adoption of the concepts of CCH and common but differentiated responsibilities in the *UNFCCC* can result in positive action by developed countries to establish institutions that provide financial assistance and transfer of technology to developing countries. However, the issue of compensation also needs to be addressed by states. Unfortunately to-date, developed states have been reluctant to consider this issue. Indeed, one proposal in the 2015 draft agreement is that there be no reference to loss or damage in the agreement.[150] The other, more appropriate alternative, in the 2015 draft agreement is to establish a new mechanism on loss and damage that would build on the work of WIM.[151]

The question is whether the development of an international agreement on climate change liability is possible because it is likely that developed countries would oppose this development. One option is to reverse the burden of proof in climate change cases before an international environmental arbitration tribunal or the ICJ. So, states with high levels of GHG emissions could be obliged to prove that their high levels did not cause damage.[152] Another suggestion is for states to adopt 1992 (the year when states became aware of the implications of high levels of GHG emissions that could lead to changes in climate) because of the opening for signature of the *UNFCCC* in this year. As a consequence of the international recognition of the threat of climate change in 1992, states could be liable for

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145 UNFCCC, Subsidiary Body for Implementation, *Report on the Regional Expert Meetings on a Range of Approaches to Address Loss and Damage Associated with the Adverse Effects of Climate Change, including Impacts Related to Extreme Weather Events and Slow Onset Events*, 37th Sess, FCCC/SBI/2012/29 (26 Nov- 1 Dec 2012)[27].

146 Cullet, above n 100, 178.

147 Paul Harris, 'The European Union and Environmental Change: Sharing the Burdens of Global Warming' (2006) 17 *Colorado Journal of International Environmental Law and Policy* 309, 315; Cullet, above n 100, 169.

148 Trindade and Attard, above n 111, 23. 'Some experts regarded sharing of burdens as an important subsidiary principle instrumental in the application of the common concern of mankind concept itself (collective or concerted actions); other experts went further, in expressing the view that the success or failure of the very concept of common concern of mankind would ultimately depend on the recognition or acceptance of the principle of equitable sharing of burdens'.

149 Mariette Le Roux, 'Rifts Remain at Talks on Climate Pact', *Sydney Morning Herald* (Sydney), 27 October 2014, 13.

150 *2015 Draft Agreement*, above n 5, art 5.

151 Ibid.

152 Atapattu, above n 86, 51.

failing to take actions to reduce their emissions after this date.[153] Another possibility is to permit low GHG emitting countries adversely affected by climate change to apply for funding from the Green Climate Fund as compensation.[154]

The concept of common but differentiated responsibilities can be viewed as a framework principle,[155] and the application of this principle and the CCH concept are likely to influence the development of a compliance mechanism in the next international agreement on climate change as discussed in the following section.

VIII CHH AND COMPLIANCE

States have agreed to aim for an overall reduction of GHGs in the atmosphere, to try to prevent the global temperature from increasing by more than 2 degrees Celsius above preindustrial levels.[156] The difficulty for states is that in order to achieve this objective, greater targets for emission reduction by states than are currently provided in the *Kyoto Protocol* (as extended to 2020) are necessary. There is a lack of certainty about how the question of compliance will be dealt with in future negotiations. At the Working Group in the Durban Platform for Enhanced Action, parties to the *UNFCCC* considered that the goal is to negotiate a strong compliance mechanism with suitable consequences for non-compliance.[157] It is unclear whether the Compliance Committee operating under the *Kyoto Protocol* will continue to carry out facilitative and enforcement functions after 2020.

The Compliance Committee (established by the COP to the *UNFCCC*)[158] has two branches, the Facilitative Branch and the Enforcement Branch which have different roles. The role of the Facilitative Branch is to give advice to parties and facilitate compliance with their commitments under the *Kyoto Protocol*. On the other hand, the Enforcement Branch examines whether developed countries (and transition countries) are complying with their commitments in the *Kyoto Protocol* and meeting their GHG reduction targets. If a party is not in compliance, the Enforcement Branch can determine that consequences will apply. These consequences include the development of a compliance action plan, suspension from

153 Ibid 52.

154 Ibid 54.

155 Birnie, Boyle and Redgwell, above n 12, 28.

156 UNFCCC, *Warsaw Outcomes* United Nations Framework Convention on Climate Change <http://unfccc.int/key_steps/warsaw_outcomes/items/8006.php> . 'The most recent climate science shows that human-generated climate change is beyond doubt, but we have a limited time to keep warming to a maximum of under two degrees. However, global greenhouse gas emissions need to peak this decade, and get to zero net emissions by the second half of this century. To achieve this, it is critical that action is taken and coordinated swiftly at all levels: international, domestic, business and finance'.

157 UNFCCC Ad Hoc Working Group in the Durban Platform for Enhanced Action, Informal Summary, *Summary of the roundtable under work stream 1 ADP 1, part 2 Doha, Qatar, November-December 2012* Note by the Co-Chairs, ADP.2012.6, (7 February 2013) [33].

158 UNFCCC, Conference of the Parties serving as the Meeting of the parties to the Kyoto Protocol, *Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its first session, held at Montreal from 28 November to 10 December 2005 Addendum Part Two: Action taken by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its first session,* 1st Sess. FCCC/KP/CMP/2005/8/Add.3 (2005) 93, art I 'The objective of these procedures and mechanisms is to facilitate, promote and enforce compliance with the commitments under the Protocol.' ('*COP Report 2005*').

participating in emissions trading and the penalty of an increase of 1.3 times the level of emission reductions in the next phase of the *Kyoto Protocol*.[159]

The Enforcement Branch has made decisions concerning a number of countries that have not been in compliance and many of these issues have been resolved.[160] However, the consequences only apply to states that have ratified the *Kyoto Protocol,* so if states fail to ratify or withdraw their ratification, the consequences do not apply.[161] The withdrawal from international environmental agreements should be prevented because global emission reduction targets are unlikely to be achieved if states can withdraw from their commitments. This failure to effectively reduce GHG emissions could lead to devastating consequences for the Earth's environment if tipping points are reached and irreversible change to the Earth's climate occurs.

Meinhard Doelle, Jutta Brunnée and Lavanya Rajamani consider that the Compliance Committee is a more advanced and elaborate enforcement mechanism than compliance systems established in other multilateral environmental agreements.[162] Even so, some commentators have pointed out that the Compliance Committee has not been effective because the penalties are too weak, and it would be preferable to develop a new framework for compliance in the post-Kyoto agreement.[163] In any event, as the climate change regime is changing, it is likely that the enforcement procedures will develop to accommodate the new regime.[164]

There are three proposals in the draft 2015 agreement concerning compliance.[165] First, a similar institution to the existing Compliance Committee could be established.[166] There are alternative arrangements to be negotiated by states about the nature and functions of this mechanism if it is established.[167] The consequences for failure to comply could be a declaration of failure to comply and a request for a compliance action plan; or possibly that advice or assistance or a statement of concern be given. The other alternative is that there are no consequences at all.[168] The disadvantage of the first option is that there are inadequate penalties for failure to comply. Secondly, an International Tribunal of Climate Justice could be set up to determine issues of non-compliance by developed countries concerning their commitments on mitigation, adaptation, contributions to finance, technology transfer and capacity-building as well as their compliance with transparency provisions in the agreement.[169] This is a preferable alternative however, it is unlikely that

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159 Ibid art XV [5].

160 UNFCCC, *Compliance under the Kyoto Protocol* United Nations Framework Convention on Climate Change <http://unfccc.int/kyoto_protocol/compliance/items/2875.php>. The countries involved were Greece, Canada, Croatia, Bulgaria, Romania, Ukraine, Lithuania and Slovakia.

161 UNFCCC, *Status of Ratification of the Kyoto Protocol* above n 16. For example, Canada has withdrawn from the *Kyoto Protocol.*

162 Meinhard Doelle, Jutta Brunnée and Lavanya Rajamani, 'Conclusion: Promoting Compliance in an Evolving Climate Regime' in Jutta Brunnée, Meinhard Doelle and Lavanya Rajamani (eds), *Promoting Compliance in an Evolving Climate Regime* (Cambridge University Press, 2012) 437, 437.

163 Sean Walsh and John Whalley, 'Compliance Mechanisms in Global Climate regimes: Kyoto and Post-Kyoto' in Nicholas Stern, Alex Bowen and John Whaley (eds), *The Global Development of Policy Regimes to Combat Climate Change* (World Scientific Publishing Co, Pte. Ltd., 2014) 225, 247.

164 Doelle, Brunnée and Rajamani, above n 162, 438.

165 *2015 Draft Agreement*, above n 5, art 11.

166 Ibid art 11 option I.

167 Ibid.

168 Ibid .

169 Ibid art 11 option II.

states will agree to the expansive international supervision imposed in this option. Even so, the possibility of international institutional oversight of state compliance indicates the continuing erosion of the doctrine of sovereignty of states in the area of climate change protection. The third option is the least desirable because the 2015 draft agreement would not include any provisions concerning compliance.[170]

Clearly, international agreement on a standard measurement and monitoring of greenhouse gas emissions is required.[171] Indeed, it would be difficult to track whether the overall global target can be achieved without international supervision of the efforts by countries to reduce GHG emissions. A stronger international compliance and enforcement mechanism should be established in the future to ensure states adhere to greater emission reductions than they may be willing to make unilaterally.[172] The USA and China have agreed to greater reductions,[173] however, even these goals are not strong enough to achieve the cuts in emissions required to achieve the international objective.[174]

Academic commentators have suggested a number of alternative proposals for the development of a future international climate change compliance system. Lavanya Rajamani proposes the development of a multilateral consultative process relying upon existing provisions in the *UNFCCC*.[175] As it is likely that developing country parties will increase their mitigation commitments in the next international agreements on climate change,[176] a multilateral consultative process could facilitate the compliance of developing countries endeavouring to meet their responsibilities.[177] Secondly, Rajamani considers that the review and assessment provisions in the *UNFCCC* could be improved so that they could operate as compliance provisions.[178] It may be possible to expand the reporting, review and assessment provisions under the *UNFCCC* to assist the compliance requirements for developing countries.[179]

The difficulty with these two proposals is that there are no provisions for penalties for non-compliance. So, some states could fail to adhere to their mitigation commitments and yet not suffer from the imposition of any sanctions. Further, if the provisions for reporting and review in the *UNFCCC* are relied upon, it is unlikely to produce a successful outcome because there are no incentives for states to comply with reporting requirements. A more

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170 Ibid art 11option III.

171 Walsh and Whalley, above n 163, 242.

172 Chatterji at al, above n 61,182.

173 James Massola, Philip Wen, Lisa Cox, 'Game Changer', *Sydney Morning Herald* (Sydney) 13 November 2014, 1. 'Mr Obama announced a target to cut US emissions by 26-28 per cent below 2005 levels by 2025… Mr Xi pledged to cap China's growing carbon emissions by 2030 or sooner if possible. China also gave itself the challenging goal of increasing the share of zero-emission non-fossil fuel to 20 per cent of the country's energy mix by the same year…'.

174 Peter Hannnan, 'US, China Cuts to Carbon Emissions Won't Be Deep Enough', CSIRO says' *Sydney Morning Herald* (Sydney) 13 November 2014, 5 'The United States-China pact to curb greenhouse gas emissions is 'unprecedented' but won't be enough to prevent dangerous climate change, CSIRO Global Carbon Project head Pep Canadell says').

175 Lavanya Rajamani, 'Developing Countries and Compliance in the Climate Regime' in Jutta Brunnée, Meinhard Doelle and Lavanya Rajamani (eds), *Promoting Compliance in an Evolving Climate Regime* (Cambridge University Press, 2012) 367, 387.

176 Ibid 388.

177 Ibid.

178 Ibid 386.

179 Ibid 387.

effective system of compliance is necessary in order to ensure adequate reduction of GHGs occurs, and global targets can be achieved.

Sean Walsh and John Whalley discuss three proposals to improve climate change compliance including trade penalties, enforcing an international treaty through an escrow account and the application of agency rankings.[180] If trade penalties are imposed, the World Trade Organisation may become involved, however, this organisation has not been established to deal with climate change trade restrictions[181] so, presumably, amendments to the operation of this institution would be required. An escrow account could be set up so that all countries would be required to pay funds into the account. An international institution could manage the escrow account and would determine whether countries have complied with their obligations.[182] If a country is not in compliance, the portion of the funds that they contributed will be forfeited and redistributed to other members of the fund who are in compliance.[183] The question is how would the surplus funds be allocated? Perhaps, it is more appropriate to provide these escrow funds as financial assistance to those developing countries likely to be severely impacted by climate change.

The third suggestion is to provide a system of agency rankings. An international agency could be established to determine compliance with mitigation and adaptation to climate change and could rate each country to assess their degree of compliance.[184] This rating system could encourage countries to comply because they would be encouraged to compete with other countries to achieve a good ranking. The difficulty with the agency ranking system is that some countries may opt out and free ride on the efforts of other countries that incur the costs and burden of climate change action.

Another proposal is to use trade sanctions as an incentive to ensure compliance.[185] If large numbers of countries join the next international agreement on climate change, the decision to join is beneficial because countries are only able to trade with those countries that have joined this international agreement.[186] If a country considers the option to free ride, this country will weigh up the benefits of free riding and is likely to wish to join the international agreement because the benefits from trade with a large number of countries would outweigh the benefits of free riding.[187] The problem with a consent based approach in international law is only states that ratify international climate change agreements will be bound. This is why the development of customary law through the CCH concept and the duty to cooperate in the *UNFCCC* is important, because states have a duty to develop the legal framework on climate change and this duty extends to the duty to ratify subsequent international agreements to the *UNFCCC*.

It would be possible to adopt a similar (but more complicated) compliance system to the existing Compliance Committee regime, but in order to improve this system in the future,

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180 Walsh and Whalley, above n 163, 230-231.
181 Ibid 229.
182 Ibid 231.
183 Ibid.
184 Ibid.
185 Scott Barrett, 'Negotiating to Avoid 'Dangerous' Climate Change' in Nicholas Stern, Alex Bowen and John Whaley (eds), *The Global Development of Policy Regimes to Combat Climate Change* (World Scientific Publishing Co, Pte Ltd, 2014) 159, 177.
186 Ibid 176.
187 Ibid.

there could be more serious consequences and penalties for failure to comply.[188] Clearly, innovation is necessary, but if a stronger compliance system is introduced in a future climate change agreement, the threat of onerous consequences could deter some states from ratifying it, unless it is determined that a customary rule provides states are under an obligation to ratify subsequent agreements to the *UNFCCC*.

The links between CCH, intragenerational equity and intergenerational equity show that further action should be taken by states to address international concern about climate change because the human rights of future generations are likely to be adversely impacted particularly in the situation where people are likely to become displaced due to the adverse effects of climate change.

IX CCH, HUMAN RIGHTS AND DISPLACED PEOPLE

The CCH applies to the protection of the Earth's atmosphere as well as to the protection of human rights.[189] Indeed, the impacts of climate change on human rights are of common concern to the international community, however, to date, there has been little progress on the responses necessary at the international level to deal with this problem.[190] States should reduce the threat of predicted human rights violations,[191] and those that have ratified *UNFCCC*, have the responsibility to take action to reduce GHG emissions.[192]

The Human Rights Council *Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights* discusses human rights that could be impacted by the adverse effects of climate change.[193] It is expected that the consequences of these violations of human rights will be very serious.

In summary, the human rights likely to be affected include the following:

> 1) The right to life will be impacted because of more frequent extreme weather events due to climate change such as heat spells, storms, fires and droughts that will increase the number of human deaths.[194] More conflicts will occur including civil war and violence due to the impacts of climate change which will exacerbate the causes of these conflicts.[195] Lack of food and water resources can also lead to increased mortality.[196]

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188 Walsh and Whalley, above n 163, 226.

189 Alexandre Kiss and Dinah Shelton, *International Environmental Law* (Transnational Publications Inc, 2004) 32; McInerney-Lankford, Darrow and Rajamani, above n 120, 24.

190 Jane McAdam, *Climate Change, Forced Migration and International Law* (Oxford University Press, 2012) 91.

191 *Universal Declaration of Human Rights* , GA Res on the Universal Declaration of Human Rights, 217A (III) (10 December 1948) UN Doc A/810, preamble paras 1, 2 ('*UDHR'*).

192 *UNFCCC,* art 4.

193 United Nations General Assembly, Human Rights Council *Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship between Climate Change and Human Rights* 10th Sess Agenda Item 2 (15 January 2009) A/HRC/10/61 United Nations Human Rights <http://www.ohchr.org/EN/Issues/HRAndClimateChange/Pages/Study.aspx>.

194 *UDHR* art 2, *International Covenant on Civil and Political Rights*, 16 December 1966, 999 UNTS 171, (entered into force 23 March 1976) art 6, *Convention on the Rights of the Child,* 20 November 1989, 1577 UNTS 3, (entered into force 2 September 1990) art 6; *WG II Summary for Policy Makers*, above n 1, 6.

195 *WG II Summary for Policy Makers*, above n 1, 20.

196 Ibid 7.

2) The right to adequate food will be impacted by the effects of climate change in many countries, particularly in the lower latitudes where increased temperatures, droughts or floods will lead to a deterioration of food systems.[197] Reduced access to food and price increases could occur in many areas. Poor people in regions such as sub-Saharan Africa are likely to be adversely impacted by reductions in crop production and food insecurity.[198]

3) The right to water - it is likely that there will be substantial water loss in dry sub-tropical regions due to the effects of climate change, although at high latitudes water resources are likely to increase.[199] So, more people are likely to suffer from a loss of safe drinking water.

4) The right to health will be affected because the impacts of climate change will lead to an increase of existing health problems, particularly in developing countries.[200]

5) The right to adequate housing will be impacted by increasing air pollution, temperatures, flooding and water scarcity and those living in poor quality housing in urban areas are most likely to be adversely impacted.[201] There is potential for loss of housing and increasing numbers of people living in slums due to displacement.

6) The right to self-determination will be impacted because climate change will lead to sea level rise which threatens the future viability of small island states[202] and low- lying areas where communities are displaced due to inundation of sea water. There will also continue to be adverse impacts on the livelihoods of indigenous groups in the Arctic and Russia. Some indigenous peoples may no longer be able to engage in their traditional way of life and may have to leave their homelands.

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197 *UDHR* GA Res on the Universal Declaration of Human Rights, 217A (III) (10 December 1948) UN Doc A/810 at art 25; *International Covenant on Economic, Social and Cultural Rights,*16 December 1966, 993 UNTS 3, (entered into force 3 January 1976) art 11; *Convention on the Rights of the Child*, 20 November 1989, 1577 UNTS 3, (entered into force 2 September 1990) art 24(c); *Convention on the Rights of Persons with Disabilities* adopted 13 December 2006, G.A. Res. 61/106, arts 25(f), art 28 para 1; *Convention on Elimination of All Forms of Discrimination against Women* adopted 18 December 1979, 1249 UNTS 13, (entered into force 3 September 1981) art 14 para 2 (h); *International Convention on Elimination of All Forms of Racial Discrimination* adopted 21 December 1965, 660 UNTS 195, (entered into force 4 January 1969) art 5(e); *WG II Summary for Policy Makers*, above n 1, 13.

198 *WG II Summary for Policy Makers*, above n 1, 7.

199 Ibid 14.

200 *International Covenant on Economic, Social and Cultural Rights*, 16 December 1966, 993 UNTS 3, (entered into force 3 January 1976) art 12; *Convention on Elimination of All Forms of Discrimination against Women*, adopted 18 December 1979, 1249 UNTS 13, (entered into force 3 September 1981) arts 12, 14; *International Convention on Elimination of All Forms of Racial Discrimination* adopted 21 December 1965, 660 UNTS 195, (entered into force 4 January 1969) art 59(e)(iv); *Convention on the Rights of the Child* opened for signature 20 November 1989, 1577 UNTS 3, (entered into force 2 September 1990) art 24; *Convention on the Rights of Persons with Disabilities* adopted 13 December 2006, G.A. Res. 61/106, arts 16[4], 22[2], 25; *International Convention on the Protection of the Rights of all Migrant Workers and Members of their Families* adopted 18 December 1990, 30 ILM 1517 (1991) (entered into force 1 July 2003) arts 43[1], 70; *WG II Summary for Policy Makers*, above n 1, 39.

201 *UDHR* art 25, *International Covenant on Economic, Social and Cultural Rights* opened for signature 16 December 1966, 993 UNTS 3, (entered into force 3 January 1976) art 11; *WG II Summary for Policy Makers*, above n 1, 18.

202 *International Covenant on Economic, Social and Cultural Rights* opened for signature 16 December 1966, 993 UNTS 3, (entered into force 3 January 1976) art 1 [1]; *WG II Summary for Policy Makers*, above n 1, 20.

The 2015 draft agreement includes respect for human rights in the preamble.[203] This agreement may include terminology where the overall agreement will be implemented with respect and fulfilment of human rights for all and providing that adaptation action should follow a participatory approach with respect for human rights.[204]

The *WG II Contribution to the Fifth Assessment Report of the IPCC* states that the impacts of climate change will lead to the displacement of people in the twenty-first century.[205] The danger increases for people that have inadequate resources for planned migration because these people are at risk of exposure to extreme weather and generally reside in low income developing countries where there is a lack of resources to assist displaced people.[206] There are large numbers of people who are likely to be displaced by climate change either because of internal displacement (within the boundaries of their home state) or external displacement (where they are forced to cross the border into a neighbouring state).[207] Estimated numbers of people likely to be displaced as a result of the adverse impacts of climate change range between about fifty million,[208] or possibly two hundred and fifty million,[209] during the next fifty years, although there is some uncertainty about whether these figures are based upon an accurate assessment.[210] Impacts of climate change may not necessarily be the only reason for displacement and additional social, economic and environmental causes are likely to influence the decision to move locations.[211] In any event, increasing numbers of displaced people are a matter of international concern.[212] So, the problem of displaced people (where climate change is a factor in the decision to relocate) is linked to the concept of the common concern of humankind and could be ameliorated by appropriate international, regional and national and local responses.

Climate change impacts can exacerbate the social and economic circumstances of those at risk of displacement.[213] Protection of the human rights of climate change displaced people requires the cooperation of all states acting in accordance with the common concern of humankind.[214] One reason for the plight of climate change displaced people is the failure by states to effectively mitigate GHGs in accordance with sustainable development.[215] So, the best approach for states is to negotiate for greater reductions in GHG emissions to minimise the numbers of people displaced in the future.

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203 *2015 Draft Agreement*, above n 5, preamble.

204 Ibid arts 2, 4.

205 *WG II Summary for Policy Makers*, above n 1, 20.

206 Ibid.

207 Ibid.

208 Ilona Millar, 'There's No Place Like Home: Human Displacement and Climate Change' (2007) 14 *Australian International Law Journal* 71, 72.

209 John Von Doussa, Allison Corkery and Renée Chartres, 'Human Rights and Climate Change' (2007) 14 *Australian International Law Journal* 161, 180; McInerney-Lankford, Darrow and Rajamani, above n 120, 63. Jane McAdam, 'Climate Change 'Refugees' and International Law' *Bar News: The Journal of the NSW Bar Association* (Winter 2008) 27, 27.

210 McAdam, above n 190, 28.

211 Ibid 29-30.

212 Ibid 92.

213 Ibid 20. In this article, 'climate change displaced people' refers to people who are displaced, in circumstances where one of the factors causing the displacement is due to the impact of climate change.

214 Horn and Freeland, above n 45, 124.

215 Aurelie Lopez, 'The Protection of Environmentally-Displaced Persons in International Law' (2007) 37 *Environmental Law* 365, 408.

At the international level, there is no specific institution capable of protecting the human rights of climate change displaced people, nor is there an international legal agreement that applies. The *Convention Relating to the Status of Refugees* does not cover people who are displaced in their own home state and remain within the borders of this state.[216] Even if climate change displaced people cross the border into a neighbouring country, they are not classified as 'refugees'. It is likely that these people are fleeing not because of circumstances where they have a 'fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion…'[217] It may be possible to argue that climate change displaced people are fleeing because of environmental harm but, this reason is unlikely to constitute persecution within the meaning of the *Convention Relating to the Status of Refugees* except perhaps, for very limited circumstances.[218]

An international agreement could provide for protection of climate change displaced people in the circumstances where they cross borders to migrate.[219] Some commentators have suggested that the adoption of a protocol to the *UNFCCC,*[220] or an amendment to the *Convention Relating to the Status of Refugees* could provide protection for climate change displaced people.[221] Unfortunately, states have been reluctant to engage in debate about the merits of the development of a new treaty concerning climate change displaced people due to the sensitivity of the governments of some states about the likelihood of debate about issues concerning liability and compensation.[222]

Opportunities are available to discuss policy options through the *UNFCCC* forum in the future because as part of the Cancun Adaptation Framework, the COP to the *UNFCCC* invited parties to adopt measures on climate change displacement and relocation.[223] Even though the Cancun Adaptation Framework is a non-binding agreement, this statement sets out the importance of the displacement of people and treats this issue as one of adaptation.[224] So, countries may be able to apply for international adaptation funding to prevent displacement or to provide for relocation of climate change displaced people.[225]

The situation of climate change displaced people is very complex because of the difficulty of distinguishing those people that are genuinely displaced by climate change events as opposed to those affected by natural disasters.[226] In 1998, the United Nations Office for

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216 *Convention Relating to the Status of Refugees*, opened for signature 28 July 1951, 189 UNTS 150 art 1 (entered into force 22 April 1954).

217 Ibid.

218 McAdam, above n 190, 43-48.

219 McInerney-Lankford, Darrow and Rajamani, above n 120, 64.

220 Frank Biermann and Ingrid Boas 'Protecting Climate refugees: The Case for a Global Protocol' Environment Magazine November-December 2008, Environment Science and Policy for Sustainable Development <http://www.environmentmagazine.org>.

221 Marei Pelzer, 'Environmentally Displaced Persons Not Protected: Further Agreement' (2009) *Environmental Policy and Law* 90, 190.

222 Koko Warner, *Legal and Protection Research Policy Series: Climate Change Induced Displacement: Adaptation Policy in the Context of the UNFCCC Climate Negotiations* (Switzerland, United Nations High Commission for Refugees, 2011) 13-14.

223 UNFCCC, Conference of the Parties, *Report of the Conference of the Parties on its Sixteenth Session, held in Cancun from 29 November to 10 December 2010,* 16th Sess, Addendum Part Two, FCCC/CP/2010/7/Add.1, (15 March 2010) 14(f).

224 McAdam, above n 190, 232.

225 Ibid.

226 McInerney-Lankford, Darrow and Rajamani, above n 120, 64.

Coordination of Humanitarian Affairs set out the *Guiding Principles on Internal Displacement* which are available for states planning to provide protection to displaced people within their jurisdiction if a natural or human caused disaster causes the displacement. However, these guidelines are not binding and are not directly related to climate change displacement.[227] There have been suggestions that similar guidelines could be developed to cover climate change displacement, called 'Guiding Principles around Climate Induced Displacement' which could help states plan for large numbers of displaced people in the future.[228] Further, there are opportunities for discussion about international assistance under the *UNFCCC* and the development of proactive approaches for work with humanitarian and environmental organisations.[229]

Some countries that are likely to experience large numbers of climate change displaced people are low-lying states and island nations that have contributed very low amounts of GHG emissions. It appears to be particularly inequitable that vulnerable countries should shoulder the burden for climate change displaced people if large GHG emitting countries fail to take adequate steps to limit their GHG emissions. So, this problem is an issue of equity and assistance from developed states should be provided through the application of common but differentiated responsibilities concept.[230] It is possible that this issue will be taken into account in the 2015 draft agreement. This new organisation on loss and damage could establish a coordination facility to assist displaced people as a result of severe impacts of climate change.[231] The recognition of the plight of displaced people in the 2015 draft agreement indicates that this problem is a matter of common concern and should be dealt with on a cooperative basis by states.

Even though some climate change displaced people may be able to rely upon existing human rights protection at international law, many will be internally displaced in developing countries and will be relying upon the national enforcement of human rights.[232] However, human rights protection may not be able to be adequately enforced due to factors such as a lack of resources, inadequate education about human rights or limited access to institutions capable of providing assistance.

It may be possible, at some stage in the future, for states to negotiate the development of a protocol to protect the human rights of climate change displaced people and to ensure that financial assistance is available to help them to relocate. A preferable approach is for states to coordinate the response for large-scale migrations at the international level, to provide a legal framework to support climate change displaced people and to manage migration based upon the sharing of burdens principle, whilst ensuring appropriate allocation of humanitarian assistance and legal protection for human rights through appropriate agencies.[233]

The following section explores the link between concepts of CCH, intergenerational equity and trust to protect the interests of future generations.

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227 *Guiding Principles on Internal Displacement (1998)* United Nations Office for Coordination of Humanitarian Affairs <https://docs.unocha.org/sites/dms/Documents/GuidingPrinciplesDispl.pdf> .

228 Warner, above n 222, 14.

229 Ibid 15.

230 McAdam, above n 190, 233.

231 *2015 Draft Agreement*, above n 5 , art 5.

232 McInerney-Lankford, Darrow and Rajamani, above n 120, 64.

233 McAdam, above n 190, 236.

X TRUST FOR FUTURE GENERATIONS

Future generations are specifically acknowledged in the preamble of the *UNFCCC*.[234] Parties are to be guided by the principle that the protection of the climate is for the benefit of present and future generations.[235] The link to the common concern of humankind is through the temporal dimension which supports action by states to limit climate change in the interests of present and future generations. Intergenerational equity is also central to the concept of sustainable development.[236] The temporal dimension of CCH carries with it the implication of a trust arrangement where the protection of the atmosphere is necessary for the public benefit and future generations would be beneficiaries of the trust.[237] So, the trust could be used to improve the legal protection of the environment for future generations.[238] The protection of the atmosphere through a trust also gives the atmosphere value and as states are trustees, they have fiduciary responsibilities to protect the atmosphere (the subject matter of the trust).[239] So, the trust is a legal device that has the potential to assist the international community of states to address the threat of climate change.[240]

Edith Brown Weiss views the trust as a method of benefitting future generations where the present generation (along with future generations) are beneficiaries of the trust.[241] The trustees could be an international institution under the supervision of the international community. This institution would undertake to ensure that internationally agreed rules and principles would be applied to the protection of the atmosphere. So, a strong institution is required at the international level, with the power to regulate to protect the atmosphere against the threat of climate change. However no such institution has yet been established.[242]

There was an earlier proposal that the UN Trusteeship Council could manage areas in the global commons but this suggestion was not taken up by the international community.[243] State responsibility through the common concern of humankind concept includes the international management of the atmosphere by establishing an international institution to

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234 *UNFCCC* preamble ('*Determined* to protect the climate system for present and future generations').

235 Ibid art 3(1).

236 World Commission on Environment and Development, *Our Common Future* (Australian edition, Oxford University Press, 1987) 43 ('Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future. Far from requiring the cessation of economic growth, it recognizes that the problems of poverty and underdevelopment cannot be solved unless we have a new era of growth in which developing countries play a large role and reap large benefits.[Sustainable development] contains within it two key concepts:
• The concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
• The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs').

237 Trindade and Attard, above n 111, 21.

238 Birnie, Boyle and Redgwell, above n 12, 121.

239 Raphael Sagarin and Mary Turnipseed, 'The Public Trust Doctrine: Where Ecology Meets Natural Resources Management' (2012) *The Annual Review of Environment and Resources* 473, 474.

240 Ibid 492.

241 Edith Brown Weiss, 'The Planetary Trust: Conservation and Intergenerational Equity' (1984) 11 *Ecology Law Quarterly* 495, 507.

242 Birnie, Boyle and Redgwell, above n 12, 97.

243 Ibid.

regulate the protection of the atmosphere[244] as a trust for present and future generations. So, arguably, the CCH concept operates to motivate states to change existing institutions and develop new institutions that will provide more effective protection of the Earth's climate.[245]

Another approach is through the doctrine of public trust that emerged in the United States of America.[246] This doctrine could be applied to the atmosphere.[247] Mary Wood develops 'nature's trust' as a device to incorporate the public trust doctrine to protect natural resources including the atmosphere.[248] The government of the state acts as the trustee to protect natural resources for present and future generations.[249] This application of the trust at the domestic level of jurisdiction could be adapted to the international level where each state has a duty to protect natural resources and act jointly to protect them, particularly where transboundary resources are concerned.[250] Ved Nanda and William Ris have applied the public trust doctrine to international environmental law so that states may recommend areas of importance to be placed in a trust which will be protected by an international agency for the benefit of humankind.[251] The trust could be used to enhance international protection of the atmosphere provided that an international institution is established with effective regulatory and compliance powers. In order for the trust to be effective, future generations would require a representative with legal standing to protect their interests at the international level and this issue is discussed in the next section.

XI REPRESENTATION FOR FUTURE GENERATIONS

Climate change is likely to result in a deterioration of the environment for future generations including the depletion of natural resources, loss of biological diversity and degradation of the quality of the environment.[252] Other impacts include lack of food and water due to climate change impacts on agricultural production and water resources as well as rising sea levels leading to inundation of coastal areas.[253] It is becoming urgent to determine what legal protection can be granted to future generations given that climate change impacts are already taking place and are likely become more serious in the future. This section discusses the proposals by the Secretary General of the United Nations (UN) and Edith Brown Weiss for a representative for future generations.

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244 The *Hague Declaration on the Environment* 28 ILM 1308 (1989). (This is not a binding agreement). See P. M. Dupuy 'International Protection of the Earth's Atmosphere' (1991) 21 (2) *Environmental Policy and Law* 61, 63.

245 *Note from the UNEP Secretariat to the Meeting*, above n 17, 46-47.

246 Joseph Sax, 'The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention' (1970) 68 *Michigan Law Review* 471, 474.

247 Mary Christina Wood, *Nature's Trust Environmental Law for a New Ecological Age* (Cambridge University Press, 2014) 149.

248 Ibid 336.

249 Ibid.

250 Burns Weston and David Bollier, *Green Governance: Ecological Survival, Human Rights and the Law of the Commons* (Cambridge University Press, 2013) 241.

251 Ved Nanda, and William, K Ris Jr, 'The Public Trust Doctrine: A Viable Approach to International Environmental Protection' (1976) 5 *Ecology Law Quarterly* 291, 315.

252 Edith Brown Weiss, 'Implementing Intergenerational Equity' in Malgosia Fitzmaurice, David Ong and Panos Merkouris, (eds) *Research Handbook on International Environmental Law* (Edward Elgar Publishing Ltd, 2010) 100, 101.

253 Ibid 102.

The report of the Secretary General, *Recent Proposals in Intergenerational Solidarity and the Needs of Future Generations,* [254] discussed four options that could facilitate the representation of future generations at the international level. First, the most effective option would be to appoint a High Commissioner for Future Generations who would promote the interests of future generations amongst states and UN agencies, carry out research and offer advice on these issues.[255] Second, a Special Envoy to the Secretary General for Future Generations could foster intergenerational solidarity and include consideration of these issues in policy making.[256] This envoy would report to the UN General Assembly and to the High-level Political Forum on sustainable development.[257] Another option to ensure policy making takes into account the interests of future generations is to include these matters as a regular agenda item for the High-level Political Forum.[258] Finally, the UN Secretary General could promote inter-agency coordination on issues concerning future generations through the UN organisations to ensure policy consistency.[259]

The role and functions of a High Commissioner would be to be engaged with:

- International agenda-setting and leadership;
- Monitoring, early warning and review;
- Public participation;
- Capacity for innovation at national and sub-national levels;
- Public understanding and evidence; and
- Reporting.[260]

These functions are very broad and fail to take into account the specific problems faced by people from the impacts of climate change such as the serious impacts on human rights of climate change displaced people. It would be preferable to introduce a commissioner for future generations that specialises in climate change and could address issues raised at the international level on behalf of future generations.

A commissioner for future generations could provide assistance for the interests of future generations, if established with functions to collect information about the state of the Earth's environment and likely threats to its integrity, to warn about hazards, to identify research areas to provide opportunities for discussion and education about these issues.[261] Brown Weiss specifically identifies the advantage of the creation of the office of a climate change commissioner for future generations that could retain a focus on the long term issues arising from climate change and facilitate the involvement of all members of the community including government, private enterprise, individuals and NGOs in the management of

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254 Report of the Secretary-General, *Recent Proposals in Intergenerational Solidarity and the Needs of Future Generations UNGAOR*, 68th sess, Agenda Item 19, UN Doc A/68/x, 5 August 2013 [14]. 'In the case of some global environmental problems, the consequences of our present actions would not appear before decades, if not hundreds of years. For instance, certain very high risk impacts of climate change would not likely fall on our children or grandchildren; they would impact people born perhaps five or ten or twenty generations hence'.

255 Ibid [63].

256 Ibid [65].

257 Ibid.

258 Ibid [66].

259 Ibid [67].

260 Ibid [57].

261 Brown Weiss, above n 252,112.

adaptation and mitigation.[262] Clearly, implementation of climate change law and policies favouring future generations would be more effective if a watchdog, such as a climate change commissioner could report on the international situation on climate change and represent the interests of future generations.

At the international level, questions are raised about whether the rights of future generations to a healthy environment can be protected, whether this protection will cover human rights and whether the rights of future generations are categorised as individual or collective rights.[263] It is also uncertain if a state can take legal action to represent the rights of future generations. It may be possible for states to bring an action *erga omnes* in circumstances where the human rights of future generations are likely to be adversely affected or where the environment is under threat of severe degradation as in the circumstances where serious adverse impacts of climate change occur.

A representative could be appointed to act on behalf of future generations with standing to represent the interests of future generations in international disputes concerning climate change or the environment.[264] This could be a role of a climate change commissioner. Or, the governments of states could develop procedures in national legal systems where representation is available to future generations in courts to ensure that their interests are protected as in the case of a class action brought on behalf of the unborn generations.[265] In the Philippines, Justice Davide considered that the plaintiffs had standing to bring a class suit on behalf of succeeding generations in *Re Minors Oposa v Secretary of the Department of Environment and Natural Resources*.[266] The judges in this case indicated that every generation has a responsibility to protect the environment for the ensuing generations.[267] So, standing could be granted to an international climate change commissioner to represent the claims of future generations in ICJ and international environmental arbitration. The difficulty with the present structure of the ICJ is that only states can be parties before this court.[268] So, it may be more appropriate to encourage climate change disputes to be resolved through the process of international environmental arbitration in the Permanent Court of Arbitration or in a specialised climate change tribunal. The 2015 draft agreement proposed that an International Tribunal of Climate Justice could be established to deal with loss or damage resulting from the impacts of climate change.[269] It may be possible to expand the range of powers of this tribunal to include representation for future generations on disputes involving climate change that would affect their interests.

XII CONCLUSION

Overall, the CCH concept forms the foundation building block for the operation of an environmental regime to protect the atmosphere.[270] There are links between the CCH and other principles of international environmental law including the precautionary principle and the concepts of intragenerational and intergenerational equity. The links between these

262 Ibid.
263 Ibid 109.
264 Birnie, Boyle and Redgwell, above n 12, 121.
265 *Re Minors Oposa v Secretary of the Department of Environment and Natural Resources* (1994) 33 ILM 174.
266 Ibid 187-188.
267 Ibid 185.
268 *Statute of the International Court of Justice* art 34.
269 *2015 Draft Agreement*, above n 5, art 11.
270 See Dupuy and Vinuales above n 18, 53.

concepts indicate that there are likely to be further legal implications flowing from the CCH in the future. It is possible to predict that the CCH could apply to states' responsibility to assist climate change displaced people and to take into account the interests of future generations.

The operation of the CCH concept together with the provisions of the *UNFCCC* show that states have a responsibility to assist the development of an appropriate legal framework on climate change and to cooperate to mitigate GHGs. The duty to cooperate in the *UNFCCC* and the common concern of humankind implies that there is a duty for parties to ratify subsequent legal agreements to the *UNFCCC* which promote state action against the threat of climate change.[271] The 2015 draft agreement provides evidence of the focus on collective action by states to protect the atmosphere and further erosion of the traditional doctrine of sovereignty as states are required to undertake accelerated mitigation and adaptation action to deal with the threat of climate change. The evidence of cooperative action and limitations to national sovereignty when states negotiate agreements to deal with the global threat of climate change are consistent with the operation of the CCH concept.

Similarly, as the human rights of climate change displaced people are likely to be seriously impacted by the adverse effects of climate change, these potential violations of human rights are clearly matters of international concern. States have responsibilities under existing international human rights agreements to cooperate on the development of overarching human rights principles and detailed responses for assistance to be given to climate change displaced people.[272]

The consequences of the state responsibilities to the international community through the common concern of humankind and the operation of the *UNFCCC* are that free riding states which refuse to ratify subsequent protocols to the *UNFCCC* could be liable for additional compensation to those countries that suffer damage due to the impacts of climate change. It may be possible to pass a General Assembly resolution to this effect. Even though the General Assembly resolution would not be legally binding, it may indicate the view of a large number of states and perhaps could be taken into account in legal actions.

Indeed, the prediction for the future is that the CCH will apply to the environment as a whole. Even though the wording of the CCH refers to 'humankind' and takes into account the interests of future generations of humans, it can be applied as a holistic concept to 'life on the planet.'[273] The CCH could be expanded to include the elements of nature as well as future generations of humankind. In the future, it may be necessary for natural elements of the Earth (such as the atmosphere) to be represented in order to obtain legal protection.[274] This could be achieved by appointing a climate change commissioner who would act in the interests of legal protection for the atmosphere. The functions of this commissioner could include monitoring the levels of reduction of GHG emissions, recommending new multilateral agreements (for example, to cover climate change displaced people), acting as a

271 McAdam, above n 190, 95.
272 Ibid 269.
273 *Introduction to the Proceedings of the Meeting*, above n 26, 18.
274 Christopher Stone, 'Defending the Global Commons' in Philippe Sands (ed), *Greening International Law* (Earthscan Publications Ltd, 1993) 34, 40.

representative for the atmosphere in environmental disputes and instigating legal or diplomatic action on behalf of the atmosphere in appropriate situations.[275]

POSTSCRIPT

This article was written prior to the conclusion of negotiations at COP21. These discussions were successful because they resulted in the conclusion of the *Paris Agreement* which will form a legally binding agreement if ratified by 55 states accounting for at least 55% percent of total world-wide GHG emissions.[276] The *Paris Agreement* confirms the application of the CCH to the threat of climate change in the preamble. The links between the CCH and human rights and equity are also apparent from the wording of this agreement. According to the preamble of the *Paris Agreement*, the parties acknowledge:

> that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.[277]

The commitments to take mitigation and adaptation action are undertaken by all parties to this agreement which is indicative of the operation of the CCH concept as all countries are taking responsibility for climate change action. Further, the action undertaken will be reviewed through a global stocktake to assess 'collective progress towards achieving the purpose' of the *Paris Agreement*.[278] The role of equity and common but differentiated responsibilities continue to apply and different national circumstances will be taken into account when the *Paris Agreement* is implemented.[279] An overview of the *Paris Agreement* indicates that the CCH continues to operate as a foundation for the operation of an environmental regime to protect the atmosphere.

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275 Ibid 39-41. Stone discusses the possibility of a representative on behalf of the oceans. These comments could also be applied to the atmosphere.

276 Conference of the Parties, United Nations Framework Convention on Climate Change, *Agenda item 4(b) Durban Platform for Enhanced Action (Draft decision 1/CP.17) Adoption of a protocol, another legal instrument, or an agreed outcome with legal force under the Convention applicable to all Parties* UN Doc FCCC/CP/2015/L.9/Rev.1 Annex (12 December 2015) art 21. ('*Paris Agreement*')

277 Ibid preamble [11].

278 Ibid art 14.

279 Ibid art 2.

COMMUNICATING THE CULPABILITY OF ILLEGAL DUMPING: BANKSTOWN V HANNA (2014)

DR PENNY CROFTS*

The use of criminal law as a means to prevent harms to the environment is increasingly common. Despite this, environmental offences tend to be seen as not 'real' crimes. Research has consistently demonstrated low rates of identification of perpetrators of illegal dumping, low prosecutions and low penalties. Through a close reading of Bankstown v Hanna (2014) this paper analyses not only the criminalisation of illegal dumping by the state through legislation, but the process through which illegal dumping becomes regarded as sufficiently culpable to justify criminal sanctions, that is, that it is a 'real' crime. This paper analyses the process of substantive criminalisation in terms of the formal labelling of illegal dumping as criminal, the imposition of criminal penalties, and a normative account of illegal dumping as sufficiently blameworthy to justify the imposition of criminal penalties. Although the state has formally labelled illegal dumping criminal, this is undermined by the laws, regulation, procedures and enforcement of offences which are a mix of civil and criminal procedures. The history of cases against Hanna reveals a process of shifting from civil to increasingly serious criminal penalties, communicating not only to the general public but also regulators, courts and the wrongfulness of his behaviour. Hanna (2014) asserts a substantive normative account of illegal dumping as blameworthy, drawing upon narratives of harmful consequences and subjective culpability to emphasise the criminality of Hanna's actions. These narratives draw upon and are informed by principle that the criminal law should only be used to censure people for substantial wrongdoing. This process has accomplished the substantive criminalisation of illegal dumping, such that legal and non-legal actors now perceive this type of behaviour as sufficiently blameworthy as to justify the application of the serious criminal sanction of imprisonment in response to serious offending.

I INTRODUCTION

Pollution and illegal disposal of waste laws were first enacted in Australia in the early 1970s.[1] The use of criminal law as a means to prevent harms to the environment is increasingly common.[2] The criminalisation of illegal dumping specifically, and environmental offences

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1 Samantha Bricknell, *Environmental Crime in Australia* (Australian Institute of Criminology, 2010).

2 Tanya Wyatt, Piers Beirne and Nigel South, 'Special Edition: Green Criminology Matters Introduction' (2014) 3(2) *International Journal for Crime, Justice and Social Democracy* 1.

generally, has been queried in terms of efficacy,[3] expense,[4] conflicts between environmental ideals and the use of criminal law,[5] and specific problems and features of environmental 'offending' and victims.[6] A key issue is that although labelled criminal by the state, 'environmental crime itself is consistently undervalued in law',[7] perceived as only a crime on paper, rather than 'real' crime. The Australian Institute of Criminology has asserted that 'compared with other crimes, environmental crime has taken longer to be accepted as a genuine category of crime'.[8] Various reasons have been proposed for this perceived lack of criminality. Research has suggested this may be because the impact of the offending is often underestimated or marginalised,[9] particularly because environmental crimes may not be detected or have an immediate impact,[10] and thus may be perceived as 'victimless'.[11] National and international research has consistently demonstrated low rates of identification of perpetrators of illegal dumping, low prosecutions and low penalties, with Faure and Svatikova asserting that empirical studies have found that 'enforcement of environmental offences through criminal law is relatively low in terms of the number of prosecutions relative to the number of established violations.'[12] There are 'many cases where the criminal law is effectively not applied at all as a result of which no sanctions follow.'[13] This leniency (both apparent and real) reflects and reinforces the perception by enforcement officers and the wider public that environmental crimes are not as important as other criminal offences in terms of their nature and gravity,[14] or are not 'real crimes'.[15] The attitude toward environmental offences can also be explained in terms of structures of criminal law. Environmental offences tend to be categorised as 'regulatory' or 'technical' – that is, aimed at regulating behaviour and prohibiting acts that 'are not criminal in any real sense, but are acts which in the public interest are prohibited under a penalty.'[16] Regulatory offences tend to be regarded as 'quasi criminal' and not inherently wrong.[17] This is despite the fact that possible penalties prescribed for regulatory offences such as environmental offences can be severe. For example, in NSW, any person found guilty of wilful disposal of waste that causes

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3 Matthew Hall, 'The roles and use of law in green criminology' (2013) 3 *International Journal for Crime, Justice and Social Democracy* 96.

4 Michael Faure and Katarina Svatikova, 'Criminal or Administrative Law to Protect the Environment? Evidence from Western Europe' (2012) 24(2) *Journal of Environmental Law* 253.

5 Kathleen Brickey, 'Environmental Crime at the Crossroads: The intersection of environmental and criminal law theory' (1996-1997) 71 *Tulane Law Review* 487.

6 Above n 4.

7 Rob White, 'Environmental Crime and Problem-Solving Courts' (2013) 59 *Crime, Law and Social Change* 267, 274.

8 Above, n 1, xi.

9 Michael Lynch and Paul Stretsky, 'Green Criminology in the United States' in Piers Beirne and Nigel South (eds), *Issues in Green Criminology* (2007) 248-269; Nigel South, 'Green Criminology: Reflections, Connections, Horizons' (2014) 3(2) *International Journal for Crime, Justice and Social Democracy* 5-20.

10 Above n 3.

11 M Halsey and Rob White, 'Crime, ecophilosophy, and environmental harm' (1998) 2(3) *Theoretical Criminology* 345-371; Rob White, *Crimes against nature: environmental criminology and ecological justice* (2008); Nigel South, 'A green field for Criminology? A proposal for a perspective' (1998) 2(2) *Theoretical Criminology* 211-233.

12 Above n 4, 259.

13 Ibid, 253.

14 Lars Korsell, 'Big stick, little stick: Strategies for controlling and combatting environmental crime' (2001) 2(2) *Journal of Scandinavian Studies in Criminology and Crime Prevention* 127-148.

15 Above n 4, 259.

16 *Sherra v De Rutzen* [1895] 1 QB 918 at 922. Examples of regulatory offences include food adulteration and driving offences.

17 Lindsay Farmer, 'The Obsession With Definition: The Nature of Crime and and Critical Legal Theory' (1996) 5 *Social and Legal Studies* 57. The distinction between *mala in se* and *mala prohibitum*.

or is likely to cause serious environmental harm can receive a maximum fine of up to $1 million and/or 7 years imprisonment.[18]

Environmental criminologists have asserted that the study of law and legal reasoning is vital to green criminology,[19] and there is a need for scrutiny of criminal regulation and law enforcement.[20] The environmental criminologist Rob White has noted that 'legislative change and law reform may provide abstract solutions to environmental harm, but it is in the grounded activities of enforcement officers and courtroom practices that the law in theory becomes law in practice.'[21] There is a need for 'continuing research and critique'[22] and 'ongoing and close scrutiny' into how sentencing options translate into sentencing outcomes.[23] To this end, this paper presents a close reading of the Land and Environment Court Case *Bankstown City Council v Hanna* [2014] and associated legislation.[24] This paper focuses particularly on Chief Justice Preston's communication of the criminal blameworthiness of the offence and offender. This paper analyses not only the criminalisation of illegal dumping by the state through legislation, but the process through which illegal dumping becomes regarded as sufficiently culpable to justify criminal sanctions, that is, that it is a 'real' crime.

After a long history of previous convictions and penalty notices, Hanna was again charged with further illegal dumping offences by Bankstown City Council. *Hanna (2014)* and the associated legislation can be read as cultural texts which communicate with a variety of social audiences and convey a range of meaning. The legal theorist David Garland emphasises that penality not only has a negative capacity to suppress and silence deviancy, but also produces meaning and creates normality:[25]

> Penal signs and symbols are one part of an authoritative institutional discourse which seeks to organise our moral and political understanding and to educate our sentiments and sensibilities. They provide a continuous, repetitive set of instructions as to how we should think about good and evil, normal and pathological, legitimate and illegitimate, order and disorder.[26]

This paper reads *Hanna* (2014) for strategies of communicating criminality and blameworthiness. The process of communication requires us to consider both the audience of that communication and what is being communicated. The audience the criminal justice system is communicating with includes the offender, criminal justice officials, and the community more broadly.[27] Communication of culpability may operate as a form of deterrence - attempting to dissuade the specific offender but also other potential offenders – whether because potential offenders do not want to breach 'serious' criminal provisions or run the risk of serious penalties. *Hanna (2014)* also communicates with regulators that when illegal dumping is prosecuted it will be taken seriously, thus encouraging enforcement by regulators. The communication of criminality to the public informs people of the law so that

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18 Section 119 *Protection of the Environment Operations Act* 1997 NSW.

19 Above n 3.

20 Tanya Wyatt, Piers Beirne and Nigel South, 'Special Edition: Green Criminology Matters Introduction' (2014)ibid. 1-4.

21 Rob White, 'Prosecution and sentencing in relation to environmental crime: Recent socio-legal developments' (2010) 53 *Crime, Law and Social Change* 365-381, 376.

22 Ibid, 379.

23 Ibid, 375.

24 [2014] NSWLEC 152. Henceforth I will refer to the case in text as *Hanna* (2014).

25 David Garland, *Punishment and Modern Society* (Oxford University Press 1990).

26 Ibid., 252-253.

27 Victor Tadros, *Criminal Responsibility* (Oxford University Press, 2005) 71-73.

they do not unknowingly breach it, but also encourages reporting of breaches by the general public. In *Hanna (2014),* Chief Justice Preston's judgment clearly identifies the importance of communication to different audiences. This is particularly highlighted by the order that Hanna publicise his apprehension, prosecution and punishment for the offence by publishing notices in appropriate newspapers.[28] Preston CJ was concerned not only to (attempt to) prevent Hanna from reoffending but also to deter other transporters of waste from unlawfully transporting and dumping waste. The publishing of notices and the imposition of criminal penalties communicated denunciation of Hanna's conduct to the general public – reflecting and reinforcing statutory provisions that express the community's moral condemnation of conduct that causes harm to the environment and human health.[29]

This paper will focus particularly on *what* is communicated in *Hanna* (2014). The 'criminal law invites citizens not only to obey its norms, but explains why the norms that it is constituted by are worth recognising'.[30] I explore the ways in which the judgment aims to establish Hanna's culpability – that is, that Hanna is sufficiently blameworthy to justify the imposition of criminal sanctions. The legal materials not only label illegal dumping as criminal and attach severe sanctions, but are also accompanied by attempts to assert a substantive normative account of illegal dumping as blameworthy, particularly through establishing fault and harm.

II CASE STUDY: *BANKSTOWN V HANNA [2014] NSWLEC 152*

In *Hanna (2014)*, Hanna pleaded guilty to unlawfully transporting (s.143 *Protection of the Environment Operations Act 1997 NSW*) and depositing waste (s.142A POEO Act) containing asbestos on private land and a public park without obtaining a license at Henry Lawson Drive, Picnic Point. The owner of the private land had demolished and removed a cottage with the intention of developing it. Hanna owned and operated a transport business which generally transported solid waste. The truck had a capacity to carry about 11 tonnes and was owned and registered in his wife's name (as was most of their property). Hanna forced the fence around the property open and then deposited 8 loads of waste containing asbestos throughout the day. Hanna was caught by the neighbour of the property who had installed CCTV at 892 Henry Lawson Drive to watch over vehicles parked in the area. The CCTV captured Hanna reversing his truck and depositing waste. The CCTV recordings were given to Bankstown Council and the EPA.

Hanna had a long record of previous convictions and penalty notices for illegal dumping, and owed more than $200,000 in fines primarily relating to unauthorised transportation of waste:

> Mr Hanna has repeatedly over the last seven years unlawfully transported and dumped building waste. He has been issued with at least 29 penalty notices and prosecuted in courts at least 11 times for offences involving the unlawful transporting and dumping of waste, failing to pay fees for cleaning up waste that he has dumped, failing to comply with requirements made of him in the investigation of unlawful transporting and dumping of waste, or obstructing an authorised officer exercising powers to investigate unlawful transporting or dumping of waste.[31]

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28 *Hanna (2014)* at [8].
29 Ibid,[144].
30 Above n 27, 138.
31 *Hanna (2014)* at [1] per Preston CJ.

In addition, Hanna pleaded guilty to the charge of contempt of court in *EPA v Hanna [2013] NSWLEC 41* for failing to comply with the order of the LEC restraining him from unlawfully transporting and depositing waste.[32] The contempt charges were for the same conduct involved in *Hanna (2014)*. In *EPA v Hanna (2013)*, the EPA had requested a custodial sentence of 1-3 months, but Pain J gave a 3-month suspended sentence and placed Hanna on a good behaviour bond.[33]

At the time the offences were committed in 2012, imprisonment was not available for unlawful transporting and depositing of waste. The maximum penalty for both offences of unlawfully transporting waste and polluting land was $250,000 for an individual. In *Hanna* (2014), Preston CJ held that Hanna should be convicted for each offence and fined $77,0000 for the offence of unlawfully transporting waste to the private land; $48,0000 for the offence of polluting the private land; $60,000 for the offence of unlawfully transporting waste to the public land; and $40,000 for the offence of polluting the public park – a total penalty of $225,000. In addition, Hanna was ordered to publicise his apprehension, prosecution and punishment for the offences in newspapers and to pay the prosecutor's costs.

As a consequence of the perceived leniency of the penalties for Hanna's continued offending, particularly in response to *EPA v Hanna* (2013), the New South Wales government introduced the *Protection of the Environment Operations Amendment (Illegal Waste Disposal) Act* in September 2013. Amongst other reforms, the amendments created a new offence of repeat offending for illegal dumping with a custodial sentence of up to 2 years[34] and empowered the EPA to seize and impound vehicles used in illegal waste disposal by a repeat offender. The reforms were justified thus:

> Illegal dumping is a despicable criminal act. The Government is taking action to ensure that those people's illegal actions are dealt with by application of the full force of the law.[35]

I will now consider the processes of criminalisation apparent in the legal materials of *Hanna (2014)* and the legislative reforms. I argue that in order to ensure the 'application of the full force of the law' the legal materials express not only formal criminality, but have accompanied criminalisation with substantive normative claims.

III 'ILLEGAL DUMPING IS A DESPICABLE CRIMINAL ACT'[36]

A primary means of criminalisation available to the government is to formally identify behaviour as criminal. This process can be analysed through the positivist definition of crime:

> A crime (of offence) is a legal wrong that can be followed by criminal proceedings which may result in punishment.[37]

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32 *EPA v Hanna* [2010] NSWLEC 254. Henceforth I will refer to this case as *EPA v Hanna (2013)* in text.

33 New South Wales has a court designated to environmental offences.

34 Section 144AB Repeat waste offenders
(2) A person commits an offence against this section if the person is an individual who:
(a) has been convicted of a waste offence, and
(b) commits a waste offence on a separate subsequent occasion within 5 years after that conviction.
Maximum penalty: The maximum monetary penalty provided by this Act for the commission of the waste offence by an individual or imprisonment for 2 years, or both.

35 Robyn Parker, Minister for the Environment and Heritage, *Protection of the Environment Operations Amendment (Illegal Waste Disposal) Bill 2013*, Hansard, 30 May 2013, 21354.

36 Ibid.

37 Glanville Williams, 'The definition of crime' (1955) *Current Legal Problems* 107.

This strict legalist definition places law at the centre of the definition of criminality. It has also been mirrored in some definitions proffered of environmental crimes, such as, 'an environmental crime is an unauthorised act or omission that violates the law and is therefore subject to criminal prosecution and criminal sanctions'.[38] The positivist definition centres on procedural rather than substantive law, and focuses on formal authorities, namely legislation and case law. On this account, criminal law is defined by reference to the legal norms for identifying and punishing proscribed conduct rather than by reference to the inherent wrongful *quality* of that conduct. Crime is simply whatever the law makers at a particular time have decided is a punishable crime.

Although the positivist definition of crime is circular, it provides insight into the quasi-criminal status of illegal dumping. In New South Wales, illegal dumping, particularly Tier 1 offences can be followed by criminal proceedings which may result in punishment.[39] Although labelled criminal by the state through legislation, illegal dumping tends not to be thought of, or responded to, as criminal.[40] This quasi criminality is reiterated in a variety of ways. For example, illegal dumping is not recorded in official crime statistics.[41] Research suggests that 'magistrates were unsympathetic to the idea that environmental crime was *real* crime.'[42] Indeed, Hanna did not seem to appreciate the criminality of his actions:

> Indeed, Mr Hanna seems not to have realised that the many offences he has committed in the past, including for transporting and depositing waste unlawfully, and for which he has been punished by way of penalty notices and convictions and other orders made by the courts, are crimes. In his affidavit… he asked the Court "to take into account the fact that I have, in my time in Australia, had no criminal convictions whatsoever. Apart from the matter presently before the Court, I have not been brought to the attention of the authorities…"[43]

The quasi-criminal status of illegal dumping can be explained in part due to the blurring of the distinction between the civil and criminal. Critical to the positivist definition of crime is the distinction between criminal and civil wrongs – particularly as reflected in procedure and penality:

> One way of distinguishing criminal cases from civil is generally, and subject to exceptions and various hybrids, by reference to the procedure adopted – public prosecutor, conviction and sentence – rather than by reference to the content of the law itself.[44]

Throughout *Hanna (2014)*, Preston CJ uses the discourse of crime. He emphasises that the burden of proof is the criminal standard, that is, beyond a reasonable doubt. Preston CJ appropriately draws upon the *Crimes (Sentencing Procedure) Act 1999 (NSW)* and precedents

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38 Yingyi Situ and David Emmons, *Environmental Crime: The Criminal Justice System's Role in Protecting the Enironment* (Sage 2000).

39 Part 5.2 *Protection of Environment and Operations Act 1997 (NSW)*. All states and territories apart from Victoria include a custodial option for polluting and waste disposal offences.

40 For example, convictions of tier 3 offences are not part of a criminal record.

41 The extent of illegal pollution and waste disposal in Australia has received no formal analysis recently other than that published in regulatory reports. Above n 1, xiii. However, the LEC is at the forefront in developing an environmental crime database that records sentencing statistics of environmental offences in the LEC consistent with practices for other criminal offences. Justice Brian Preston and Hugh Donnelly, 'The establishment of an environmental crime sentencing database in New South Wales' (2008) 32 *Criminal Law Journal* 214-238.

42 Environmental Audit Committee, *Environmental Crime and the Courts* (House of Commons, London, 2004) 11. Emphasis in the original.

43 *Hanna (2014)* at [123].

44 Andrew Ashworth, 'Is the Criminal Law a Lost Cause?' (2000) 116 *Law Quarterly Review* 225, 232.

from criminal cases. He uses the language of criminality, labelling Hanna a 'persistent offender'[45] and referring to his 'total criminality'.[46]

However, the distinction between civil and criminal law is not always clear. Hayne J observed that distinction between civil and criminal is 'at best unstable':[47]

> It seeks to divide the litigious world into only two parts when, in truth, that world is more complex and varied that such a classification acknowledges. There are proceedings with both civil and criminal characteristics: for example, proceedings for a civil penalty under companies and trade practices legislation. The purposes of these proceedings include purposes of deterrence, and the consequences can be large and punishing.

The distinction has been blurred through the emergence of hybrid provisions – civil legal regulation is ultimately underpinned by the possibility of coercive enforcement via penalties for contempt of court.[48]

This blurring between civil and criminal is reflected in the regulatory structures of the EPA. As is the case in many jurisdictions, the EPA plays multiple roles as regulator and enforcer of environmental law,[49] using a range of administrative, civil and criminal enforcement tools to address environmental issues.[50] This regulatory structure and approach reflects academic discourse about best practice models of regulatory practices for the prevention and deterrence of environmental crime. Both Scholz's tit-for-tat enforcement strategy[51] and Ayers and Braithwaite's enforcement pyramid[52] are based on the premise that best-practice regulation must involve a mix of punishment and persuasion (although they differ on how intricate or

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45 *Hanna (2014)* at [6].

46 Ibid, at [7].

47 *CEO Customs v Labrador Liquor Wholesale Pty Ltd* (2003) 216 CLR 161 at 198 per Hayne J. Footnotes omitted.

48 The lack of clarity about the civil/criminal divide also arises in contempt of court proceedings, which depend upon procedure and fault to distinguish between the two.
The Court of Appeal in *Pang v Bydand Holdings Pty Ltd* [2011] NSWCA 69 considered whether a breach of an undertaking to a court was civil or criminal and held it to be civil contempt unless it involves contumacy, in which case it was criminal contempt. *Witham v Holloway* at 542 was cited for the statement that regardless of whether the contempt was civil or criminal the criminal standard of proof was required. The issue of proof of the contempt does not arise in this sentencing matter as Mr Mihalopoulos has pleaded guilty and there is no dispute about any factual matters.
Canterbury City Council v Mihalopoulos (No 3) [2012] NSWLEC 72 at 28 per Pain J.
In *EPA v Hanna (2013)*, Judge Pain found that Hanna was contumacious and therefore criminal and subject to criminal penalties.

49 The use of the preface 'illegal' before waste offences indicates a blurring of the line between lawful and criminal behaviour. Some component of these activities is still condoned and only becomes unlawful once a set boundary has been passed. Above n 1, 4.

50 Kris Dighe and Lana Pettus, 'Environmental justice in the context of environmental crime' (2011) 59(4) *United States Attorneys' Bulletin* 3-14; Above n 7.

51 John Scholz, 'Cooperation, deterrence and the ecology of regulatory enforcement' (1984) 18 *Law and Society Review* 179-224; John Scholz, 'Voluntary compliance and regulatory enforcement' (1984) 6 *Law and Policy* 385-404.

52 John Braithwaite, *Crime, shame and reintegration* (Cambridge University Press, 1989). John Braithwaite, 'Taking responsibility seriously: corporate compliance systems' in Brent Fisse and P French (eds), *Corrigible corporations and unruly law* (Cambridge University Press, 1985) 49-63; Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (Oxford University Press, 1992).

complex that mix needs to be).[53] Both models involve a transition from non-criminal regulatory strategies that emphasise an ongoing relationship between regulators and regulated and the use of persuasion, prior to any shift toward more punitive sanctions. Recent research recommends the use of criminal sanctions as complementary to administrative approaches.[54] The primary aim of agencies like the EPA is to change behaviour and ensure compliance. While a firm is cooperating regulatory models recommend that the enforcement agency should refrain from deterrent responses, particularly prosecution. Breaches should be dealt with through informal warnings, and if these fail, then formal warnings. Compliance will be secured through less intrusive interventions towards the base of the pyramid, with prosecution at the pinnacle. Punishment should be 'in the background until there is no choice but to move it to the foreground.'[55] However, punishment must be perceived as inexorable for those who do not cooperate and adjust their behaviour following intervention at the lower levels of the pyramid. These regulatory models blur the role of agencies such as the EPA – its role is neither fully civil nor criminal.

The blurring of the line between civil and criminal is also demonstrated in the investigation and enforcement of environmental offences. Although investigated and enforced by the state, the police, the usual arm of the state in criminal matters, are not involved. Environmental crimes are not enshrined in criminal legislation, but find a home in a mix of civil and criminal offences such as the *Environment Protection and Operations Act*. In addition, separate agencies are responsible for various aspects of illegal dumping, including the EPA, councils, and Regional Illegal Dumping Squads. The primary role of these agencies is to encourage compliance, and there is consensus that the capacity to undertake formal investigations such as intelligence gathering through increased scrutiny, random checks and formal raids is compromised by a lack of resources and the enormity of the job.[56] Agencies are reliant upon the public to report suspected environmental offences. This means that the public needs to know something is criminal and to whom to report it.[57] In *Hanna (2014)*, the investigation was done by a private citizen installing CCTV who reported the offence to the local council and the EPA. There is a very small chance of getting caught, but even if caught, there are very low rates of prosecution.[58] In line with best practice models a criminal response is the

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53 Persuasion is not only cheaper, but has been shown to be more effective in ensuring compliant behavior than criminal sanctions: Peter Grabosky and John Braithwaite, *Of manners gentle: Enforcement strategies of Australian business regulatory agencies* (Oxford University Press, 1986); Keith Hawkins, *Environment and Enforcement* (Oxford University Press, 1984).

54 Above n 46.

55 Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (1992) 47.

56 See for example, Robyn Bartel, 'Compliance and complicity: An assessment of the success of land clearance legislation in New South Wales' (2003) 20(2) *Environmental Planning and Law Journal* 116-136; Helena du Rees, 'Can criminal law protect the environment?' (2001) 2(2) *Journal of Scandinavian Studies in Criminology and Crime Prevention* 109-126; Neil Gunningham, 'Negotiated non-compliance: A case study of regulatory failure' (1987) 9(1) *Law and Policy* 59-67; Nicola Pain, 'Criminal law and environmental protection: Overview of issues and themes' (1993) *Environmental Crime*; above n 1. The recent homicide of Glen Turner, a compliance officer for the NSW Office of Environment and Heritage also highlights the lack of training, protection and capacity of officers to respond to threats from individuals they are seeking to regulate. http://www.abc.net.au/news/2014-07-31/tributes-for-slain-nsw-environment-officer-glen-turner/5637656

57 Bartel, ibid.

58 Penny Crofts and Jason Prior, *Environment Protection Authority responses to illegal dumping in NSW: An analysis of clean-up notices and prosecutions*, Report submitted to the NSW EPA (University of Technology, Sydney 2014).

last resort.[59] The EPA prosecution guidelines emphasise that the EPA has options to prevent, control and mitigate harm to the environment,[60] such as through prevention and clean-up notices issued to polluters requiring them to take action. In accordance with these guidelines, prosecution is highly selective and restricted, and there is heavy reliance upon civil and administrative responses. Between 2011 and 2015 there had been only one unsuccessful prosecution for illegal dumping offences undertaken by the EPA.[61]

The ALRC conducted a major inquiry into the use of civil and administrative penalties in the federal jurisdiction.[62] The Commission identified a lack of coherence and principles governing the use of such penalties. It recommended that the distinction between criminal and non-criminal penalty law and procedure should be maintained and reinforced and that parliament should exercise caution about extending the criminal law into regulatory areas unless the conduct being proscribed clearly merited the moral and social censure that attached to conduct regarded as criminal.[63] This conflicts with best practice regulatory models which recommend a mix of civil and criminal.[64] It also underplays or disregards the expressive role of law as producing meaning and organising moral understandings.[65] So-called regulatory/instrumental offences can develop an element of moral opprobrium over time. For example, 20 years ago driving under the influence of alcohol would have been seen as an essentially regulatory offence, while in contemporary life it has become heavily moralised.[66] I will now turn to the techniques used in *Hanna (2014)* and the associated legislation to communicate sufficient blameworthiness to justify the imposition of criminal sanctions.

IV COMMUNICATING THE CULPABILITY OF ILLEGAL DUMPING

Prosecutions, political debates, and legislative reforms have attempted to deploy the category of crime by establishing the criminal culpability of illegal dumping. I will argue that there are

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59 Crofts and Prior have noted the use of clean-up notices in preference to prosecution. Between 2011-2013, the EPA prosecuted only 8 cases in the LEC and 16 cases in local courts. Ibid. Farrier has detailed the more aggressive approach to prosecution of pollution offences in the late 1980s and early 1990s by the NSW State Pollution Control Commission at the instigation of the Minister for the Environment and the problems this caused: David Farrier, 'In search of real criminal law' in Tim Bonyhady (ed), *Environmental Protection and Legal Change* (Federation Press 1992).

60 *EPA Prosecution Guidelines March 2013*, NSW Environment Protection Authority: Sydney.
2.2.6 Parliament has recognised that prosecution may not always be the appropriate response. The EPA has a discretion as to how to proceed in relation to environmental breaches and section 219(3) of the POEO Act envisages that the EPA may pursue non-prosecution options to prevent, control, abate or mitigate any harm to the environment caused by an alleged offence or to prevent the continuance or recurrence of an alleged offence. Where the EPA uses these alternatives, prosecution by third parties is precluded under the POEO Act.
2.2.7 Prosecution will be used, therefore, as part of the EPA's overall strategy for achieving its objectives. Each case will be assessed to determine whether prosecution is the appropriate strategic response. It will be used as a strategic response where it is in the public interest to do so.

61 Crofts, above n 58, 26.

62 ALRC 95 (2002), *Principled Regulation: Civil and Administrative Penalties in Australian Federal Regulation*.

63 Statement of Principle, para 3.110.

64 Above n 4.

65 Above n 25 ; Penny Crofts, *Wickedness and Crime* (Routledge 2013).

66 Michael Greenberg, AR Morral and AK Jain, (2005) 66(5) 'Drink-driving and DUI recidivists' attitudes and beliefs: a longitudinal analysis' *J Stud Alcohol* 640. Results from multiple regression modeling showed significant protective effects associated with the beliefs that driving after drinking is immoral and that random police sobriety checks are a good idea (internal control items). Results also showed that a social desirability control measure was predictive of increased risk, at follow-up, for driving after drinking.

three strong narratives of criminality in the legislation and *Hanna (2014)* beyond the process of formal labelling. First, the possibility of very high penalties draws on the assumption that an offence must be wrong if it is penalised so severely. The latter two narratives emphasise the wrongfulness of illegal dumping through establishing the harmful consequences of illegal dumping and the subjective culpability of perpetrators. These narratives draw upon and are informed by principle that the criminal law should only be used to censure people for substantial wrongdoing.[67] I will consider each in turn.

A *Culpability Through Penalty*

A popular approach by contemporary governments in law and order politics is to assert wrongfulness through penality. This draws on what Ashworth has labelled a fundamental principle of criminal law – 'that maximum sentences and effective sentence levels should be proportionate to the seriousness of the wrongdoing'.[68] This linking of potential penalties with the perceived seriousness of the offence was expressed by Preston CJ in *Hanna (2014)*:

> The maximum penalty for the offences is relevant in determining the objective gravity of offences. The maximum penalty reflects the public expression by the New South Wales Parliament of the seriousness of the offence: see *Camilleri's Stockfeeds Pty Ltd v EPA* (1993) 32 NSWLR 683 at 698.[69]

Maximum penalties for illegal dumping have become increasingly serious, but the process of increasing available penalties has reinforced the disjunction between law on paper and the complexity of law in action.[70]

The Australian Institute of Criminology has noted a:

> [S]urfeit of infringement notices, with a smaller number of (non-court appointed) orders and a smaller number again of prosecutions. This distribution reflects a greater proportion of minor environmental offences than a channelling of punishments towards the lesser end of the penalty spectrum. It has been asserted, however, that the application of penalties for environmental offences has been somewhat unsystematic, with a tendency to resort of lenient sentencing options.[71]

If penalties are resorted to by Parliament to establish the seriousness of particular offences, then the leniency of prosecution and judicial responses to these potentially massive financial penalties and custodial sentences ostensibly indicates the continued perception of illegal

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67 Above n 4. Ashworth argues that core interlinked principles of criminal law have been breached with the proliferation of legal forms and structures.

68 Andrew Ashworth, 'Taking the Consequence' in Stephen Shute, John Gardner and Jeremy Horder (eds), *Action and Value in Criminal Law* (Clarendon Press, 1993) 123, 126.

69 *Hanna* (2014) at [58]. See also, *Environmental Protection Authority v Hanna* [2010] NSWLEC 98 [40] per Craig J.

70 Sentences should have regard to maximum penalties as a yardstick, but the court must arrive at a sentence that is just in all the circumstances. *Elias v R* (2013) 248 CLR 483 at [27]. See also *Markarian v R* (2005) 228 CLR 357.

71 Above n 1, 18. See also, M Hain and Chris Cocklin, 'The effectiveness of the courts in achieving the goals of environmental protection legislation' (2001) 18(3) *Environment and Planning and Law Journal* 319-338; Pain, above n 56; Bartel, above n 56; Robyn Bartel, 'Sentencing for environmental offences: An Australian exploration' (2008) *Sentencing Conference*; Helena du Rees, 'Can criminal law protect the environment?' (2001) 2(2) *Journal of Scandinavian Studies in Criminology and Crime Prevention* 109-126; above n 14.

dumping as somehow lacking in criminality.[72] However, available sanctioning options are informed by best-practice models and reflect the complexity of the role of agencies like the EPA, the primary aim is prevention and criminal law is not by nature a preventative tool.[73] The difficulty is that the emphasis upon civil penalties reflects and reinforces the quasi-criminal status of environmental offending. At the least severe level, enforcers can apply administrative sanctions such as warnings, cautions or advisory letters that alert the offender that a potential or actual breach has been detected and how their breach might be amended. These sanctions tend to be posted by regulatory officers for administrative, minor or technical breaches. At the next level are infringement or penalty notices – 'one-stop' fines for 'minor', one-off breaches. No criminal conviction is recorded on payment of the fine, but persons may elect to forgo the fine and have the case tested in court. Deliberate non-payment may also result in prosecution. Fines are the predominant penalty for environmental offences. Hain and Cocklin found that the actual fines handed down for offences tried under the *Protection of the Environment and Operations Act 1997* were a fraction of the maximum penalty (15% or less),[74] and this was reinforced more recently by Crofts and Prior for cases between 2011-2013.[75] The range of sentencing options requested by the prosecution and applied by the courts ostensibly reflects and reinforces the perceived lack of seriousness. However, the picture is more complex than this. The sentencing range may be limited by offender characteristics. For example, offenders prosecuted for waste offences may be either sole operators like Hanna or relatively poor individuals unable to afford large penalties. Other offenders prosecuted have been local councils, where penalties imposed will effectively be paid for by the general community.[76]

Best practice regulatory models recommend a mix of civil and criminal enforcement measures and the civil enforcement measures are clearly reflected in the legislation and the history of responses to Hanna. However, arguably what was missing in Hanna's case by 2013 was the top of Ayres and Braithwaite's pyramid – the inexorability of criminal punishment for those who do not cooperate and adjust their behaviour following intervention at the lower levels of the pyramid.[77] Hanna's cases can be read as a gradual moving up the pyramid of enforcement in response to sustained repeat offending by regulators, courts and the legislature.

The history of cases against Hanna reveals a very slow build in the imposition of penalties. In *Hanna (2014)*, Preston CJ lists some of Hanna's prior convictions and penalties for illegal dumping offences under the heading 'Mr Hanna's significant record of previous convictions'.[78] Penalties for 3 separate offences imposed by local court in September 2009 were of $8,000, $8,000 and $10,000, and a penalty imposed by local court in September 2010 of $5,000. In 2010, Hanna was found guilty of 4 separate incidents of dumping waste, including asbestos, on Commonwealth land, council land, and private land.[79] Craig J imposed financial penalties of $104,000 to be paid to the Environmental Trust to be used in its Emergency Pollution and Orphan Waste Cleanup Program, an alternative sanction to rehabilitate land. In addition, Hanna was required to pay the prosecutor cleanup costs of

72 Above n 14.
73 Pain, above 56; above n 58.
74 Hain, above n 71.
75 Above n 58.
76 Ibid.
77 Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (1992).
78 *Hanna* (2014) at [93].
79 *Environmental Protection Authority v Hanna* [2010] NSWLEC 98.

$8,282.60. Craig J also imposed an additional requirement that Hanna publish a notice in the local newspapers of his offence. In that case, the EPA also sought an order under s245 that whenever the defendant transports waste he disposes of it to a waste facility that is lawfully authorised to receive that waste, that is, a mandatory injunction that the defendant comply with the provision of s143 of the Act.[80] Judge Craig refused to make such an order:

> A provision of that kind is hardly apposite to a requirement for an order that a defendant, in the future, obey the provisions of the POEO Act. I am not persuaded either that I have the power to make such an order or that I should do so in the circumstances of this case.[81]

However, several months later, Hanna was again before the LEC for dumping building waste. Craig J then imposed the order for which Hanna was then found in contempt of court in the 2013 case.[82] By the time of *EPA v Hanna (2013)*, the EPA had shifted from civil sanctions to requesting a custodial sentence of 1-3 months. The EPA argued that a suspended sentence was not appropriate as sufficient punishment and that fines appeared to be ineffective. Justice Pain accepted that 'the contempt is serious' [54] and that 'fines had become meaningless as a deterrent' [68].[83] Justice Pain imposed a term of imprisonment of 3 months but:

> As this is the first occasion on which Mr Hanna has faced a gaol term for any offence and for contempt of court in particular, and… Mr Hanna's personal circumstances including that he is the sole financial support for this family, that sentence is suspended for the same period on condition that Mr Hanna enter into a good behaviour bond… [84]

As a consequence of Hanna's repeat offending and the decision in *EPA v Hanna (2013)*, Parliament introduced the possibility of a custodial sentence for waste offences and a new offence of repeat offending with custodial penalties.[84]

By the time of *Hanna (2014)*, it was clear that non-custodial penalties had not ensured compliance by Hanna. As at 2013, the State Debt Recovery Office had identified 41 enforcement orders belonging to Hanna that he had failed to pay and that were overdue. It was estimated that he needed to pay $300 per month from February 2013 until June 2072 to pay off his fines.[85] In determining appropriate penalties for Hanna's most recent offences, Preston CJ asserted the need for consistency in sentencing.[86] Consistency in sentencing by the specialist environment court[87] has been greatly assisted by the environmental crime

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80 Section 245(c) *POEO Act* The court may order the offender to take such steps as are specified in the order, within such time as is so specified (or such further time as the court on application may allow:
(a) to prevent, control, abate or mitigate any harm to the environment caused by the commission of the offence, or
(b) to make good any resulting environmental damage, or
(c) to prevent the continuance or recurrence of the offence.

81 *Environmental Protection Authority v Hanna* [2010] NSWLEC 98 at [90-91].

82 Ibid.

83 The purposes of sentencing are specified in section 3A *Crimes (Sentencing Procedure) Act* 1999.

84 Amendments to the POEO Act in 2013 created a new offence for repeat waste offenders (s144AB) allowing imprisonment for 2 years, and the *Protection of the Environment Operations (General) Amendment (Fees and Penalty Notices) Regulation 2014* increased penalties up to tenfold.

85 [180].

86 For the principles of consistency in sentencing see *Hill v R* (2010) 242 CLR 520.

87 Justice Brian Preston, 'Principled sentencing for environmental offences - Part 2: Sentencing considerations and options' (2007) 31 *Criminal Law Journal* 142-164; Justice Brian Preston, 'Characteristics of Successful Environmental Courts and Tribunals' (2014) 26(3) *Journal of Environmental Law* 365-395.

sentencing database.[88] However, a difficulty in sentencing for environmental offences of this kind is that there are a fairly low number of prosecutions. Preston CJ noted that this difficulty was exacerbated by the fact that four of the prior sentences were against Hanna. Preston CJ referred to six previous cases for offences under s143, all of which reflect the imposition of penalties that were only a fraction of the available penalties.[89] Penalties imposed by the Land and Environment Court in these cases ranged from $5,000 to a maximum of $80,000. If earlier penalties imposed are only a fraction of available penalties, then consistency of sentencing sustains the practice of not taking illegal dumping seriously. As a consequence of these prior sentences, Preston CJ determined that fines in the order of $75,000 and $90,000 were appropriate. Preston CJ imposed a total fine for the four offences of $225,000 (including a 25% discount for an early guilty plea).

The history of Hanna's cases and offending demonstrates a long, slow process in terms of requests for increasing penalties by regulators, gradual increases in penalties by the courts, in turn accompanied by increasing available penalties granted by the legislature. A 'big stick' of imprisonment is now available for repeat offenders such as Hanna. Liberal accounts view the criminal law as the ultimate prohibitory norm that should only be used as a last resort.[90] Hanna's serial offending is an example of a situation where a custodial penalty was now justified and was indeed a last resort. It is possible, given Preston CJ's comments that Hanna's offending was of 'medium seriousness' and his comments about Hanna's continued offending that if available, a custodial penalty may have been imposed:

> Clearly, Mr Hanna is impervious to criminal punishment that has been imposed on him in the past… Mr Hanna may likewise be impervious to the sentences that are imposed for the current offences.[91]

The question is whether or not the 'big stick' will be applied in future cases. Hanna's offending history and the enforcement responses can be read as a process of communicating criminality to the regulators, courts and parliament. Custodial penalties are now available and likely to be applied for in future and to be granted by the courts where appropriate.

The foregoing analysis highlights that it is not sufficient for parliament to rely solely on labelling particular behaviour criminal and attaching large potential penalties. Whilst this satisfies the formal elements of criminality, this formal account lacks the moral opprobrium associated with criminality, and the history of low enforcement, low prosecution and low penality for environmental offences highlights the need to establish substantive culpability. Hanna's history of offending fostered a perception of his criminality and the need for increasingly serious penalties to dissuade him (and others) from offending. I will now point to ways in which the legal materials (seek to) establish the wrongfulness or culpability of illegal dumping through narratives of harmful consequences and subjective culpability.[92]

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88 Above n 41.

89 *Hanna (2014)* at [161].

90 Andrew Ashworth and Jeremy Horder, *Principles of Criminal Law* (Oxford University Press, 5th ed, 2003) 32-37.

91 *Hanna (2014)* at [123].

92 The criminal legal theorist Fletcher influentially articulated three patterns of blameworthiness underlying criminal offences, that of, subjective culpability, harmful consequences and manifest criminality. The pattern of manifest criminality is based on the notion that an act that threatens the peace and order of community life should be penalised. The classic example is larceny, or acting like a thief. Early understandings of theft were based upon the single image of the thief coming at night, endangering the security of the home. Fletcher notes that manifest criminality was primarily expressed in two

B *The Harmful Consequences of Illegal Dumping*

The environmental legal materials draw upon a classic harm narrative to justify criminal sanctions. This pattern of criminality emphasises that an offender is culpable because of the harmful consequences he or she has caused.[93] J S Mill articulated a 'principle of liberty'[94] that the justifying purpose of any social rule or institution must be the maximisation of happiness. Human suffering should be minimised through the prevention of harmful conduct by the most efficient means possible. The content of criminal law should be circumscribed based on the principle that the coercive power of the state should only be invoked as a means of preventing 'harm to others' – and never to control harmless behaviour or to prevent person from harming herself. The 'harm principle' represents an accommodation of the concerns of the state whilst respecting individual freedom. The narrative of harmful consequences remains influential in contemporary criminal law, underlying serious offences including manslaughter and drug offences,[95] and providing a classic narrative to justify the extension of the reach of criminal law.[96]

Criminologists have noted that underlying the ambivalence towards environmental crime is the perception that it is 'victimless'.[97] To address this, environmental criminology has particularly emphasised the harmful consequences of environmental wrongs.[98] The limited literature available indicates that in addition to the subjective culpability of a perpetrator, the decision to prosecute is also informed by harmful consequences.[99] The criminalisation of

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characteristics. First, a characteristic form of conduct came to be associated with the act of thieving: thieves could be seen thieving; they could be caught in the act. Second, manifest criminality in the offence of larceny required the thief to tread on a significant boundary and enter a forbidden area. George Fletcher, *Rethinking Criminal Law* (Little Brown, 1978) 80-81. The discourse around Hanna could also be read as drawing upon manifest criminality. Hanna crosses property lines to dump waste that endangers the community. His behaviour can be constructed as manifestly wrongful.

93 Ibid. Fletcher has argued that the pattern of harmful consequences was the primary pattern of blameworthiness underlying historical and contemporary homicide law.

94 John Stuart Mill, *On Liberty* (Penguin, 1859/1982).

95 The complexity of Mill's harm principle is demonstrated particularly in drug law, where the harms of addiction are used to justify criminalisation, but theorists assert that the laws cause more harm than they prevent. See for example, Desmond Manderson, *From Mr Sin to Mr Big* (Melbourne University Press,1993); Stephen Mugford, 'Harm Reduction: Does it lead where its proponents imagine?' in N Heather et al (eds), *Psychoactive Drugs and Harm Reduction: From Faith to Science* (Whurr Publishers, 1993) 29.

96 Drink driving offences were and are justified on the basis of harmful consequences. Reforms to the 'defence' of intoxication were justified due to the harm inflicted by those who chose to become intoxicated. Paul Whelan, NSW Minister for Police, Second Reading speech, *Crimes Legislation Amendment Act 1996* (NSW). The more recent reforms introducing assault causing death (s25A) are informed by the notion that an accused is culpable for causing the prohibited consequence of death. Julia Quilter, 'One-punch laws, mandatory minimums and 'alcohol-fuelled' as an aggravating factor: implications for NSW criminal law' (2014) 3(1) *International Journal for Crime, Justice and Social Democracy* 81.

97 Rob White, 'Environmental Issues and the criminological imagination' (2003) 7(4) *Theoretical Criminology* 483; Rob White, *Environmental harm and crime prevention* (Willan Publishing, 2008).

98 Ibid, White (2008). The emphasis upon harmful consequences has been relied upon by criminologists to extend analysis beyond legal definitions of crime to consider actions which are harmful to the environment. See for example, ibid, White (2003); Lynch, above n 9.

99 In his analysis of the pollution control activities of the Regional Water Authorities in England and Wales, Hawkins noted that there were two situations where prosecution was seen to be appropriate: persistent failure to comply, and one-off pollution incidents causing substantial and noticeable damage, threatening

illegal dumping has been justified in terms of harmful consequences[100] and harm makes up three of the five elements that must be considered in imposing penalty under section 241 of the *POEO Act*.[101] Thus Preston CJ was required to take 'harm' into account when sentencing Hanna, but the definition of harm is elastic and subject to debate.[102] How Preston CJ communicated harmful consequences in *Hanna (2014)* is worthy of analysis.

Preston CJ devotes much of his judgment in *Hanna (2014)* to emphasising the harmful consequences of illegal dumping on a variety of different grounds. The judgment focuses on harm to the environment of dumping and potential threat to human health:

> The asbestos had the potential to be blown by the wind into the air causing potential harm to the health of nearby residents who might breathe it in. The degradation of the lands, therefore, resulted in potential harm to the health of human beings.[103]

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water supplies or involving the agency in heavy expenditure despite the fact that liability was effectively absolute: Hawkins, above n 53, 201.

In his analysis of enforcement of health and safety legislation in the UK between 1983 and 1998, Hawkins noted that whilst offence definitions required that the prosecution only prove a risk of harm, prosecutions only occurred where actual harm had occurred. Hawkins concluded prosecution was 'a matter reserved for the most dramatic cases, either where something appalling has happened (a worker badly injured or killed at work), where an egregious hazard threatens the workforce or public, or where an employer persistently fails to comply. Some cases almost demand prosecution, even in the face of legally weak evidence: very serious incidents, newsworthy cases prompting a great deal of public concern, multiple fatalities, an especially vulnerable victim, and so on. Note that these are all examples of accidents or other untoward events, where a risk has been realised.'

Keith Hawkins, 'Law as Last Resort' in R Baldwin, C Scott and C Hood (eds), *A Reader on Regulation* (1998) 441.

100 In justifying the amendments to the *Protection of the Environment and Operations Act*, the Minister for the Environment asserted:

The Government estimates that each year $100 million is lost to the New South Wales Government from incidents causing significant and long-lasting environmental harm, associated clean-up costs and unpaid waste levies…

The bill makes it clear that this Government will not tolerate serial waste dumpers – those who flout the laws that are there to protect the health of our communities and the health of our environment… We are all sick and tired of people who take the law into their own hands, flout the law, and illegal dump.

Robyn Parker, Minister for the Environment and Heritage, *Protection of the Environment Operations Amendment (Illegal Waste Disposal) Bill 2013*, Second Reading, 30 May 2013, 21354.

101 241 Matters to be considered in imposing penalty

(1) In imposing a penalty for an offence against this Act or the regulations, the court is to take into consideration the following (so far as they are relevant):

(a) the extent of the harm caused or likely to be caused to the environment by the commission of the offence,

(b) the practical measures that may be taken to prevent, control, abate or mitigate that harm,

(c) the extent to which the person who committed the offence could reasonably have foreseen the harm caused or likely to be caused to the environment by the commission of the offence,

(d) the extent to which the person who committed the offence had control over the causes that gave rise to the offence,

(e) whether, in committing the offence, the person was complying with orders from an employer or supervising employee.

102 See for example, Joel Feinberg, *Harm to Others* (Oxford University Press, 1984); Paul McCutcheon, 'Morality and the Criminal Law: Reflections on Hart-Devlin' (2002) 47 *Criminal Law Quarterly* 15. McCutcheon argues that the designation of a consequence as a 'harm' involves a societal judgment with moral dimensions.

103 *Hanna (2014)* at [66].

Preston CJ also emphasised that by ignoring clean-up notices Hanna had harmed specific victims – the owners had to pay a total more than $20,000 to remove the asbestos,[104] with no chance that Hanna would reimburse them.

> I find, beyond reasonable doubt, that the harm to the environment and human health and the financial loss to the owners of the lands caused by the commission of the offences are 'substantial' and an aggravating factor under s 21A(2)(g) of the *Sentencing Act*.[105]

In *EPA v Hanna (2013)*, Justice Pain also emphasised the harmful consequences of Hanna's behaviour by summarising the health risks associated with asbestos in several paragraphs, quoting the NSW Health Department's 'Asbestos and Health Risks'[106] and WorkCover NSW 'Working with Asbestos Guide'.[107] Justice Pain concluded:

> The removal of waste is potentially even more dangerous if the nature of the waste is unknown and it is not dealt with in an appropriate way; that is by assessing the risk of clean up and the wearing of personal protective equipment including masks and protective overalls. The dangers to human health are even greater where there is the possibility of asbestos fibres being released into the air. This is the case in circumstances where broken or damaged asbestos waste is being moved around.[108]

Preston CJ's judgment in *Hanna (2014)* is particularly interesting because he constructs an argument of harm in terms of breach of environmental law as a public wrong in and of itself. He noted that Hanna's offending 'thwarts the achievement of the objects of the POEO Act… and undermines the integrity of the regulatory scheme under the POEO Act'.[109] Preston CJ explains the importance of environmental law for the general public by analysing the reasons why Hanna had offended. Hanna illegally dumped waste to avoid the expense of tipping fees charged by licensed waste facilities – he profited from his crimes.[110] Preston CJ argues that this was a public wrong in terms of 'community's concept of fairness':

> This concept is applicable to environmental offences where all persons should bear the costs of complying with environmental law. An offender who operates a business unlawfully, such as unlawfully transporting and dumping waste without incurring the necessary costs and expenses to transporting waste lawfully and depositing it at a place that can lawfully be used as a waste facility, secures an unfair advantage compared to the offender's law abiding competitors who incur the costs and expenses of operating lawfully. The offender has been unjustly enriched. Punishment is necessary to remove that unjust enrichment from the offender and so secure a just equilibrium – a level playing field – on behalf of those who are willing to be law abiding.[111]

This argument is consistent with the idea of criminal law as a law of public wrongs. Duff has argued that a public wrong is not a wrong done to the public, but rather a wrong that is the proper concern of the public.[112] Preston CJ asserts that illegal dumping is a proper concern to the general public. It is in the public interest that people remove waste consistently with regulations, and those who breach these regulations that protect the community from harm

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104 Ibid, [67].
105 Ibid, [69].
106 Ibid, [29].
107 Ibid, [30].
108 Ibid, [31].
109 Ibid, [54].
110 Ibid, [80-81].
111 Ibid, [149].
112 Anthony Duff, *Punishment, Communication and Community* (Oxford University Press, 2001) 60-64.

should be punished. This is a broad concept of 'harm' that regards a breach of environmental regulations as inherently harmful, without the need to point to actual victims. The narrative of harmful consequences was thus relied upon in *Hanna (2014)* to communicate the criminality of illegal dumping.

C *Establishing fault through Subjective Culpability*

Preston CJ's judgment also communicates Hanna's individual criminality by emphasising his subjective culpability, even though he was charged with strict liability offences. A major critique of 'regulatory' offences is that they do not require *mens rea* and thus the wrongfulness or fault of an accused has not been established. An emphasis upon subjective culpability is a central (though disputed) tenet of self-representation of the legal system by judges and legal theorists.[113] It is ostensibly articulated in the Latin maxim that is often cited as fundamental to the criminal law: *actus not facit reum nisi mens sit rea* – stated by Blackstone 'as a vicious will without a vicious act is not civil crime, so on the other hand, an unwarrantable act without a vicious will is no crime at all'.[114] Subjectivism has also been asserted as a general principle of criminal law doctrine by the High Court:

> There is a presumption that *mens rea*, an evil intention, or knowledge of the wrongfulness of the act, is an essential ingredient in every offence… unless displaced by statute or subject matter.[115]

Underlying the emphasis upon *mens rea* is the harshness of holding an accused liable in the absence of any 'fault' on their part.[116] A person who engaged in prohibited conduct should not be convicted unless they intentionally or knowingly did the wrong thing. Thus an accused should not be liable for outcomes that were unintended or accidental. On this account, subjective standards are the norm in the criminal justice system, and offences such as strict and absolute liability, manslaughter by criminal negligence, constitute exceptions to the general principle that an accused ought not to be convicted of an offence where their conduct did not involve an element of moral culpability.[117]

The majority of environmental offences are strict liability,[118] and thus arguably do not satisfy the wickedness/moral opprobrium associated with the intradiscourse of the criminal law.[119]

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113 Ibid.; Crofts, above n 65. I am drawing upon Goodrich's idea of analysing how a legal system presents itself to itself in Peter Goodrich, *Legal Discourse* (Macmillan 1987) ch. 6.

114 William Blackstone, *Commentaries on the Laws of England. Book the Fourth* (Dawsons of Pall Mall, 1966 [1769]) 21.

115 *He Kaw Teh v R* (1985) 15 A Crim R 203 approving the statement in *Sherras v DeRutzen* [1895] 1 QB 918 at 921.

116 See also *Sweet and Parsley* [1970] AC 132, 148 per Lord Reid:
There has for centuries been a presumption that Parliament did not intend to make criminals of persons who were in no way blameworthy in what they did. This means that, whenever a section is silent as to *mens rea* there is a presumption that, in order to give effect to the will of Parliament, we must read in words appropriate to require *mens rea*.

117 *Lin Chin Aik v R* [1963] AC 160 at 174 per Judicial Commission of the Privy Council:
The continuing increase in the number of crimes defined without reference to any *mens rea* represents a disturbing phenomena. The existence of crimes of strict liability constitutes an important and wide ranging exception to the general principle that an accused ought not to be convicted of an offence where his or her conduct did not involve an element of moral culpability.

118 See for example, *Environment Protection Act* 1970 Vic. Argued by Hain above n 71, this adoption of strict and absolute liability has enabled a consistently high number of proven cases to be returned for cases of illegal pollution.

As a consequence of the perceived laxity in response to Hanna's serial offending, the government introduced a repeat offender offence.[120] Although the repeat offender offence is strict liability, the underlying presumption is that if a person continues offending after prior convictions then they wilfully breach the law, and thus have sufficient subjective blameworthiness to justify imposing criminal sanctions.

Even for those offences that are strict liability, enforcement practices often superimpose *mens rea* onto formal legislative requirements. As noted above, best practice regulatory models recommend selective prosecution. Keith Hawkins found that there was only prosecution of environmental offences in cases where there was evidence of an intentional violation of the law by the accused. This restriction applied notwithstanding the legal reality that these offences, being crimes of strict liability, did not technically require proof of intention.[121] Values and policies of prosecutors, not the substantive legal definitions, were determinative of prosecution:

> Practical criminal law – the enforcement of norms embodied in that branch of the law – is… founded not so much in the substantive acts it deems unlawful, but rather on the principles that define its proper realm and procedure.[122]

In seeking compliance from the lower end of the regulatory pyramid, regulators adopt an educational role – advising a person of a breach, how to fix it, and how to comply in the future. According to these regulatory models, by the time regulators choose to prosecute an offender has had ample opportunity to understand the law and what needs to be done, but has chosen not to comply. This was demonstrated in recent research by Crofts and Prior with cases prosecuted by the EPA having a history of notices to comply prior to prosecution.[123]

This emphasis upon subjective culpability beyond the formal requirements of the law is emphasised in response to Hanna's offending. Although not required, all the LEC cases against Hanna clearly establish his deliberate breach of environmental law. In the earlier case Justice Craig found that Hanna's illegal disposal of the waste was 'premeditated and deliberate'.[124] By the time of the 2014 case against Hanna, he was an established repeat offender. Preston CJ emphasised Hanna's premeditation with an analysis of the facts. Hanna was given about $300 per load to transport building waste – and it would have cost $300 per load to have disposed of the waste lawfully at the tip. 'He conceded that the only way he

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119 Unlike many other jurisdictions New South Wales has maintained *mens rea* in Tier 1 offences. These offences require that an accused wilfully or negligently committed a waste offence that harmed or was likely to harm the environment. The legislation reflects and reinforces the emphasis upon subjective fault in terms of culpability, differentiating between the penalties available based on whether the acts were wilful or negligent. The *Protection of the Environment and Operations Act 1997* (NSW) defines Tier 1 offences as mens rea offences, Tier 2 offences as strict liability and Tier 3 offences are absolute liability.

120 Section 144AB *Protection of the Environment and Operations Act 1997 (NSW)*

121 Hawkins, above n 53. See also W Carson, 'Some sociological aspects of strict liability and the Enforcement of factory legislation' (1970) 33 *Modern Law Review* 396. Carson found that legal proceedings under the *Factories Act* were usually only recommended in cases where previous warnings had been issued. Where there was no such prior warning, inspectors tended to recommend against legal action. Carson argues that this was a way to establish 'moral fault' and meet the criminal law's traditional concern with *mens rea* despite the absence of such a requirement in strict liability offences.

122 Hawkins, above n 99, 288.

123 Above n 58.

124 *EPA v Hanna* [2010] NSWLEC 98 at [43].

could have made money from the job was to dispose of the waste unlawfully and avoid the tipping fee.'[125]

Throughout the judgment Preston CJ underlines Hanna's subjective culpability. Preston CJ commented that 'a strict liability offence that is committed intentionally, negligently or recklessly will be objectively more serious than one not so committed.'[126] Hanna's actions were 'premeditated and intentionally done with knowledge of its illegality'.[127] Hanna also knew that the waste was not clean and could have reasonably foreseen harm caused or likely to be caused to the environment. Great emphasis was also placed on Hanna's prior convictions, he 'persistently and habitually offended',[128] which meant that he was under no doubt that his actions were unlawful. Preston CJ examined Hanna's claims of remorse at length, but concluded by stating 'his unremorseful actions speak louder than his remorseful words'.[129] Accordingly, although mens rea was not required great emphasis was placed on his premeditation, and sustained and deliberate flouting of law to establish Hanna's subjective culpability.

Although the bulk of environmental offences are strict liability, they are usually only prosecuted where the subjective culpability of the offender can be established. Subjective culpability also impacts on the sentences imposed on the offender. *Hanna (2014)* goes to great lengths to highlight Hanna's subjective blameworthiness as a basis for justifying the imposition of criminal sanctions.

V CONCLUSION

Hanna (2014) and associated legislative reforms demonstrate the process of the criminalisation of the regulatory offence of illegal dumping in formal and normative terms. Illegal dumping offences conform to the positivist definition of crime – they are legal wrongs that can be followed by criminal proceedings which may result in punishment. However, the positivist definition of crime also highlights the mixed administrative, civil and criminal approaches enshrined in the legislation and expressed in enforcement processes. This mix of approaches is in accordance with best practice models which recommend a mix of persuasion and encouragement of compliance, with prosecution and criminal penalties only as a last resort.

By 2013, Hanna had a long history of illegal dumping offences and had demonstrably failed to respond to council and EPA efforts to persuade him to obey the law. In *EPA v Hanna (2013)*, the EPA request for a custodial sentence could indeed be regarded as a last resort in the face of serial offending. However, the LEC refused to impose a custodial sentence for contempt of court. If severe penalties are used by Parliament to express the perceived seriousness and criminality of offenders, then the slowness of the EPA to apply for custodial sentences, and then the refusal by the LEC to impose incarceration in 2013 suggests that legal actors did not perceive illegal dumping as sufficiently blameworthy to justify incarceration. Accordingly, while regulators may be meeting the requirements of using civil techniques such as persuasion at the bottom of the regulatory pyramid, what was lacking was the inexorable application of serious sanctions for those who refuse to comply. *Hanna (2014)* and

125 *Hanna (2014)* at [24].
126 Ibid, [70].
127 Ibid, [73].
128 Ibid, [120].
129 Ibid, [118].

the creation of the new custodial offence for repeat offenders seems to indicate the patience of the LEC is now exhausted and if Hanna, or another serial offender were to appear before the court, a custodial sentence would be appropriate.

The long, slow process of responding to Hanna's actions as criminal has been a form of education and persuasion. *Hanna (2014)* is an exercise in communicating the criminality of illegal dumping to Hanna, other potential dumpers, the community and legal practitioners. His appearances in the LEC resulted in a great deal of media coverage on the television, radio and newspapers, emphasising his criminality in terms of his serial offending, deliberate breaching of laws and the harmful consequences of his behaviour in monetary and health costs. The softly, softly regulatory approach may not have persuaded Hanna to obey the law, but it has performed a process of criminalisation. Incarceration of Hanna in response to his most recent charges would not be perceived as harsh and unnecessary, but instead as a necessity. This process has accomplished the substantive criminalisation of illegal dumping, such that legal and non-legal actors now perceive this type of behaviour as sufficiently blameworthy as to justify the application of the serious criminal sanction of imprisonment in response to serious offending.

COUNTRY OF ORIGIN LABELLING AND PURCHASING CUT FLOWERS IN AUSTRALIA: WHAT ARE THE SOCIAL AND MORAL CONSIDERATIONS FOR CONSUMERS?

JULIA WERREN*

Buying cut flowers is often central to celebrating significant life events or occasions around the world. Many of us though would be unsure or perhaps ambivalent about where these flowers are grown or who actually grows them. In Europe and America there has been widespread attention given to this issue as a result of campaigns that were directed to consumers relating to the working conditions and rates of pay that many cut flower workers receive. To date, these issues have not received the same amount of attention in Australia that they have received in the aforementioned regions. The main question that this article will address is whether or not this apparent lack of consumer awareness about where our cut flowers are sourced and the working conditions in the industry is a problem in need of reform. In order to analyse this issue, this article will discuss some of the concerns that have been addressed in the literature relating to the cut flower industry in some overseas jurisdictions and will then go on to discuss whether or not these issues are relevant in the Australian context and to the Australian cut flower industry. The article will also comment on whether country of labelling for cut flowers in Australia should be made mandatory as it is for edible products. In this regard corporate social responsibility and consumer responsibility theories will be discussed in order to canvass what the possible areas for reform may be in Australia.

I INTRODUCTION

In the past decade there has been attention focused on the safety and conditions of workers within the cut flower industry in countries such as Colombia, Kenya and Ecuador. The concerns that have been highlighted about the industry have gained traction in countries such as the United States and the United Kingdom which led to consumer campaigns that in many cases have had a direct positive impact on cut flower workers' working conditions in developing countries. Interestingly though, the same level of awareness of these issues has not reached Australia. Whether or not this is a problem is a matter of contention, however, in the opinion of the author there has been a shift towards consumers wanting to know where the goods that they purchase are derived from, which would indicate that this lack of awareness is a problem. In Australia, consumers of cut flowers are often not in a position to

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overseas jurisdictions such as Colombia or Ecuador, but it is currently impossible for consumers to be able to draw this distinction.

This article will discuss some of the issues that have been raised in the literature surrounding the cut flower industry in the primary cut flower growing areas. The article will then look at whether or not these issues are of concern in the context of the rise of corporate social responsibility and consumer responsibility considerations. In conclusion the article will suggest that in order for Australian consumers to be more aware of where their cut flowers are coming from, the labelling requirements should be reformed to include country of origin labelling.

II SOME ISSUES THAT HAVE BEEN DISCUSSED IN THE LITERATURE ABOUT THE CUT FLOWER INDUSTRY IN SOME OVERSEAS JURISDICTIONS

A *An Overview of the Cut Flower Industry*

The commercial cut flower industry is a relatively new industry in many parts of the world. The industry has been embraced by developing countries for many reasons which include its adaptability to a wide variety of land sizes and business structures, the availability of government subsidies as well as its attractiveness to overseas investors. The industry has grown significantly in the last twenty years and in 2000 the global flower trade was assessed to be worth US$7 billion.[1] There are many countries involved in the global flower trade but the industry is concentrated in the Netherlands, Colombia, Israel, Ecuador, Spain and Italy.[2] To a lesser extent, the industry is also becoming more popular with producers in developed countries such as Australia. For example, Australia's cut flower industry has been referred to as an increasingly important, but small, entity in the cut flower trade.[3]

The expansion of the cut flower industry has had a number of positive economic impacts on the countries that house the industry.[4] There have, however, been numerous reports and articles written about the problems that exist within the industry, especially in developing countries. Some of the problems that have been canvassed by the literature include occupational health and safety, labour standards, discrimination and harassment. It is interesting to note that many of the aforementioned problems that are associated with the industry are not prevalent in the Australian industry. Nonetheless, the labour standards and economic structures of many of these developing countries do allow them to more effectively compete in relation to price than the Australian cut flower growers that are subject to considerable regulations. It also should be noted that some of the more recent literature has highlighted successful strategies that have been put in place to address some of the employment issues.

A large proportion of workers in the cut flower industry are women, which is an important consideration when addressing the concerns within the industry. For example, in Tanzania,

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[1] Note that there is a lack of reliable resources and data in this area; Bettina Gollnow, *Exporting Cut Flowers* (21 October 2002) Primary Industries Agriculture <http://www.dpi.nsw.gov.au/agriculture/horticulture/floriculture/industry/export>.

[2] Ibid.

[3] Ibid.

[4] V Meier, 'Cut-Flower Production in Colombia—a Major Development Success Story for Women?' (1999) 31 *Environment and Planning* 273, 273.

60% of workforces in the cut flower industry are women.[5] In Zimbabwe, 79% of the workers in the floriculture industry are women.[6] Finally, in Colombia up to 80% of the workers are female.[7] At the beginning of the cut flower industry in Colombia, the female workers were predominantly the wives and daughters of local male sharecroppers or tenants.[8] In modern times however, the female workers are more likely to be rural-urban migrants.[9] Many of these workers may choose to work on the cut flower farms as opposed to domestic service, which is even lower-paid than unskilled work on the flower farms.[10] Importantly, many of the women working in the cut flower industry are single mothers.[11] Furthermore, employment in the cut flower trade may also mean that women do not have to seek employment within the drug trade.[12]

However, even though there may be positive aspects for women relating to the cut flower industry there are many concerns relating to the industry that have been addressed in the relevant academic literature.

III CONCERNS ABOUT THE CUT FLOWER INDUSTRY THAT HAVE BEEN ADDRESSED IN THE LITERATURE

A *Environmental Concerns*

The sustainability of flower farms from an environmental viewpoint is an issue that will no doubt be of increasing significance on cut flower farms in future years. This is especially the case since flower farms are large-scale users of crop protection agents and fertilisers.[13]

Specific concerns about the environmental sustainability of the cut flower industry have already been raised in the literature. For example in Kenya, the fishing communities around Lake Naivasha in the Rift Valley have raised concerns about the spread of the water hyacinth.[14] Apparently, this weed prospers when it is exposed to phosphates and nitrates which are in constant use on the flower farms.[15] This in turn has a grave impact on the fishing stocks within the lake.[16]

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[5] Tanzanian Plantation and Agricultural Workers Union, *Action Research Report: Factors Affecting Labor Conditions in Horticulture Industry in Tanzania* (February 2011), 7 <http://www.women-ww.org/documents/Research-Booklet-TPAWU.pdf>.
[6] The Food and Agricultural Organization of the United Nations, the International Fund for Agricultural Development and the International Labour Office, *Gender Dimensions of Agricultural and Rural Employment: Differentiated Pathways out of Poverty Status, Trends and Gaps* (2010).
[7] Caroline Wright and Gilma Madrid, 'Contesting Ethical Trade in Colombia's Cut-Flower Industry: A Case of Cultural and Economic Injustice' (2007) 1(2) *Cultural Sociology* 255, 257.
[8] Ibid 257.
[9] Ibid 257.
[10] Ibid 257.
[11] Nora Ferm, 'Non-traditional agricultural export industries: Conditions for women workers in Colombia and Peru' (2008) 16 *Gender & Development* 13, 15.
[12] Ibid 261.
[13] Robert Davies, 'The Impact of Globalization on Local Communities: A Case Study of the Cut-Flower Industry in Zimbabwe' (ILO/SAMAT Discussion Paper No 13, International Labour Organization, 2000) 25.
[14] Christine Gichure, 'Ethical Sourcing and Moral Responsibility in Global Business: Is 'the Common Good' the Missing Factor? The Case of the Cut Flower Industry in Kenya' in G Moore (ed), *Fairness in International Trade* (Springer Science + Business Media, 2010) 69, 72.
[15] Ibid.
[16] Ibid, 72.

There is some suggestion that social and environmental labelling can also have positive environmental ramifications, as the labels can help to isolate which flower farms have been environmentally responsible.[17]

B *Occupational Health and Safety Concerns*

1 *Introduction*

There are wide scale concerns relating to the cut flower industry and the health and safety of its workers. Many of these concerns came to light in the mid-1990s.[18] The concerns highlighted in the literature relate to both the whole of workplace as well as women specifically. Our discussion will begin with an examination of the use of pesticides and other chemicals within the industry.

2 *Pesticides and Chemical Usage*

Pesticides and fertilisers are used intensively in the cut flower industry.[19] When the cut flower industry was in its infancy, workers did not understand the ill effects that incorrect use of pesticides may have on their health.[20] Meier documents instances where workers used 'freshly sprayed flower leaves to clean their hands.'[21] Today, workers and other stakeholders understand the problems that incorrect and unsafe pesticide usage may have on workers' health, but the literature indicates that there are still many safety concerns with the use of pesticides in the industry.

This is especially the case when protective clothing is not worn and adequate training is not provided for the workers.[22] Korovkin has suggested that the farms that do provide their workers with adequate safety equipment are in the minority.[23] When protective clothing is supplied, there can also be issues in relation to the comfort levels the clothing creates and the adequacy of the equipment. According to some employers it is difficult to get the workers to wear some of the protective clothing, as the sprayers may find the clothing to be hot and uncomfortable, whilst the flower graders may find that the work takes them too long if they wear gloves.[24] Rose growers have also noted that chemical-resistant gloves are 'not supple and durable enough for rose harvesting.'[25] The other concern is that casual workers are rarely provided with protective clothing.[26] In addition, workers have documented that they have been directed

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[17] Davies, above n 13, 25.
[18] Christopher Riddselius, *Certification Process of International Standards in the Kenyan Cut Flower Industry* (Master's Thesis, Stockholm University, 2011).
[19] Davies, above n 13, ix.
[20] Meier, above n 4, 284.
[21] Ibid, 284.
[22] Wright and Madrid, above n 7, 259.
[23] Tanya Korovkin, 'Creating a Social Wasteland? Non-traditional Agricultural Exports and Rural Poverty in Ecuador' (2005) 79 *European Review of Latin American and Caribbean Studies* 47 ,55.
[24] Catherine Dolan, Maggie Opondo and Sally Smith, 'Gender, Rights & Participation in the Kenyan Cut Flower Industry' (Natural Resources Institute Working Paper No 2768, Natural Resources Institute, 2002), 46.
[25] John Megara, 'Silver Anniversary: Comment: The Rose Industry Exception for Early Entry Into Pesticide Treated Greenhouses: Romance in Regulation' (1998) 25 *Boston College Environmental Affairs Law Review* 941, 986.
[26] Angela Hale and Maggie Opondo, 'Humanising the Cut Flower Chain: Confronting the Realities of Flower Production for Workers in Kenya' (2005) *Antipode* 301, 312.

to re-enter greenhouses straight after spraying and that they also work in the fields without shoes or gloves on.[27]

The symptoms of pesticide poisoning include delayed neurological deficits, increased risks for some cancers and reproductive complications.[28] Often proving the causal connection between prolonged pesticide exposure and the aforementioned health complaints is difficult, to say the least.[29] As Dr Bolivar Nera, who is a health specialist at the Health Environment and Development Foundation in Quinto has stated: 'No one can speak with conclusive facts in hand about the impact of this industry on the health of the workers, because we have not been able to do the necessary studies.'[30]

Korovkin has stated that there have been reports of workers suffering from bad headaches, dizziness, nausea and blurred vision after working with pesticides on the flower farms.[31] Other workers have reported health problems such as skin, eye and upper respiratory tract infections as well as irregular menstrual cycles for women.[32] In 2002, within the areas where the flower farms are situated in Colombia, doctors reported that in some instances there were up to five cases of acute poisonings per day.[33] It has also been suggested that pesticide-related health problems are the reason why many workers are no longer working on the flower farms.[34]

The other concern is that it is not only the flower workers who may be exposed to the pesticide residue. The families of workers can also be exposed to pesticides as a result of pesticide residues being brought into the family home on the clothes, shoes and skin.[35] Also if the workers and families are living near the farms, pesticide residue may also drift into their homes from nearby farms.[36]

There has also been some suggestion that the health of children who reside in high pesticide exposure communities have been reported as poorer than other children who do not reside in these communities.[37] Children aged 3–23 months in communities with high pesticide exposure scored lower on gross motor, fine motor and socio individual skills as opposed to children outside of the exposed areas.[38] Children can be exposed in these communities from open irrigation ditches and water systems.[39]

3 *Working Environment*

[27] Ibid 308.
[28] Thomas Arcury et al, 'Reducing Farmworker Residential Pesticide Exposure: Evaluation of a Lay Health Advisor Intervention' (2009) 10 *Health Promotion Practice* 447, 448.
[29] Ibid 448.
[30] Ginger Thompson, "Behind Roses' Beauty, Poor and Ill Workers' , *The New York Times* (online), 13 February 2003 <http://www.nytimes.com/2003/02/13/international/americas/13ROSE.html>.
[31] Korovkin, above n 23, 55.
[32] Hale and Opondo, above n 26, 308.
[33] Ferm, above n 11, 17.
[34] Korovkin, above n 23, 55.
[35] Arcury et al, above n 28, 447.
[36] Ibid.
[37] Alexis Handal et al, 'Effect of Community of Residence on Neurobehavioral Development in Infants and Young Children in a Flower-Growing Region of Ecuador' (2007) 115 *Environmental Health Perspectives* 128, 128.
[38] Ibid 128.
[39] Ibid 129.

The working conditions and environment on the cut flower farms may also have significant occupational health and safety implications. For example, the high intensity of work may lead to health problems such as repetitive strain injuries.[40] This is caused by the fast pace and 'awkward movements' that are required when engaging in highly productive flower picking, as an example.[41] Mena and Proaño assert that these and other work conditions may have physical and mental ill effects on cut flower workers.[42]

The working conditions within the greenhouses may also have adverse impacts on worker's health.[43] The use of pesticides within the confined spaces of a green house is one area of concern.[44] In addition, the extremes of cold and heat within the greenhouses may have health and wellbeing implications.[45]

4 *Occupational Health and Safety Concerns and Reproductive Outcomes*

There has been some suggestion that the reproductive health outcomes of women who work in the cut flower industry in countries such as Colombia are cause for concern.[46] Mauricio Restrepo et al conducted a study of 8867 people, 2951 men and 5916 women, who were working in the cut flower industry in the Bogatá area of Colombia for at least six months.[47] Statistics relating to foetal loss, prematurity and congenital malformations were analysed among the offspring of workers in the Bogatá district of Colombia.[48] These workers were exposed to 127 different types of pesticides.[49] This study found that spontaneous abortions and foetal malformation moderately increased within pregnancies that occurred after the workers entered the cut flower industry.[50] This study needs to be looked at with some caution though as it was conducted more than 20 years ago and the accurate recording of spontaneous abortions may be subject to error.[51] Note however, that recent studies have also highlighted the same issues in relation to reproductive health and pesticide usage in the cut flower industry.[52]

Similar studies have been undertaken in Ecuador. In a study conducted by Handal and Harlow it was found that once adjustments for age were factored in, women working in the cut flower industry had a 2.6 fold increase in the odds of having a miscarriage than women who were working outside the industry.[53] The research also indicated that the odds of having a spontaneous abortion increased the longer a woman was working within the cut flower

[40] Wright and Madrid, above n 7, 259.
[41] Molly Talcott, 'Gendered Webs of Development and Resistance: Women, Children, and Flowers in Bogata' (2003) 29(2) *Signs: Journal of Women in Culture and Society* 465, 471.
[42] Norma Mena and Silvia Proano, 'Sexual Harassment in the Workplace: The Cut Flower Industry' (Case Study, International Labor Rights Fund, April 2005), 11.
[43] Wright and Madrid, above n 7, 259.
[44] Molly Talcott, anove n 41, 472.
[45] Wright and Madrid, above n 7, 259.
[46] Mauricio Restrepo et al, 'Prevalence of Adverse Reproductive Outcomes in a Population Occupationally Exposed to Pesticides in Colombia' (1990) 16 *Scandinavian Journal of Work, Environment and Health* 232, 232.
[47] Ibid.
[48] Ibid.
[49] Ibid.
[50] Ibid.
[51] Ibid 236.
[52] Wright and Madrid, above n 7, 259.
[53] Alexis J Handal and Sioban D Harlow, 'Employment in the Ecuadorian Cut-Flower Industry and the Risk of Spontaneous Abortion' (2009) 9(25) *BMC International Health and Human Rights*, 1.

industry.[54] Thus, women who had been working in the industry for 4–6 years reported that the odds of miscarrying were 3.4 times the odds of people not working in the cut flower industry.[55]

There is also some suggestion that paternal cut flower workers may also have adverse reproductive outcomes.[56] In other words, a male worker may influence pregnancy loss through contaminated seminal fluid and/or bringing contaminated clothing and equipment into his domestic premises.[57] Note that there has been some suggestion that rather than as a result of pesticide usage, the higher spontaneous abortion rate may be as a result of long work hours and physical strain that often accompanies workers in the cut flower industry.[58] Working in greenhouses is hot and exhausting work, and this could also help to explain the aforementioned results.[59]

C *Discrimination and Pregnant Workers*

Some studies have suggested that women who become pregnant whilst working on the cut flower farms have either been fired or forced to pay for a replacement worker during their maternity leave.[60] Also, if pregnant women are in temporary employment, in many instances this worker will not be offered another contract with the flower farm once her contractual term is finished.[61] Hale and Opondo stated that because of this fact, abortions are common in the cut flower industry.[62]

According to some commentators, cut flower employers may ask women to undertake a pregnancy test and/or prove that they have been sterilised before they are given a job in the sector.[63] This notion was affirmed in a Corporación Cactus poll, which concluded that 85% of workers had been asked to perform a pregnancy test before they were employed in the sector.[64] It is unclear from the literature what the motivation behind conducting these tests is, but some reasons may be concerns for the health and safety of the worker as well as the company's unwillingness to be subject to workplace disruptions.

Arguably, some of these concerns have been addressed by social codes that have recently been introduced. Most codes mandate that women cannot be discriminated against whilst pregnant when applying for a job or whilst they have a job in the industry.[65] Furthermore, many of the codes indicate that pregnant women should be given duties that are appropriate for pregnant workers.[66] Whether or not, in practice this actually happens is the subject of some debate.[67]

Access to adequate childcare is another concern of many mothers who work in the industry. In some instances, if adequate childcare cannot be found, mothers are forced to leave their

[54] Ibid.
[55] Ibid.
[56] Ibid.
[57] Ibid.
[58] Ibid 3.
[59] Ibid 3.
[60] Mena and Proano, above n 42, 12; Also see Ferm, above n 11, 18.
[61] Dolan, Opondo and Smith, above n 24, 49.
[62] Hale and Opondo, above n 26, 311.
[63] Ferm, above n 11, 18.
[64] Ibid.
[65] Dolon, Opondo and Smith, above n 24, 47.
[66] Ibid.
[67] See for example the discussion in ibid, 47; Also see Hale and Opondo, above n 26, 311.

children in the care of family members who are often residing in rural areas away from the cut flower growing.[68]

D *Sexual Harrassment*

Sexual harassment issues within the cut flower industry have been the subject of ongoing concern. Dolan, Opondo and Smith found in their study of the Kenyan cut flower industry that sexual harassment was reported on all of the farms that they studied.[69] Also in a recent study in Tanzania, sexual harassment was reported as being a serious concern within the industry.[70]

Sexual harassment is usually targeted at young, widowed or divorced women on the farms.[71] The type of work the female worker is undertaking also has a direct correlation with the likelihood that she will be the victim of sexual harassment.[72] For example, women who earn lower wages, are in lower status jobs or with precarious employment are most likely to be sexually harassed within the industry.[73]

Sexual abuse and other forms of harassment are made possible in the cut flower industry due to the work conditions. In the cut flower industry many cultivation activities are done in isolation from other people.[74] Furthermore, long working hours that may extend into the evening and the burden of achieving high levels of production may also allow workers to be the subject of sexual harassment and abuse by their superiors.[75] In a Kenyan study: 'one picker recounted how she has had difficulties with her male supervisor ever since she refused his sexual advances and now lives in fear of dismissal.'[76] Furthermore, in Tanzania women may be incited into providing sexual favours by their superiors by promises of 'maintaining their status' and being able to work 'under less severe conditions.'[77] Sexual harassment concerns have also been reported in literature relating to the Colombian cut flower industry.[78]
A study of the Ecuadorian cut flower industry, where 101 flower workers were interviewed, found that 55% of flower workers were victims of sexual harassment in the workplace.[79] When the results were isolated to 20–24 year old flower workers, the incidence of sexual harassment was even higher at 71%.[80] The same study indicated that very few of these women (5%) reported incidences of sexual harassment to their managers.[81] It should be noted that these figures also reflect reported cultural norms in Ecuador where violence against women is a normal cultural practice.[82]

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[68] Dolon, Opondo and Smith, above n 26, 51.
[69] Ibid 8.
[70] The Food and Agricultural Organization of the United Nations, the International Fund for Agricultural Development and the International Labour Office, above n 6, 37.
[71] Ibid.
[72] Ibid.
[73] Ibid.
[74] Mena and Proana, above n 42, 12.
[75] Ibid 1.
[76] Dolon, Opondo and Smith, above n 26, 39.
[77] The Food and Agricultural Organization of the United Nations, the International Fund for Agricultural Development and the International Labour Office, above n 6, 37.
[78] Meier, above n 4, 284.
[79] Mena and Proana, above n 42, 1.
[80] Ibid 1.
[81] Ibid 1.
[82] Ibid 1.

Korovkin has also indicated that there is a stigma attached to workers in the cut flower industry because of the supposed amount of sexual misconduct that takes place on the flower farms.[83] This not only relates to sexual assault cases, but also consensual sexual unions.[84] In Ecuador the instance of consensual sexual union in the cut flower industry is higher than among other peasant women.[85]

These and other factors have reportedly led to the erosion of communities and families in some flower farm areas.

E *Erosion of Community and Families*

The erosion of community networks and families has also been reported as being a problem on cut flower farms. For example, in Ecuador, absentee fathers have long been a problem.[86] There is also some evidence to suggest that with the arrival of the cut flower farms, due to long working hours, mothers are now also absent from their children.[87] In one report from Ecuador, 90% of female cut flower workers indicated that they had to work on the weekends, which would have a significant impact on families.[88] Overtime is even more of a problem during peak times of production, such as Valentine's Day and Mother's Day.[89] These issues are exacerbated by the difficulties of accessing childcare in many of the countries where the flower farms are present.[90] The concerns surrounding the functionality of families of cut flower workers are highlighted by the fact that there is some evidence to suggest that children of cut flower workers are more likely to be malnourished than children of other peasant workers.[91]

Community activities and organisations are reported to be disintegrating in cut flower areas, as workers ordinarily do not have the time to participate in community activities and organisations.[92] For example, in Ecuador, since the inception of the cut flower industry, it is virtually impossible for workers within the industry to participate in community labour and assemblies as these are generally held on the weekends.[93] In Ecuador two thirds of the community (aside from cut flower workers) attend community labour and meetings, whereas only one third of flower workers participate in the aforementioned community events.[94] In addition to this 'community relations' which include networks that may help with childcare and credit, may erode when workers don't have time to participate within the community.[95]

There is also some concern that in Ecuador the rise of cut flower farms has been accompanied by a rise in social violence.[96] In addition, concerns have been expressed about the rise of gangs

[83] Korovkin, above n 23, 57.
[84] Ibid.
[85] Ibid.
[86] Ibid.
[87] Ibid.
[88] Ibid 57-58.
[89] Ibid 58.
[90] Ibid.
[91] Ibid.
[92] Ibid 60.
[93] Korovkin, above n 23, 30.
[94] Ibid 31.
[95] Thalia Kidder and Kate Raworth, ' Good Jobs' and Hidden Costs: Women Workers Documenting the Price of Precarious Employment' (2004) 12 *Gender and Development* 12, 16.
[96] Korovkin, above n 23, 58.

and prostitution in cut flower growing areas.[97] Many of these concerns are directly related to the labour standards that are present within the industry.

F *Labour Standards*

5 *Introduction*

In relation to benchmark labour standards, the International Labour Organization (ILO) has prescribed certain conditions which indicate whether or not 'decent work' is available within an industry. The objective of the ILO's Decent Work Framework is: 'employment that takes place under conditions of freedom, equity, security and dignity, in which rights are protected and adequate remuneration and social coverage are provided.'[98] This framework also includes freedom of association and the right to collective bargaining as part of its function.[99] Whether or not the cut flower industry has achieved these provisions is the subject of some debate.

6 *Levels of Renumeration*

One of the objectives at the inception of the cut flower industry in developing nations was to increase the economic position of the countries who became involved in the industry. It is unlikely that this objective has been achieved in relation to individual workers though. In fact, Tanya Korovkin has suggested that rather than the cut flower industry helping to alleviate poverty in developing nations, it actually encourages poverty.[100] In addition, Gichure has suggested that a 'new form of poverty is emerging, occasioned by the notion of global business.'[101] It has been suggested that even though the industry creates employment opportunities, the level of remuneration does not allow workers to live above the poverty level.[102] The wages in the cut flower industry are very low, even though the workers are usually paid the minimum wage within the jurisdiction.

In particular, in many countries the workers do not receive a 'living wage' in the cut flower industry. A living wage is one that 'enables workers and their dependants to meet their needs for nutritious food and clean water, shelter, clothes, education, health care and transport, as well as allowing for a discretionary income.'[103] For example, in Tanzania, workers are paid as low as 65 000 Tanzanian Shillings per month, which does not meet the workers' basic needs.[104] The 'living wage' for an average Tanzanian family is approximately 315 000 Tanzanian Shillings per month.[105] In Colombia, cut flower workers generally receive the minimum wage, but the wage is less than adequate in terms of achieving an adequate living standard.[106] Ferm has indicated that cut flower workers in Colombia earn approximately $200 per month, which after social security contributions and other deductions only equates to about $100 per

[97] Ibid 59.
[98] The Food and Agricultural Organization of the United Nations, the International Fund for Agricultural Development and the International Labour Office, above n 6, 2.
[99] Ibid 107.
[100] Korovkin, above n 23, 47.
[101] Gichure, above n 14, 91.
[102] Korovkin, above n 23, 47.
[103] Riddselius, above n 18, 11.
[104] Tanzanian Plantation and Agricultural Workers Union, above n 5, 24.
[105] Ibid.
[106] Wright and Madrid, above n 7, 259.

month.[107] Oxfam have indicated that in Colombia the minimum wage that a cut flower worker receives only covers 45% of a family's basic living expenses.[108] Also in Ecuador, the flower worker's salary will only cover approximately 47% of the basic family food basket.[109] These statistics are even more significant when one notes that in Colombia for 39% of women in the cut flower industry, this is the only source of income for their household.[110]

Not surprisingly, the inability of cut flower workers to adequately cater for the basic needs on his or her family leads to social, familial and personal conflicts.[111] In the likely event that the women are single mothers, this creates a serious crisis situation for their households, especially when they don't have job security.[112]

The discrepancy between the woman's wage and the value of the produce that is exported highlights the issue. Where a female cut flower worker in Colombia is paid approximately US$2 per day, the flowers that she will pick in a day have a retail value of US$600–$800.[113]

This is a complicated issue as some companies argue that if they increase wages significantly they would go out of business, or at the very least would be unable to stay competitive within the international industry.[114] Thus, the competitive pressure on companies to keep costs low as well as the abundance of unskilled labour and the absence of enterprise bargaining all contribute to the issues relating to the levels of remuneration.[115]

The low level of remuneration is the one area which the literature consistently indicates is still a significant problem on all cut flower farms.[116]

7 *Levels of Productivity and Overtime*

Even though wages have not increased,[117] the expectations of workers' productivity probably have. For example in relation to roses, in the late 1980s, workers were expected to pick from 20–30 beds in a day, whereas in 2000 workers were expected to pick all the roses from 50 or more beds.[118]

In addition to this, concerns have been raised about the high amounts of involuntary overtime that is expected at peak periods of flower production.[119] It has been suggested that in Colombia around peak cut flower times, flower workers are expected to work as many as 80 hours per week.[120] It should be noted that voluntary overtime is often welcomed by workers, as long as

[107] Please note that Ferm did not specify if this was US dollars. One would assume that this is what she meant though as the other literature speaks in US dollars when quantifying the salaries of workers ;Ferm, above n 11, 16.
[108] Wright and Madrid, above n 7, 259.
[109] Mena and Proana, above n 42, 10.
[110] Ferm, above n 11, 17.
[111] Mena and Proana, above n 42, 10.
[112] Ferm, above n 11, 17.
[113] Wright and Madrid, above n 7, 259.
[114] Dolon, Opondo and Smith, above n 24, 38.
[115] Wright and Madrid, above n 7, 263.
[116] Davies, above n 13, 34.
[117] Ibid,25.
[118] Korovkin, above n 23, 25.
[119] Wright and Madrid, above n 7, 259; Also see Mena and Proana, above n 42, 10.
[120] Ferm, above n 11, 16.

it is remunerated, because of the low wages in the industry.[121] Involuntary overtime, however, does cause problems for women with children in particular, as they may not be able to make adequate childcare arrangements when short notice is given.[122] There has been some progress in this area though, as Dolon, Opondo and Smith noted that all of the Kenyan farms that they looked at did pay overtime at a rate of one and a half times the basic pay and double time for Sundays and public holidays.[123]

8 *Precarious Employment*

Many workers, especially female workers, within the cut flower industry are on precarious working contracts. For example, in Tanzania, women make up 85% of the casual workers working on the flower farms.[124] Short-term contracts may be utilised on cut flower plantations, even though in many instances workers will work at the same farm for many years.[125] There are many reasons why there is a high level of casual employment on cut flower farms. First, this type of employment may be advantageous to farms that may not be able to abide by the conditions that the labour laws in each jurisdiction provide, as casual workers are often not covered by these laws.[126] In some instances informal working arrangements may be advantageous for some women, especially if they are less desirable workers who have had difficulties gaining other more formal employment.[127] Informal work conditions can also suit women who need flexibility so that they can maintain their childcare commitments.[128]

There can be significant concerns with informal work as it may mean that labour conditions become more difficult to scrutinize, as these workers often fall outside the formal working structures.[129] Furthermore, these work arrangements are often synonymous with adverse labour conditions such as low pay, unsafe working conditions and very long hours.[130] The other main concern with short term employment is that in times of economic downturns 'precarious jobs are the first to go as employers reduce their payrolls in this global recession.'[131] This will clearly have significant repercussions on the lives of the workers, as they may lose their jobs when they are least able to find another one.

The other employment practice of concern that has been reported in recent literature is farms which hire workers through 'co-operatives' which are essentially acting as subcontracting agencies.[132] This practise means that the workers employed by these co-operatives are not

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[121] Anne Tallontire 'Reaching the Marginalised? Gender Value Chains and Ethical Trade in African Horticulture' (2005) 15 *Development in Practice* 559, 567.
[122] Ibid 567.
[123] Dolon, Opondo and Smith, above n 24, 36.
[124] The Food and Agricultural Organization of the United Nations, the International Fund for Agricultural Development and the International Labour Office, above n 6, 24.
[125] Wright and Madrid, above n 7, 259.
[126] Susana Lastarria-Cornhiel, 'Feminization of Agriculture: Trends and Driving Forces' (Background Paper for the World Development Report 2008, Rimsip - Latin American Centre for Rural Development, November 2006) 7.
[127] Nicole Grimm, 'The North American Agreement on Labor Cooperation and its Effects on Women Working in Mexican Maquiladoras' (1998) 48 T*he American University Law Review* 179, 211.
[128] Ibid, 211; Also see Greta Friedemann-Sanchez, 'Assets in Intrahousehold Bargaining Among Women Workers in Colombia's Cut-Flower Industry' (2006) 12(1) *Feminist Economics* 247, 250.
[129] Grimm, above n 127, 212.
[130] Ibid.
[131] International Trade Union Confederation, *New Report Shows Global Gender Pay Gap Bigger Than Previously Thought* (5 March 2009) <http:www.ituc-csi.org/new-report-shows-global-gender-pay.html>.
[132] Ferm, above n 11, 16.

given the same rights as other workers under the relevant labour law system.[133] This is the case as these workers are deemed as 'associates' rather than 'employees'.[134]

The reports are inconsistent, but there is some evidence to suggest that the numbers of women who are permanently employed in jurisdictions such as Kenya and Zambia have increased.[135] In Kenya 61% of women are on permanent contracts whereas in Zambia the figure is even higher at 66%.[136] This is consistent with the 2002 study of Dolan, Opondo and Smith who found that in Kenya 33% of the farms that they studied contained workers in insecure jobs.[137] Nevertheless, the practise of placing many workers on temporary employment contracts is unlikely to change in the industry; even though producers are under pressure from retailers to adhere to codes and other requirements, they are also under pressure to keep costs low. This means that there is a tendency towards short-term employment options rather than permanent employment.[138] Informal workers are often not entitled to join a union and this is another area that has been of concern within the industry.[139]

IV HOW HAVE THESE CONCERNS BEEN ADDRESSED OVERSEAS?

As a result of the concerns that have been highlighted in the literature surrounding the cut flower industry, several campaigns have been launched in order to both educate consumers and try to improve the employment conditions of the workers in the cut flower industry.

A *Ethical Trade Campaigns*

The array of campaigns, codes and labelling that now exist in order to try to eradicate many of the alleged problems within the industry that have been highlighted within this article are extensive.

International attention has been directed towards the cut flower industry and the many issues that surround it, particularly relating to workplace safety. This has led a number of stakeholders, consumers and other members of the supply chain to take action to improve these conditions. There have been a large number of initiatives in each of the main cut flower growing jurisdictions, which this article will discuss. There have been many movements towards solving the aforementioned problems with the international cut flower industry. One of the central campaigns relates to ethical trade and trade networks. The relationship between the developing country producer networks and the consumers in the developing world is complicated, with many and varied interconnected participants.[140] These campaigns are often instigated by consumers who are concerned about the occupational health and safety issues and the low levels of remuneration surrounding workers in developing nations.[141] An example of a consumer instigated campaign is a Swiss-Colombian initiative that in the lead up to

[133] Ibid.
[134] Ibid.
[135] Tallontire, above n 121, 565.
[136] Ibid.
[137] Dolon, Opondo and Smith, above n 24, 8.
[138] Tallontire, above n 121, 566.
[139] Ferm, above n 11, 16.
[140] A Hughes, 'Retailers, knowledges and changing commodity networks: the case of the cut flower trade' (2000) 31 *Geoforum* 175, 179. ,
[141] For a discussion on this and other issues see Caroline Wright and Gilma Madrid, 'Contesting Ethical Trade in Colombia's Cut-Flower Industry: A Case of Cultural and Economic Injustice' (2007) 1(2) *Cultural Sociology* 255.

Mother's Day circulated information about the poor working conditions and low wages within the cut flower industry.[142] The consumers were then asked to write to the Colombian embassy to express their concerns with the industry.[143] Soon after this, an entity that became known as Flower Coordination Switzerland negotiated with Swiss supermarkets to develop a flower labelling system.[144] Systems such as this have spread across Europe.[145]

The international labelling system gives flower farm owners a 'market incentive' to achieve adequate occupational health and safety and employment conditions.[146]

Social labelling programs are an avenue used within the cut flower industry to improve the conditions of the workers. This means that labels on the cut flower packaging display logos, trademarks and text which may help to differentiate the product.[147] In Ecuador, some farms have participated in the Flower Label Programme (FLP), which is a European certification system. This program requires flower growers to meet certain environmental and social standards in order to have their flowers labelled with the FLP slogan.[148] The idea of this program, as with others, is that the flower farms will get access to the higher paid 'green' markets if they adhere to the conditions of the program.[149] Korovokin reported that only a few farms engage with this program as many of the flowers from Ecuador are exported to America.[150] The other problems that have been reported with this method of labelling and other fair trade concepts is that consumers have little notion of what the term 'fair trade' actually means.[151] Studies have indicated that even amongst people in the food and agricultural industry, there is no definitive definition of 'ethical sourcing.'[152] Some actors within the industry, and consumers view 'ethical sourcing' as relating to the way the product is packaged and produced, whilst others thought that the term related to fair wages and access to social benefits.[153] Reportedly, very few equated the term as relating to 'social benefits for their workers, the protection of children, equal opportunity and occupational health and safety.'[154] Dolan, Opondo and Smith, did find that the implementation of the codes has led to positive outcomes, such as health, safety and maternity improvements.[155] They also suggested that there were improvements in terms of the formalisation of employment relations.[156]

In Kenya, the Horticultural Ethical Business Initiative (HEBI) was launched in 2002. In 2002 members of HEBI investigated the claims that have been made about allegations of labour rights abuses on flower farms.[157] This entity formed from local civil society organisations that

[142] Ibid 260.
[143] Ibid.
[144] Ibid.
[145] Ibid.
[146] Davies, above n 13, vii.
[147] Janelle Diller, 'A Social Conscience in the Global Marketplace? Labour Dimensions of Codes of Conduct, Social Labelling and Investor Initiatives' (1999) 138 *International Labour Review* 99, 104.
[148] Korokvin, above n 23, 55.
[149] Ibid.
[150]Ibid.
[151] Gichure, above n 14, 75.
[152] Ibid.
[153] Ibid.
[154] Ibid.
[155] Dolan, Opondo and Smith, above n 24, 27.
[156] Ibid.
[157] Peter Lund-Thomsen and Khalid Nadvi, 'Global Value Chains, Local Collective Action and Corporate Social Responsibility: A Review of Empirical Evidence ' (2010) 19 *Business Strategy and the Environment* 1, 5.

started a campaign on the poor working conditions in the industry.[158] This entity now houses members from government, civil society organisations, and trade associations employers.[159] This independent body means that hopefully one stakeholder will not make all of the decisions in relation to implementing the codes, as well as the other goals that are central to the body.[160]

The practical differences that the labelling makes to the lives of cut flower workers is in contention, but it is interesting to note that even though Kenya is very heavily codified this has not stopped the 'ethical violations of basic rights of the workers and the natural environment.'[161] Furthermore, it is probable that the codes do not aid the plight of informal and casual workers within the cut flower industry.[162] This is the case as most codes only refer to permanent employees, with some protection given to part time and temporary workers whose employment has been formalised under contract.[163] Also, most codes only relate to working conditions and not to broader issues such as parental leave, childcare, reproductive rights and housing.[164] These issues are generally more pertinent to women than men.[165] Thus, it is arguable that these codes often do not have an extensive impact on the lives of women who are informal workers within the cut flower industry.[166] Furthermore, studies have indicated that many workers are unaware of the codes and relevant legislation that is applicable to employment rights.[167] In addition, the implementation of codes is costly to producers, but probably not insurmountable.[168] They may however lead to financial difficulties on the flower farms and in turn jobs may be lost.[169] In a recent study of the Tanzanian cut flower industry, the reasons that were given by some of the farm owners and managers for not adhering to the codes was the wage increase and legal contracts of employment, which would have significant cost ramifications.[170] In addition, one of the concerns that have been voiced is that there may be too many different labelling systems and that it would be better if only one was generated for each country.[171]

9 *Impact of Recent Reforms*

Some commentators have suggested that the labour conditions for cut flower workers have improved since the inception of campaigns such as Florverde.[172] Note however, that the International Labour Rights Forum has critiqued the Florverde label as doing more to promote selling flowers to US consumers, as opposed to protecting workers rights and health.[173] Greta Friedemann-Sánchez, who is an Associate Professor at the Humphrey School of Public Affairs,

[158] Dolan, Opondo and Smith, above n 24, 59.
[159] Ibid.
[160] Ibid.
[161] Gichure, above n 14, 76.
[162] Tallontire above n 121, 560.
[163] Ibid 564.
[164] Ibid.
[165] Ibid.
[166] Ibid.
[167] Dolan, Opondo and Smith, above n 24, 9.
[168] Ibid, 26.
[169] Diller, above n 147, 120.
[170] Tanzanian Plantation and Agricultural Workers Union, above n 5, xii.
[171] Tanzanian Plantation and Agricultural Workers Union, above n 5, 33.
[172] Greta Friedemann-Sanchez, 'Assets in Intrahousehold Bargaining Among Women Workers in Colombia's Cut-Flower Industry' (2006) 12(1) *Feminist Economics* 247, 250..
[173] Clarissa Pintado, *Fairness in Flowers Campaign Toolkit* (25 April 2008) International Labor Rights Forum <http://www.laborrights.org/publications/fairness-flowers-campaign-toolkit>.

suggests that 'much room for progress remains.'[174] In at least some instances, though, the literature suggests that some flower farms are putting in place procedures to enhance the lives of their flower workers.[175] For example, some farms have offered workshops on self-esteem and family violence.[176] Hale and Opondo state that not much attention has been paid as to whether or not the codes have made a significant difference to the workers.[177] The impacts of the Ethical Trading Initiative are largely positive as they encourage the implementation of corporate codes of practice, whilst also trying to promote an increase and compliance with labour standards.[178] Like many of the other initiatives that have been referred to, the results are varied depending on the performance of each individual member company.[179] Some of the problems that have been cited though, relate to companies needing to cut prices in order to be competitive whilst also being subject to greater costs to adhere to labour standard codes.[180] The article will now look at the Kenyan situation to see what the impact of the reforms has been.

V KENYA

There have been several reforms in Kenya relating to the cut flower industry since 2002 when attention was placed on the industry. The reports indicate that these reforms have led to improvements relating to employment. Areas where improvements have been documented include increasing the number of permanent as opposed to temporary workers and improvements in relation to working conditions such as reducing overtime hours and an increased emphasis on health and safety issues.[181] For example, a recent study undertaken by Riisgard and Gibbon found that more than 50% of workers were continuously working at the same farm for more than four years.[182]

The Kenyan cut flower market is now one of the most highly regulated cut flower countries in the world. For example, the flower farms in Kenya are subject to a variety of codes such as Fairtrade, The Flower Label Programme, Rainforest Alliance and MPS as well as standards implemented privately by supermarkets.[183] As a result of this widespread adherence and adoption of various codes, Riisgard and Gibbon have suggested that 'the sector has become one of the most comprehensively subject to private regulation globally. Thus, of the 170 large-scale farms in 2011, 78 were certified to have adopted at least one standard covering both social and environmental issues.'[184]

One issue is whether or not the improvements in industrial conditions are also evident in other developing countries where there is wide scale flower production. It is difficult to answer these questions without doing the requisite analysis for each region, but Riisgard and Gibbon suggest

[174] Ibid 250.
[175] Ibid 259.
[176] Ibid 259.
[177] Hale and Opondo, above n 26, 307.
[178] Susanne Schaller, 'The Democratic Legitimacy of Private Governance: An Analysis of the Ethical Trading Initiative' (2007) 91 *Institute for Development and Peace* 1, 5.
[179] Ibid 25.
[180] Ibid 26.
[181] Maggie Opondo, '*Emerging Corporate Social Responsibility in Kenya's Cut Flower Industry'* (2006) University of South Africa, 6 <http://www.unisa.ac.za/contents/colleges/col_econ_man_science/ccc/docs/Opondo.pdf>.
[182] Lone Riisgaard and Peter Gibbon, 'Labour Management on Contemporary Kenyan Cut Flower Farms: Foundations of an Industrial-Civic Compromise' (2014) 14(2) *Journal of Agrarian Change* 260, 268.
[183] Ibid 277.
[184] Ibid.

that 'Kenya has achieved a degree of production stability that is unique in this sector.'[185] The commentators also state that the Ethiopian flower market comes closest to meeting the improved Kenyan conditions.[186]

We will now turn to the second part of the article which relates to why these issues and considerations are relevant in the Australian context. It will be argued that Australian consumers and companies are becoming more concerned and accountable for both where and how the goods we purchase are sourced, produced or grown.

VI THE AUSTRALIAN CUT FLOWER INDUSTRY

Australia has a small but significant cut flower industry that is a relatively new industry, having emerged in the 1970s.[187] The size of the cut flower industry in Australia is relatively modest compared to other jurisdictions; as indicated by the fact that the Australian industry comprises less than 1% of world trade in cut flower production.[188] Over 90% of the flowers produced in Australia are sold on the domestic market, but a small amount of flowers are exported to overseas countries.[189] The countries to which Australia exports flowers to are predominantly, Japan (46%), the USA (22%) and the Netherlands (12%).[190] The export market is generally concerned with fresh flowers, with some dried flowers also present on the market.[191]

The structure of cut flower farms in Australia is diverse. For example in Queensland, which is indicative of the rest of Australia, cut flower enterprises range in scope and size from large multi-million dollar businesses to small family owned enterprises.[192] Many cut flower farms in Australia are less than five hectares in area.[193] In addition to this, over 60% of cut flower farms have an estimated annual value of agricultural operations of less than $100 000.[194] The market in Australian flowers is seasonal with highest supply and demand in the September and December quarters.[195] The low season is in the March and June quarters.[196]

The small size of the Australian cut flower industry is mirrored by consumer spending on flowers in Australia, which per capita is significantly lower in Australia than in other countries.[197] The outlets from which flowers are purchased has also significantly changed (this

[185] Ibid 283.
[186] Ibid.
[187] Lotte von Richter, 'Commerical Growing of Cut Flowers' (Article presented at ASGAP 21st Biennial Seminar, Canberra Australian Capital Territory, 1-5 October 2001) <http://asgap.org.au/APOL34/jun04-6.html>.
[188] Gollnow, above n 1, 1.
[189] Ibid.
[190] Sally Sutton, 'Export Flower Industry A Review of recorded Statistics' (A report for the Rural Industries Research and Development Corporation, Rural Industries Research and Development Corporation, December 2002) (23 August 2011) vii.
[191] Ibid 7, 16.
[192] Flower Association of Queensland Inc, *Fact Sheet 2.1 Queensland's Cut Flower Industry,* 1 <http://www.hin.com.au/Resources/InfoNote---Queensland's-Cut-Flower-Industry.aspx>.
[193] NSW Department of Primary Industries, *Commercial flower growing in NSW – an industry snapshot* (21 October 2003) Primary Industries Agriculture <http://www.dpi.nsw.gov.au/agriculture/horticulture/floriculture/industry/snapshot>.
[194] Ibid.
[195] Flower Association of Queensland Inc, above n 192, 7.
[196] Ibid.
[197] The Flower Association of Queensland noted that AU$25 was spent per capita in Australia as opposed to AU$36 in USA and AU$61 in Holland; Flower Association of Queensland, above n 192, 2.

is again compatible with the overseas market) in the last ten years, as now an Australian consumer is more likely to buy cut flowers from a supermarket than a florist.[198] This change in behaviour is a result of the trend towards mass merchandising flowers that began in the 1990s.[199]

The Australian cut flower industry is currently experiencing a decline, in both the numbers of operators and overall sales; as evidenced by the fact that employment numbers within the Australian cut flower market are predicted to fall by 1.3% over the next five years. This is largely because of the automating of processes and other factors.[200] In addition to this, the number of cut flower operators is also expected to drop in the next five years in order to pursue scale economies.[201] This will result in further mergers as well as operators exiting the industry.[202]

The other main concerns within the Australian cut flower industry are that even though it is well established it is also fragmented.[203] This is demonstrated by the fact that the industry is comprised of three separate entities.[204] These are the traditional flower sector, the Australian native and Protea sector, and a tropical cut flower and foliage sector.[205] This has implications for the industry in Australia, as even though it houses a large number of producers, it lacks 'sufficient scale to market their product overseas.'[206]

A *The Competitiveness and Viability of the Australian Cut Flower Industry*

The competitiveness of Australian flower exports as opposed to other countries is an issue for Australian producers. Many of Australia's competitors have both lower labour costs and larger pools of labour and many are situated geographically closer to export markets.[207] Furthermore, Australian cut flower producers are disadvantaged by comparison with other exporting nations when selling to the Dutch market.[208] This is of concern as the Dutch market is the third largest market for Australian cut flower producers.[209] This is coupled by the concern that competitor suppliers, such as those from Zimbabwe and South Africa, can supply flowers cheaper than Australian producers because of their lower labour costs and freight costs.[210] There are also import duty exemptions on cut flowers from these suppliers, which brings their costs down even further.[211]

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[198] Suzannah Rowley, *Cut Flower Growing in Australia* (January 2011) IBIS World Industry Report AO112, <http://www.ibisworld.com.au>.
[199] Ibid.
[200] Ibid.
[201] Ibid.
[202] Ibid.
[203] Brian Shannon, *Sustainable Production Technologies for the Cut Flower Industry* (International Specialised Skills Institute, 2009).
[204] Ibid.
[205] Ibid.
[206] Ibid.
[207] Gollnow, above n 1, 1.
[208] Kim James, 'A Study of the Netherlands Flower Market' (Rural Industries Research and Development Corporation Report No 97/44, The Flower Export Council of Australia, June 1997) 15 <https://rirdc.infoservices.com.au/items/97-044 >.
[209] Ibid.
[210] Ibid.
[211] Ibid.

The future viability of the cut flower industry in Australia is tainted by other concerns within the industry. These include, rising airfreight costs and the high Australian dollar,[212] as well as the difficulty in peak harvest times of obtaining the required airfreight space.[213] These factors together with drought and the global recession have meant that exports within the Australian cut flower industry have declined at an average annual rate of 4.4%.[214] Overseas consumers have also expressed concerns relating to 'food miles' or in this case 'flower miles' which relate to the amount of carbon that is generated as a result of transporting the perishable goods across the world.[215] This is of increasing concern to Australian producers given their geographical proximity to many of their exporting markets.

There have been concerns expressed by Australia's export markets about the supply and quality of some of Australia's exported flowers. This has led to much of the Australian export market being boutique in nature, where they have to concentrate on quality and customer service to survive in the competitive market.[216] This is especially the case as in the past Australia has had a poor reputation in some overseas markets. One example of this is from the Canadian export market where concerns were aired relating to the quality control problems and inconsistency of supply and suppliers from Australian cut flower exporters.[217] Within the Dutch market, problems have also been experienced with Australian cut flowers arriving mouldy and in the stages of decomposition.[218] One of the reasons for these problems may be that air transport often reduces the quality of cut flowers, due to poor temperature control and low humidity within aircrafts.[219] In addition to this, during the transportation process there may also be delays within airports whilst the relevant authorities are undertaking checks relating to customs, and drug and quarantine inspections.[220]

The Australian cut flower market is highly fragmented and the overall industry lacks a clear industry structure.[221] There have been calls for a peak industry body to be formed but this has not yet come to fruition.[222] It has been suggested that if Australia adopted a more regulated industry, this may encourage more export activity.[223]

This snapshot of characteristics indicates that the Australian cut flower industry has followed many of the industry trends of the overseas markets. The Australian industry however, is distinct, given its level of fragmentation as well as the size and diversity of the industry. The labour conditions and other occupational concerns within the cut flower industry specifically have received very little attention in the Australian context, unlike the international landscape.

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[212] Jenny Ekman, Joseph Eyre and Daryl Joyce, *Flowers by Sea Improving Market Access for Australian Wildflowers* (January 2008) Rural Industries Research and Development Corporation ix.
[213] Ibid 1.
[214] Rowley, above n 198, 7.
[215] Ekman, Eyre and Joyce, above n 212, 1.
[216] Gollnow, above n 1**Error! Bookmark not defined.**, 41.
[217] Kim James, 'A Study of The Canadian Flower Market' (Rural Industries Research and Development Corporation Report No 99/33, The Flower Export Council of Australia, April 1999) 13 <https://rirdc.infoservices.com.au/downloads/99-034>.
[218] Ibid 15.
[219] Ekman, Eyre, and Joyce, above n 212, 1.
[220] Ibid.
[221] Rowley, above n 198, 5.
[222] Ibid 7.
[223] Ibid 30.

VII ARE THE ISSUES ASSOCIATED WITH THE OVERSEAS CUT FLOWER INDUSTRY RELEVANT TO THE AUSTRALIAN CONTEXT?

The concerns that have been documented relating to the cut flower industry in overseas countries are relevant to the Australian context for several reasons. These include the increasing prominence of corporate responsibility (CR); which is evidenced by the rise in CR reporting by Australian companies and a consumer desire to know where their goods are sourced. The importance of social responsibility and reporting these activities has become increasingly popular and widespread in the Australian context, as evidenced by the rise in CR reporting rates of Australian companies in recent years. Even though there is often no legal requirement for companies to report on their social and environmental activities,[224] the KPMG Survey of Corporate Responsibility noted that reporting on corporate responsibility in Australia's largest 100 companies has risen from 23% in 2005[225] to 82% in 2013.[226]

Furthermore, Australian consumers are becoming increasingly interested in CR initiatives and where their products are being sourced from. This awareness and concern about where Australian goods are sourced has increased due to events such as the Rana Plaza disaster where more than 1000 people were killed in Bangladesh whilst making clothes for western companies to sell to western consumers.[227] This event received considerable attention in the Australian media, as did the recent events involving Hepatitis A and frozen berries. These events and others have created the impetus for there being improved Country of Origin Labelling.[228] This attention and consumer pressure has also led to a new country of origin labelling system for Australian food which has been recently announced by the Australian government.[229]

The other main reason why these considerations are important is due to the changing nature of business in Australian society. Large corporations in contemporary Australia are generally larger and more influential than in previous times.[230] With this increasing influence comes 'significant social, cultural, environmental and political impacts'[231] which have significant costs and benefits to society as a whole.[232] The dominance of larger public companies as well as the recent economic downturn has also had an impact on business in Australia; where many small businesses are finding it hard to survive and are being overtaken by larger multinational companies. The globalisation of business has also changed how many businesses operate in

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[224] Note though that corporate annual reports in Australia need to comply with the *Corporations Act*, relevant accounting standards and if they are listed on the stock exchange, the requirements of the Australian Securities Exchange. For example, section 299(1)(f) of the *Corporations Act* notes that directors must give details of the entity's performance to environmental regulations if 'if the entity's operations are subject to any particular and significant environmental regulation under a law of the Commonwealth or of a State or Territory.'

[225] KPMG, *The KPMG International Survey of Corporate Responsibility 2008,* 16 < https://www.kpmg.com/EU/en/Documents/KPMG_International_survey_Corporate_responsibility_Survey_Reporting_2008.pdf>.

[226] KPMG, *The KPMG Survey of Corporate Responsibility Reporting 2013,* 26 < https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/corporate-responsibility/Documents/corporate-responsibility-reporting-survey-2013-exec-summary.pdf>.

[227] ABC Television, 'Fashion Victims', *Four Corners*, 24 June 2013 (Sarah Ferguson and Mary Ann Jolley) <http://www.abc.net.au/4corners/stories/2013/06025/3785918.htm>.

[228] See for example The Greens, *Better Country of Origin Labelling* <http://greens.org.au/country-of-origin>.

[229] Anna Henderson, 'Government Announces New Labelling System for Australian Food', *ABC News* (online) 21 July 2015, <http://www.abc.net.au/news/2015-07-21/tony-abbott-announces-new-labelling-system-for-australian-food/6636662>.

[230] PJCCFS (Parliamentary Joint Committee on Corporations and Financial Services) *Corporate Responsibility: Managing risk and creating value* (2006) Australian Government, Canberra, 173.

[231] Ibid.

[232] Ibid.

Australia and around the world. For example, Kobrin states that 'the post Westphalian transition — emergence of multiple authorities, increasing ambiguity of borders and blurring the line between public and private spheres" has resulted in large companies not being subject to proper oversight.[233]

Given the changing nature of Australian business as well as the increasing importance to both companies and consumers as to CR considerations and product knowledge, the afore mentioned issues relating to the international cut flower market are becoming increasingly significant in the Australian context.

There is no doubt however that this is a complex problem which is difficult if not impossible to solve. On the one hand consumers in countries such as Australia have become dependent on cheap goods being readily available. Countries such as Bangladesh also rely on trading with western countries. For example, in Bangladesh 75% of all export income comes from manufacturing clothes for Western countries.[234] Furthermore, the majority of the 3.5 million clothing workers in Bangladesh are young women who have in many instances come from poor rural backgrounds.[235]

The importance of price is permanently in the minds of both consumers and companies. However, there has been an increasing emphasis on the hidden costs of these low prices where: 'some critics of industrial agriculture argue that the relatively low prices consumers pay for food and fibre goods in industrial societies conceal a host of hidden costs.'[236] These concerns are reflected in the rise of both social corporate responsibility and consumer social responsibility ideals.

A *Social and Moral Responsibility Considerations*

This article will now go on to consider consumer social responsibility and corporate social responsibility principles that are relevant to business both in Australia and overseas. When the concept first started gaining prominence, it was primarily only used by large companies, now many small and medium companies also engage with CR principals.[237] In fact using CR information to market goods and differentiate products has become very common in recent years.[238]

There are many different definitions that have been attributed to corporate responsibility (CSR or CR), but there is no absolute agreed definition for corporate responsibility, even though several commentators have provided guidance in this area.[239] The societal obligations of conducting a business is one common theme in the literature surrounding defining CR.[240]

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[233] S J Kobrin, 'Private Political Authority and Public Responsibility Transnational Politics, Transition Firms, and Human Rights' (2009) 19 *Business Ethics Quarterly* 349.
[234] Ibid.
[235] Ibid.
[236] Paul Thompson, *The Agrarian Vision Sustainability and Environmental Ethics* (University Press of Kentucky, 2010), 33.
[237] Mirela Popa and Irina Salanta, 'Corporate Social Responsibility Versus Corporate Social Irresponsibility' (2014) 9(2) *Management and Marketing* 137.
[238] B Andrew Cudmore and Ronald Hill Karen Becker-Olsen, 'The Impact of Perceived Corporate Social Responsibility on Consumer Behaviour' (2006) 59 *Journal of Business Research* 46, 46.
[239] Popa and Salanta, above n 237, 138.
[240] Val Candy, 'Social Responsibility and Globilization' (2013) 29(5) *The Journal of Applied Business Research* 1353, 1357.

Societal obligations relates to how companies conduct their business affairs in order to 'create a positive and desirable impact on society in general.'[241] Holme and Watts have defined the concept as businesses choosing to develop sustainable economic development,[242] whilst Oppewal, Alexander and Sullivan have defined the concept as including 'the duty of the organization to respect individuals' rights and promote human welfare in its operations.'[243] Thus, even though profitability is an important consideration for all businesses, they also have ethical responsibilities.[244]

There are many reasons why companies employ corporate social responsibility principles in their businesses. Companies who support CR principles may be perceived to be more reliable and have products that are of a higher quality.[245] CR marketing strategies may also appeal to certain segments of the market so may help promote sales in some companies,[246] whilst also differentiating a company from its competitors.[247] CR activities have also been used to 'address consumers' social concerns, create a favourable corporate image, and develop a positive relationship with consumers and other stakeholders.'[248] In some instances a concept known as 'enlightened self-interest' may also be relevant, as employing CR activities and strategies may be advantageous to companies who have deleterious reputations, in order to promote their image as socially responsible citizens.[249] It should be noted though that if the intentions of a company who instigates CR activities are not based on a genuine desire to do some good, CR activities can backfire on the companies involved and actually worsen the reputation of the company.[250]

Other more altruistic advantages of complying with CR codes and values may be that social and environmental standards may be enhanced in developing countries as well as helping to reform business processes and allow for there to be an openness surrounding global chains.[251] These considerations are important in the cut flower industry as ethical responsibilities are arguably more important in relation to retail businesses, such as florists and other businesses who sell cut flowers; and this has been reflected by the fact that the retail industries have displayed higher rates of social responsibility when compared to other industries.[252]

There are of course obstacles to businesses implementing CR principles, such as the fact that complying with CR ideals may add costs to businesses.[253] In addition to this, many of the CR codes are developed by people in different countries without sufficient communication and

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[241] Popa and Salanta, above n 237, 137.
[242] R Holme and P Watts, World Business Council for Sustainable Development, *Corporate social responsibility: Making good business sense* (2000).
[243] Harmen Oppewal, Andrew Alexander and Pauline Sullivan, 'Consumer Perceptions of Corporate Social Responsibility in Town Shopping Centres and their Influence on Shopping Evaluations ' (2006) 13 *Journal of Retailing and Consumer Services* 261, 261.
[244] Ibid.
[245] Abagail McWilliams and Donald Siegel, 'Corporate Social Responsibility: A Theory of the Firm Perspective' (2001) 26(1) *The Academy of Management Review* 117, 119.
[246] Ibid.
[247] Ibid.
[248] Zeynep Gurhan-Canli and Norbert Schwarz Yeosun Toon, 'The Effect of Corporate Social Responsibility (CR) Activities on Companies With Bad Reputations' (2006) 16(4) *Journal of Consumer Psychology* 377, 377.
[249] Ibid.
[250] Ibid.
[251] Lund-Thomsen and Nadvi, above n 157, 1.
[252] Oppewal, Alexander and Sullivan, above n 243, 261.
[253] Lund-Thomsen and Nadvi, above n 157, 1.

input from the relevant stakeholders.[254] Furthermore, in some cases producers can be subject to a number of different codes and requirements which may be contradictory.[255] Nonetheless, moving towards CR ideals in business is increasingly pervading modern society. CR is becoming increasingly coupled with consumer social responsibility which is the close cousin of corporate social responsibility.

1 Consumer Social Responsibility

Consumer Social Responsibility relates to the ethical responsibilities that consumers have when buying products. Consumer Social Responsibility has recently gained an increase in attention, but it is a concept that has been around for more than 50 years.[256] The scope and definition of consumer social responsibility is still narrow and limited.[257] In effect though consumer social responsibility relates to the 'socially conscious consumer' as a 'rational, individual decision-maker, motivated toward ethically augmented products.'[258] Consumer social responsibility considerations highlight the fact that the usual incentives that are sold to consumers such as 'price, convenience, reliability and availability' are not the only considerations that are of importance when conducting business and consuming.[259] Thus, considerations such as 'justice, fairness, rights, virtue and sustainability' are also factors that are of importance when one considers consumer social responsibility.[260] Consumer social responsibility considerations are of great importance with the growth of globalisation in relation to industries such as cut flowers as products are often sourced from countries with much lower labour costs.[261] Thus, some supporters of corporate social responsibility, and consumer social responsibility advocates think that the failure of business and consumers to demand adequate social and working conditions is exploitative.[262]

It is fair to say that in many instances there is consumer apathy towards many of these issues. The apparent level of indifference with many consumers is an interesting and complex phenomenon. It is also hard to gauge what the mood of the day is as some causes and events can create widespread support whilst others do not. That is not to say that consumers do not indicate in market surveys that they are not concerned about ethical business behaviour, but often this social desire does not translate when purchasing the goods.[263] There is also a suggestion that how consumers behave and purchase may be in part cultural. For example, in the Australian context there has been a suggestion that many Australians feel that it is irrational to buy goods that are not the lowest prices even if they have strong ethical beliefs.[264] The recent economic downturn has also had a negative impact on how people make purchase decisions. For example, recent research, albeit in the UK, indicates that buying greener and more ethical

[254] Ibid 2.
[255] Ibid 2.
[256] Edward Morrison and Larry Bridwell, 'Consumer Social Responsibility-The True Corporate Social Responsibility' (2011) 9(1) *Competition Forum* 144, 144.
[257] Robert Caruana and Andreas Chatzidakis, 'Consumer Social Responsibility (CnSR): Toward a Multi-Level, Multi-Agent Conceptualization of the 'Other CR'' (2014) 121 *Journal of Business Ethics* 577, 577.
[258] Ibid.
[259] Ibid.
[260] Ibid 583.
[261] Morrison and Bridwell, above n 256, 147.
[262] Ibid, 147.
[263] Timothy M Devinney et al, *The Other CSR: Consumer Social Responsibility,* 4 <http://ssm.com/abstracts=901863>.
[264] Ibid 8.

products is a nice thing to do as opposed to something that is necessary to do.[265] Furthermore, the recession that has been evident in many parts of the world has also meant that many consumers are no longer in a financial position to pay extra for green or ethical products.[266]

Furthermore, achieving social and moral responsibility is becoming increasingly difficult given the recent global food, fuel and financial crises.[267] However it is still the author's contention that conscious consumers should be armed with the knowledge and information to know where goods have come from in order to achieve consumer social responsibility if they so choose.

VIII SUGGESTED AREAS FOR REFORM IN THE AUSTRALIAN CONTEXT: LABELLING REQUIREMENTS IN AUSTRALIA

This article has illustrated the nature and extent of the cut flower industry and some of the problems and challenges within the industry that have been documented in the relevant academic literature. These issues have not received a lot of attention in the Australian context and as such when Australian consumers are purchasing cut flowers in Australia it is usually impossible to know where the flowers have come from. This is the case as country of origin labelling is not a requirement for cut flowers as it is for imported food goods.[268]

With the increasing awareness and desire for information as to where our food comes from, there have also been some limited calls for transparency as to where our cut flowers are grown. For example, flower bodies in Victoria and New South Wales have asked that consumer laws be reformed so that consumers are not deceived into thinking that 'freshly cut' flowers are always freshly picked in Australia.[269] The Australian Consumer Laws however do not require businesses to provide a country of origin claim in relation to cut flowers.[270] Thus, it is only in cases where a label is deliberately misleading, where there may be an issue with providing false and misleading statements.[271]

Many consumers for example, may be interested to know that when imported flowers arrive in Australia under Australian regulations, they are 'devitalised' which means that they are 'treated with a herbicide that disables propagation to prevent exotic diseases and pests' by the Australian Quarantine and Inspection Service.[272] In practical terms this means that when the flowers arrive in Australia their stems are dipped in Roundup which is a common glyphosate herbicide for approximately 20 minutes.[273] This may be an important consideration for consumers who avoid buying products with chemicals on them.

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[265] Mintel, *Consumers want greener living but not at any cost* (13 October 2009) <http://www.mintel.com/press-centre/social-and-lifestyle/consumers-want-greener-living-but-not-at-any-cost>.
[266] Ibid.
[267] The Food and Agricultural Organization of the United Nations, the International Fund for Agricultural Development and the International Labour Office, above n 6, 30.
[268] Sam Butler, *The Cut Flower Industry* (5 September 2014) CHOICE <http://www.choice.com.au/reviews-and-tests/money/shopping-and-legal/shopping/cut-flowers.aspx>.
[269] Damon Kitney, 'Fresh Supermarket Flowers? A Blooming Miracle', *The Australian* (Melbourne), 26 December 2013.
[270] Australian Competition and Consumer Commission, *Country of origin claims and the Australian Consumer Law* (2014), 20.
[271] Ibid.
[272] Kitney, above n 269.
[273] Butler, above n 268.

Thus, given that in many instances there is no way for Australian consumers to know for certain where their cut flowers are sourced from due to the lack of country of origin labelling requirements, it is suggested that given the problems and concerns within the cut flower industry that country of origin labelling should be a requirement when selling imported cut flowers in Australia. This may also have the flow on effect of maintaining the viability of the Australian cut flower industry that is currently in decline. In terms of the consumer and corporate social responsibility considerations, product labelling is also relevant as it allows 'national governments [to play] protecting or enabling roles.'[274]

Of course, labelling may negatively impact on the cut flower industry in overseas jurisdictions. This was a concern that has been raised by one of the Ethical Trading Initiative Annual reports where it was documented that 'one of the largest fears of workers is that foreign companies might stop sourcing from their employer.'[275] Thus it would be necessary to make sure that safeguards, such as incorporating positive labelling, were implemented in order to counteract negative impact to the world's most vulnerable workers. In addition there are other complexities relating to country of origin labelling, such as the structures that are often employed within the supply chain of the cut flower industry. Other details such as who should take responsibility for the labelling would also need to be analysed in order to determine what would be the most cost effective system to employ.

IX CONCLUSION

This article highlights some of the concerns that have been documented within the global cut flower market. These concerns have received a lot of attention in places such as Europe and America, but very minimal attention in Australia. There is evidence to suggest that many of the employment conditions have improved since these issues were broadcast in the aforementioned jurisdictions. It is clear though, that there are still many concerns and challenges within the global cut flower industry. Thus, the inability for consumers in Australia to know where the flowers they are purchasing are sourced and grown, would be a concern to some if not many Australian consumers. This article therefore calls for reform in the labelling of cut flowers in Australia to include country of origin labelling. This reform would mean that consumers could more readily appreciate and understand where their goods are coming from and be able to make educated choices about which goods they choose to purchase, whilst helping to maintain the viability of the Australian cut flower industry. These reforms would also be in line with the increase in consumer and corporate responsibility principles that are now an important consideration in relation to business.

[274] Caruana and Chatzidakis, above n 257, 577.
[275] Susanne Schaller, 'The Democratic Legitimacy of Private Governance: An Analysis of the Ethical Trading Initiative' (2007) 91 *Institute for Development and Peace* 1, 26.

THE GATHERING STORM AROUND CORPORATE LIABILITY IN NATURAL RESOURCE INVESTMENT: RE-EXAMINING THE RECENT PAST

ALEXANDRA L. CARLETON *

There is a growing body of support that transnational companies involved in the extraction of natural resources need to be held to account for violations of social, economic and moral norms in countries of operation. The United States of America has been at the forefront of this development. A number of cases based on the Alien Tort Statute have found jurisdictional basis to decide a company's culpability for acts committed extraterritorially. This trend spells hope that resource investment decisions can no longer afford a 'business as usual approach' but have to consider the methods and moral integrity on which such business is conducted.

I INTRODUCTION

In 2011 Shell accepted liability for pollution caused by two massive oil spills, which occurred in 2008 in the Ogoniland region of the Niger Delta, following a community class action launched in London on behalf of local communities.[1] The pollution devastated a 20 kilometre network of creeks and inlets on which many communities in the area depended and damaged mangrove forests and the water table, affecting the livelihoods of the Ogoni community. Initially the company denied responsibility and refused to clean up the spilled oil. Shell stood to pay potentially hundreds of millions of dollars.[2] While the settlement figure was not quite in the order of magnitude predicted,[3] the case against Shell in Ogoniland shows increasing interest in two things: firstly, in collective claims by agrarian populations challenging land rights and land use by the extractive industry; and secondly, in the potential to expand the scope of extraterritorial jurisdiction to find corporate liability for wrongs committed.

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1 John Vidal, 'Shell accepts liability for two oil spills in Nigeria', the guardian (online), 3 August 2011 <http://www.guardian.co.uk/environment/2011/aug/03/shell-liability-oil-spills-nigeria>.

2 Ibid.

3 In 2015, Shell settled on a cumulative 55 million GBP to fisherman suffering economic losses and the community: BBC News, *Shell agrees $84m deal over Niger Delta oil spill* (2015), <http://www.bbc.com/news/world-30699787>.

Legal liability and its associated costs – both reputational and monetary – has gathered a growing body of support that transnational companies involved in the extraction of natural resources need to be held to account for violations of social, economic and moral norms in countries of operation. Corporations are intimately involved in international law processes, yet often without a concomitant level of liability. Such involvement should not go unchecked.[4] This paper explores the rising legal liability of multinationals in courts and suggests that corporate liability for wrongs committed in the resource trade should form part of a developing international corporate criminal law.

The genesis of corporate legal personality, which gave corporations similar rights to individuals, was not initially matched by their accountability. Individuals can be held liable for a multitude of crimes, irrespective of where they are committed and irrespective of which court prosecutes them. But it is not the same for corporations, who may slip between the legal lines of jurisdiction. Certain criminal acts should be justiciable irrespective of the nationality of the crime or the nationality of the corporation. If citizens can be prosecuted for criminal or illegal acts abroad, so too should companies. Jurisdiction exists over individuals where there is a connection to the territory, for example where the person is a national. By way of example, in June 2010, the sons of Patrice Lumumba, the first democratically elected president of the Democratic Republic of the Congo (DRC), launched a claim in Belgium against various Belgium officials, who had worked in the DRC at the time, for being conspirators in the assassination of their father.. The case went before the courts, illustrating the precedent that countries have jurisdiction over their own nationals' conduct, even where the conduct had taken place in another country.[5] In this article, the term 'third court' will be used to describe such exercise of jurisdiction, that is, by a court neither chosen by the parties, nor a court exercising universal jurisdiction. Non-forum courts exercising extra-jurisdictional privilege on the basis of nationality or the existence of a territorial nexus, are often discussed under the rubric of international law. Terming these courts 'third courts' may slightly alter the perception that somehow that jurisdiction must be justified. In the author's opinion, the exercise of such jurisdiction today needs little justification.

In another example, in July 2010, a Federal Appeals Court of the 11th US Circuit Court of Appeals upheld the 2008 torture convictions and 97-year sentence imposed on the son of former Liberian President Charles Taylor, Charles McArthur Emmanuel.[6] It also upheld the constitutionality of a law allowing the United States of America (US) to prosecute for torture cases abroad, providing a direct example of third court jurisdiction as Emmanuel was a US citizen.[7] It is something of a quandary why there is such debate over whether courts are able to exercise jurisdiction against national, or nationally-registered, companies whose misdeeds are carried out abroad, under a form of corporate personality jurisdiction.

Other factors associated with the ephemeral liability of multinational corporations are forum shopping (jurisdictional privilege), legal standing of either individual or collective claimants (interesting considering the increasing prevalence of class action litigation), and lack of political proactivity of the State in monitoring abuses of market power and abuses of political power by corporations. Whilst not discussed in this article, these other issues are potential

4 Karsten Nowrot, 'Transnational Corporations as Steering Subjects in International Economic Law: Two Competing Visions of the Future?' (2011) 18 *Indiana Journal of Global Legal Studies* 803, 817, 822.

5 Andrea Bottorff, *Belgium officials accused in murder of former Congo leader* (22 June 2010) JURIST < http://jurist.org/paperchase/2010/06/belgian-officials-accused-of-congo-war-crimes.php>.

6 *United States of America v Roy M. Belfast, Jr.,* 09-10461 1,1 (11th Cir, 2010).

7 Ibid.

sources for altering the jurisdictional reach of various judicatures. The problem is jurisdiction over companies and their actions: can one file a claim of action if a company does something wrong? Worse, if a group of extractive industries get together and design a pro-forma contract, or carry on other collaborative cartel activities, how is one to prosecute? Conglomerations or collections of transnational companies seem to escape the law at every turn. Plunder and international cartelization should be criminalized and international bodies should enforce international law as it applies to international and transnational bodies. Several tools could aid this including: (i) the jurisdiction to interfere on grounds of good conscience; (ii) the expansion of the jurisdiction of third and international courts; or (iii) the criminalization of plunder.

This article reflects upon the developments of extraterritorial jurisdiction where there are serious human rights violations, specifically with regards to extractive industry operations in countries which may not have enforceable and/or adequate liability regimes and where the perpetrators have some affiliation to the country pursuing accountability. It begins with a review of African examples where judicial action has been ineffective or inadequate at holding foreign enterprises accountable and the problems of interference in state sovereignty. It then examines the attempts made in recent history of expanding the jurisdiction of third courts, that is, the limits to extraterritorial jurisdiction, with a specific focus on the United States as being a forerunner in this regard under the *Alien Tort Statute* (*ATS)*[8] with the application of the territorial nexus test. A comparison with the United Kingdom and Australia is made, who have implemented their own measures being direct corporate liability and implementation of International Criminal Court (ICC) crimes under the Australian Criminal Code. It is suggested that an international crime of plunder may aid the development of greater juridical extraterritoriality. Finally, requirements of corporate due diligence and the implementation and enforcement of national codes of conduct may add to checking the power of extractive industries, in particular those who operate in conflict zones away from the purview of judicial eyes.

This article is not intended as a major analysis or review of the pre-eminent cases, including *Kiobel v Royal Dutch Petroleum* (*Kiobel)*[9] which has been dissected elsewhere.[10] Furthermore, it is not an in-depth analysis of any particular judicial decision. Rather, it is intended as an overview of judico-political developments, both comparatively and globally, offering an approach that ties European, American, Australian and African jurisdictions and interests in the highly significant area of extractive industry operations and their responsibility for invoking or perhaps creating incentives for the perpetration of human rights violations.[11] It is in covering a wide array of content in one article, bringing together the multi-national caselaw and transnational geopolitical components which might better reflect the reach of the extractive industry, that it hopes to offer a pertinent cross-jurisdictional perspective of cases that may impact or influence the industry. I note this article makes no

8 (US) 28 USC § 1350.

9 *Kiobel v Royal Dutch Petroleum*, 569 US 1659 (2013).

10 Ziad Haider, 'Corporate liability for human rights abuses: analyzing Kiobel & alternatives to the Alien Tort Stature' (2012) 43(4) *Georgetown Journal of International Law* 1361; Sarah Cleveland, 'After Kiobel' (2014) 12(3) *Journal of International Criminal Justice* 551; Robert Cryer, 'Come Together?: Civil and Criminal Jurisdiction in Kiobel from an *International Law Perspective*' (2014) 12(3) *Journal of International Criminal Justice* 579.

11 Africa is increasingly seen as an attractive, even necessary, investment option for extractive industry, see for example the Chatham House Report: Alex Vines, Lillian Wong, Markus Weimer and Indira Campos, *Thirst for African Oil: Asian National Oil Companies in Nigeria and Angola* (Report, Chatham House, August 2009) Chatham House.

attempt to place blame or offer a view on the factual substantiality of human rights violations alleged to be created by extractive operations. It only supposes that, in a free marketplace, the attraction of capital investment and profit may create such a situation.

II EXTRATERRITORIAL JURISDICTION WHERE THERE IS A FAILURE OF DOMESTIC ACCOUNTABILITY

The influence of private companies on domestic court action may prevent justice being done, even where the country has shown decisive action in acting in the interests of its population. In the Kilwa (eastern DRC, Katanga province) incident in 2004, it was alleged that Anvil Mining (Anvil) had aided a military operation which committed human rights abuses and left at least 73 dead in suppression of a small rebellion, through allowing use of company vehicles.[12] In 2007 a case for complicity in war crimes was brought against 3 employees of Anvil (as well as 9 Congolese soldiers) to a Congolese military court.[13] According to Global Witness 'obstruction by high level business interests prevented justice from taking its course; the judges failed to take into account strong eye-witness testimony at the trial and witnesses were intimidated.'[14] The defendants were acquitted, the trial having been derailed. The ineffective operation of justice in the DRC was noted by Tomlinson J in *Katanga Mining*.[15] In this case, the evidence did not permit a finding that the DRC was a forum in which the case could be tried suitably for the interests of all the parties and for the ends of justice.[16] That was particularly so where a party reasonably felt inhibited about traveling to the DRC and where there was a real risk of attempted interference with the integrity of the trial.[17] Third court interference in this case was deemed acceptable when 'attempted interference with the integrity of justice is apparently widespread and endemic.'[18] Interfering in a case could therefore be justified on the grounds of good conscience.

In other cases, government actions to hold various entities and individuals accountable are far from adequate. The Ugandan Porter Commission, set up to examine involvement of the government in illicit extraction of resources in the DRC, failed to produce any real outcome. The mandate of the Commission was restricted and did not examine human rights abuses. The report issued was criticized as being too lenient on the government of Uganda, who in turn had rejected the findings of official involvement but named some individuals for further investigation.[19] Interference then has a double-meaning, referring both to negative interference by the national governments where unreasonable exploitation is occurring and positive interference by a third court where claimants are not able to recover their rights in their home country.

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12 Action Contre l'Impunité pour les Droits Humains, *Anvil Mining Limited and the Kilwa Incident: Unaswered questions* (20 October 2005) Rights and Accountability in Development < http://www.raid-uk.org/sites/default/files/qq-anvil.pdf>; Jonathan Rhein, *Congo military court seeks war crimes trial for foreigners involved in Kilwa incident* (16 October 2006) JURIST <http://jurist.org/paperchase/2006/10/congo-military-court-seeks-war-crimes.php>.

13 Ibid.

14 Global Witness, *Natural Resource Exploitation and Human Rights in the Democratic Republic of Congo 1993 to 2003; A Global Witness briefing paper* (Report, Global Witness, 17 December 2009) Global Witness, 23-24.

15 *Alberta Inc v Katanga Mining Ltd* [2008] EWHC 2679 (Comm).

16 Ibid [2].

17 Ibid.

18 Ibid [34] (Tomlinson J).

19 Global Witness, above n 12, 24.

Interference in the judicial system of a country may be perceived as a threat to State sovereignty. While State sovereignty and territorial integrity are concomitant in international law discourse, judicial sovereignty is often ignored. State sovereignty — the ability to govern the citizens of a country, to create laws, to tax — may not be synonymous with judicial sovereignty. Non-interference in the government of another country should not be confused with interference with a judicial system. Indeed where a judiciary is absent (or not capable of acting in the interests of justice), then there may not be any organ with which to interfere. Conversely, the lack of a judicature may have no bearing on the existence or right of State sovereignty. In an age of globalized justice with the increasing importance of constitutionalism[20] and existence of international law, both of which mandate justice as existing above statehood such that States are subject to a higher law, what is the limit on judicial sovereignty? If States are not accountable to a higher law, either because it does not exist, or has been corrupted and is subservient to the State, then the exercise of sovereignty cannot be checked.

Where national courts are unwilling or unable to hold companies and their individuals accountable for their role in resource plunder and the conflict surrounding it, courts of 'third' nations or international courts and tribunals should hold such entities accountable. The US has been a leader in allowing foreign claimants who cannot seek effective remedy in their home country pursuing a claim in the US under the *ATS*.

III EXPANDING THE JURISDICTION OF THIRD COURTS: EXTRATERRITORIAL JURISDICTION, UNIVERSAL CRIMES AND DIRECT CORPORATE LIABILITY

A *Extraterritorial jurisdiction for violation of universal international norms: the lead of the United States*

The US has been at the forefront in finding 'third court' jurisdiction over corporate conduct abroad where proceedings are against a multinational by some form of a collective (either an ethnic group or a collection of individuals). [21] A debate has arisen over whether the *ATS,* which can be used by non-nationals to launch proceedings in US courts, enables extra-territorial jurisdiction over corporations for violations of international human rights norms committed overseas.

A number of cases, at both district and appellate level, have found a jurisdictional basis to decide a company's liability and culpability for acts committed on another territory. These are discussed below. Under international law, jurisdiction over specific corporate conduct abroad (such as aiding and abetting the crime of genocide) is granted to US courts because there can be no immunity for violations of universal international norms (such as genocide); that is, no derogation of the international standard is permissible under the *jus cogens* rule of international law. The jurisdictional grounds could thus be considered both an application of universal jurisdiction over widely accepted international norms from which no derogation is permissible, and/or extraterritorial application of US law, where international law has been incorporated into US law thereby granting subject matter jurisdiction. This means the

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20 Particularly in Africa: see H. Kwasi Prempeh, 'Africa's "constitutionalism revival": false start or new dawn?' (2007) 5(3) *International Journal of Constitutional Law* 469.

21 See the leading case of *Sosa v Alvarez-Machain*, 542 1 US 692 (2004); *John Doe v Exxon Mobil Corporation*, 654 F3d 11 (DC Cir, 2011); *Boimah Flomo, v Firestone Natural Rubber Co, LLC*,643 F3d 1013 (7th Cir, 2011); *Alexis Holyweek Sarei v Rio Tinto,* No. 02-56256 19331 (9th Circuit, 2011).

jurisdictional basis of application could as much be considered extraterritorial jurisdiction of US law, as universal application of international law.

The case of *John Doe v Exxon Mobil Corporation* (*John Doe)* [22] decided in July 2011 found that the *ATS* does not support corporate immunity for torts committed by agents in violation of international law. This case found that there can be extraterritorial application of the *ATS* where acts are committed by US citizens abroad or committed on US soil in the course of business which had an effect abroad. *John Doe* also found aiding and abetting a well-established jurisdictional basis under the *ATS*. The court found that:

> ...neither the text, history, nor purpose of the ATS supports corporate immunity for torts based on heinous conduct allegedly committed by its agents in violation of the law of nations...We conclude...that Exxon's objections to justiciability are unpersuasive and that the district court erred in ruling that appellants lack prudential standing to bring their non-federal tort claims and in the choice of law determination.[23]

The finding that corporations are not immune from liability for violation of international norms justiciable under the *ATS* was reiterated in *Boimah Flomo v Firestone Natural Rubber* (*Flomo)*.[24] In *John Doe* 'jurisdictional spoilers' such as the appearance on the claim of an inappropriate party (under the *ATS* there must be jurisdictional diversity where parties who are citizens from the same country cannot appear on either side of the dispute) did not impede the finding of jurisdiction.[25] Furthermore, the district court in this case had refused to dismiss claims on the basis that the appellants had failed to exhaust local (in this case Indonesian) remedies as 'it was apparent that such efforts would be futile.'[26]

Two major decisions previously had decided the contrary. In *The Presbyterian Church of Sudan v Talisman Energy* (*Talisman*),[27] a claim was made against Talisman Energy in 2001 in the US for alleged human rights abuse complicity, amounting to genocide, in Sudan, when buffer zones were created around its oil fields resulting in displacement, kidnapping, killing and rape of civilians.[28] Firstly, the court ruled that there were no grounds for applying federal law against a foreign corporation. In fact, neither the company nor the major plaintiff was American. Talisman is a Canadian company and the major plaintiff was the Presbyterian Church of Sudan. Secondly, the case was dismissed for lack of admissible evidence that the company had acted with the intention of harming civilians. It was found that the company needed to purposefully violate the law of nations, the court limiting liability for aiding and abetting to circumstances where the company sought to advance the violation. Although the Court of Appeal dismissed the appeal in favour of the company, it affirmed the decision in the pre-eminent case of *Sosa v Alvarez-Machain* (*Sosa)*.[29] Per Dennis Jacobs, Chief Judge:

> We hold that under the principles articulated by the United States Supreme Court in Sosa v Alvarez-Machain, 542 U.S. 692, 124 S. Ct. 2739, 159 L. Ed. 2d 718 (2004), the standard for imposing accessorial liability under the ATS must be drawn from international law; and that

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22 *John Doe v Exxon Mobil Corporation*, 654 F3d 11 (DC Cir, 2011).

23 Ibid 14.

24 *Boimah Flomo v Firestone Natural Rubber,* 643 F s3d 1013 (7th Cir, 2011). Although this case decided in favour of the corporation, Firestone and rejected the appeal.

25 *John Doe v Exxon Mobil Corporation*, 654 F3d 11, 71 (DC Cir, 2011).

26 Ibid 17.

27 *The Presbyterian Church of Sudan v Talisman Energy*, 82 F 3d 244 (2nd Cir, 2009).

28 Krista-Ann Staley, *Federal judge allows genocide case to proceed over US, Canadian objections*, JURIST< http://jurist.org/paperchase/2005/08/federal-judge-allows-genocide-case-to.php>.

29 *Sosa v Alvarez-Machain*, 542 US 692 (2004).

> under international law, a claimant must show that the defendant provided substantial assistance with the purpose of facilitating the alleged offenses. Applying that standard, we affirm the district court's grant of summary judgment in favor of Talisman, because plaintiffs presented no evidence that the company acted with the purpose of harming civilians living in southern Sudan.[30]

In other words, for a tort to be recognised under the *ATS*, it must be an established violation of international law norms. In order to establish corporate liability, it must be proven that the company: (i) provided practical assistance to the principal (for example, the supply of vehicles to the company agent) which has a substantial effect of perpetration of crime and (ii) had the intention or purpose of aiding or facilitating, that is; for aiding and abetting a violation of international law; the *mens rea* is purpose not simply knowledge.[31] For a claim to come under the jurisdiction of the *ATS*, *Talisman* cemented the criteria needed, applying the *Flores*[32] standard that "plaintiffs must (i) be 'aliens,' (ii) claiming damages for a 'tort only,' (iii) resulting from a violation 'of the law of nations' or of 'a treaty of the United States.'"[33] These findings were repeated in the case of *Kiobel*[34] in February 2011.

The recent appeal heard in the *Kiobel* case[35] added no additional insight to the liability of corporations under the *ATS*. Although the 2011 decision specifically addressed whether the *ATS* applied to corporations, this appeal was rather concerned with the *ATS* extraterritorial application more generally. Some argue that the *Kiobel* case has not limited the potentiality of the *ATS* in its extraterritorial application and may still yield positive results for egregious crimes.[36] The court was reluctant to intrude upon territorial sovereignty of another nation, refusing to consider the *ATS* as having extraterritorial reach (that the presumption against extraterritorial application remained intact), thus leaving other cases more relevant to answering the current state of this issue. The opinion of Breyer J, whilst concurring with the court, disagreed that the *ATS* had no extraterritorial application, rather noting that the *ATS* was developed specifically for extraterritorial application. This limited its application in a similar way to other cases concerning its application only to the most morally questionable of international crimes.[37] Breyer J noted the importance and pre-eminence of *Sosa* and other cases both before and after which have not discounted the possibility of extraterritorial application of the *ATS* – although *Sosa* may yet leave room for determining which acts are 'specific, universal and obligatory' under the *ATS*.[38] The position of the earlier court decision, in so far as corporations are concerned, has therefore not been compromised or further articulated with this latest decision.

Overall, *Talisman* and *Kiobel* have proved to be disappointing. In response to the earlier decision in *Kiobel*, *John Doe* stated:

> Given that the law of every jurisdiction in the United States and of every civilized nation, and the law of numerous international treaties, provide that corporations are responsible for their torts, it would create a bizarre anomaly to immunize corporations from liability for the conduct

30 *The Presbyterian Church of Sudan v Talisman Energy*, 82 F 3d 244, 248 (2nd Cir, 2009).
31 Ibid 41.
32 *Flores* v *Southern Peru Copper Corporation*, 414 F 3d 233 (2nd Cir, 2003).
33 *The Presbyterian Church of Sudan v Talisman Energy*, 82 F3d 244, 255 (2nd Cir, 2009).
34 *Kiobel v Royal Dutch Petroleum Co*, 642 F 3d 268 (2nd Cir 2011).
35 *Kiobel v Royal Dutch Petroleum Co,* 569 US 1659 (2013).
36 Sarah Cleveland, 'After Kiobel' (2014) 12(3) *Journal of International Criminal Justice* 551, 577.
37 *Kiobel v Royal Dutch Petroleum,* 569 US 1659, 1670–1671 (2013).
38 Robert Cryer, 'Come Together? Civil and Criminal Jurisdiction in Kiobel from an *International Law Perspective*' (2014) 12(3) *Journal of International Criminal Justice* 579, 592.

> of their agents in lawsuits brought for "shockingly egregious violations of universally recognized principles of international law." Zapata v Quinn, 707 F 2d 691 (2d Cir. 1983). The analysis of the majority in Kiobel, 621 F 3d at 130-35, by overlooking the distinction between norms and technical accoutrements in searching for an international law norm of corporate liability in customary international law, misinterpreting Sosa in several ways, and selectively ignoring relevant customary international law, is unpersuasive.[39]

Thus, exempting corporations from liability under the *ATS* was found to be legally incorrect. More importantly, leaving corporations free from liability for any reason seems inherently morally abhorrent. The dissent in the earlier *Kiobel* case by Leval J proved quite powerful on this issue, stating:

> According to Judge Jacobs, exempting corporations from liability under the law of nations has no serious adverse consequences because: (1) Corporations do not behave badly except in the rarest of instances, amounting to one or two per century; (2) natural persons who do behave badly do not adopt the corporate form; and (3) under our holding in Talisman, liability may be imposed only in cases of the most serious abuses...I have no idea what is the basis of the Chief Judge's confidence that corporations do not behave badly, or that business enterprises based on the abuse of human rights do not utilize the business advantages provided by corporate and other juridical forms. I do not share Judge Jacob's confidence that, if corporations other than I.G. Farben, the Peruvian Amazon Company, and the Abir Congo had violated human rights during the last two centuries, they would have seen to it that the world be informed of their abuses. While I do not purport to have any better information on the subject than the Chief Judge, it is my impression that those who conduct heinous and illegal businesses, such as slave trading, do not publicize that fact. Indeed, one of the many reasons why they might wish to conduct such businesses behind the veil of a juridical entity is to secure greater anonymity.[40]

Indeed Leval J's dissent later had concurrence and was applied in *Sarei*.[41] It was noted:

> Rio Tinto urges us to hold that the ATS bars corporate liability. This is a view that is to some extent supported by the recent Second Circuit majority opinion in Kiobel v Royal Dutch Petroleum Co., holding that customary international law as a whole "has not to date recognized liability for corporations that violate its norms." 621 F 3d 111, 125 (2d Cir. 2010). We, however, conclude the sounder view is that expressed in Judge Leval's concurrence. Id. at 153 (Leval, J., concurring) ([HN12] "No principle of domestic or international law supports the majority's conclusion that the norms enforceable through the ATS--such as the prohibition by international law of genocide, slavery, war crimes, piracy, etc.--apply only to natural persons and not to corporations, leaving corporations immune from suit and free to retain profits earned through such acts.").[42]

Sarei effectively summarized the grants of jurisdiction under the *ATS*. The *ATS* essentially grants extraterritorial jurisdiction to US courts over a certain small number of violations of international law norms, genocide being one. As the norms being applied though are international not domestic norms (*jus cogens* norms), it could also be a form of universal jurisdiction, (although such norms satisfy US subject matter jurisdiction through incorporation into federal US law). *Sosa* notes that '[i]nternationally accepted norms must be specific, universal, and obligatory'.[43] There can be no such thing as corporate immunity from such violations because there is no allowable derogation from *jus cogens* norms.

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39 *John Doe v Exxon Mobil Corporation*, 654 F 3d 11, 57 (DC Cir, 2011).
40 *Kiobel v Royal Dutch Petroleum C*o, 642 F 3d 268, 274-5 (2nd Cir 2011).
41 *Alexis Holyweek Sarei* v *Rio Tinto,* No. 02-56256 19331, 19339 (9th Circuit, 2011).
42 Ibid 19339.
43 Ibid 19341.

> ...there is no bar to the ATS's applicability to foreign conduct because the Supreme Court in Sosa did not disapprove these seminal decisions and Congress, in enacting the Torture Victim Protection Act, implicitly ratified such law suits…[44]

Sarei stated the *ATS* granted jurisdiction over any amorphous entity who committed violations of *jus cogens* norms such as genocide, including corporations.[45] On the other hand, *Sarei* stated that cases raising political questions were non-justiciable, which may explain the reluctance of the court in *Talisman* to consider claims that asserted violations of law through actions that accompany natural resource development generally. In reaffirming the determination of the district court, *Talisman* found:

> The activities which the plaintiffs identify as assisting the Government in committing crimes against humanity and war crimes generally accompany any natural resource development business or the creation of any industry.[46]

This could effectively mean that natural resource development, without consultation, always takes precedent over human rights and community preferences. Less disastrously, perhaps this is a statement about refraining from judicial activism.

The one major lack of consideration in the *Talisman* case - which is approached from a business as usual perspective in its strict judicial interpretation of the relevant law - is the proclivity which the presence of extractive players and their domination over land and natural resource wealth has towards exacerbating local tensions and in incentivising human rights abuses. The argument advanced by plaintiffs that forced displacement was known to Talisman Energy was disregarded because a government has the right to regulate use of land and resources, implying that forced displacement is not a violation of international law. The court stated:

> Resource extraction in particular is by nature land-intensive: land is needed for exploration and engineering, equipment, rigs or mines, offices and dormitories in remote areas, transportation infrastructure, and so on. Under the best circumstances, these facilities might require relocation from a development area. But GNPOC was not operating in the best of circumstances. Sudan's oil was located in an area heavily contested in a civil war, in a region of the country that had suffered through four decades of violence before Talisman arrived. The oil facilities came under frequent rebel attack and oil workers were killed during the relevant time. Safe operation of the oil facilities therefore required tightened security; and displacing civilians from an "area within the security ring road" was not in itself unlawful.[47]

B *Extraterritorial jurisdiction where there is a territorial nexus*

Contrariwise, a succinct statement of the reasons for finding jurisdiction over activities by corporations abroad was made in *Bauman*:[48]

> [P]olicy is providing a forum to redress violations of international law by defendants who have enough connections with the United States to be brought to trial on our shores, even though the injury is to aliens and occurs outside our borders -- "a small but important step in the fulfillment of the ageless dream to free all people from brutal violence." Filartiga v Pena-Irala, 630 F 2d

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44 Ibid 19335.
45 Ibid 19362–5.
46 *The Presbyterian Church of Sudan v Talisman Energy*, 82 F 3d 244, 260 (2nd Cir, 2009).
47 Ibid 263.
48 *Barbara Bauman v Daimler Chrysler Corporation*, 644 F 3d 909 (9th Cir, 2011).

> 876, 890 (2d Cir. 1980). American federal courts, be they in California or any other state, have a strong interest in adjudicating and redressing international human rights abuses.[49]

These cases argue about application of universal jurisdiction by third courts. It is legitimate that such jurisdiction should exist because a government should be responsible for ensuring the moral conduct of a national company. Typically:

> Home governments have failed to show moral leadership in holding to account companies based in their countries that engage in trade which benefits the warring parties and leads to human rights abuses. They have fallen back on voluntary codes of conduct and other non-binding guidelines, resisting calls for stronger action to control the corporate sector.[50]

In questioning the appropriateness of the forum, *Bauman*[51] found that a court may find jurisdiction over a foreign parent company if a subsidiary has continual operations in the forum, that is, there must be a real connection to the US through an agent. However, the bar to showing jurisdictional appropriateness is low.[52] The importance of a territorial nexus in finding corporate liability also perhaps explains the outcome in *Talisman*. As noted, Talisman was actually a Canadian company.

Despite Talisman's eventual withdrawal from Sudan, not completed until 2002, it was accused of being complicit in forcible displacement and human rights abuses in the south western part of the country.[53] Despite the large body of evidence supporting the accusation, Canada failed to pursue serious legal action of Talisman.

C *Direct Corporate Liability: the lead of the United Kingdom*

More generally, the ability of courts to prosecute companies for acts done in foreign countries, under its own national laws according to national standards of the prosecuting country, may be broadly termed direct corporate liability (DCL). DCL is used to describe the liability of a company, attributable independent of any vicarious liability owing to the acts of its agents. In the author's opinion, aspects of corporate management such as due diligence and sufficiency of knowledge of a business environment may contribute to a company either performing or evading its corporate responsibilities and hence a finding of direct corporate liability.

Jurisdictional rights may only be possible when the company in question has a territorial link to the prosecuting country. The crime of piracy, to which the crime of plunder may be likened, is 'predicated on the presence of the accused on the territory of the forum state. States may try pirates only after apprehending them, hence only when the pirates are on their

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49 Ibid 927.

50 Global Witness, 'Faced With a Gun, What Can You Do? War and the Militarisation of Mining in Eastern Congo'(Report, Global Witness, July 2009) 8.

51 *Barbara Bauman v Daimler Chrysler Corporation*, 644 F3d 909, 911 (9th Cir, 2011). Reversing the decision of the District Court, the 9th Circuit found: '[T]hat, in light of defendant's pervasive contacts with the forum state through the domestic subsidiary, including the subsidiary's extensive business operations, the forum state's interest in adjudicating important questions of human rights, the court's substantial doubt as to the adequacy of Argentina as an alternative forum, defendant failed to meet its burden of presenting a compelling case that the exercise of jurisdiction would not comport with fair play and substantial justice.' *Barbara Bauman v Daimler Chrysler Corporation*, 644 F3d 909, 911 (9th Cir, 2011).

52 Ibid.

53 Human Rights Watch, 'Sudan, Oil, and Human Rights'(Report, Human Rights Watch, 2003) 65.

territory or at any rate under their physical control'.[54] Likewise with DCL, a territorial nexus is supplied because the company is registered and/or operating in the prosecuting country.

In the United Kingdom (UK), a notable precedent for third court jurisdiction is *Katanga Mining*.[55] In this case an English court took over jurisdiction from the DRC even though the Tribunal de Grande Instance of Kolwezi in the province of Katanga in the DRC, was to be given exclusive jurisdiction under the contract. The contractual provisions regarding elected jurisdiction were overridden because the selected jurisdiction was found not to be an appropriate forum, unable even to guarantee a minimum level of safety to its citizens.[56] The justification for the UK court finding jurisdiction was here effectively determined by two principles: (i) the ability and willingness of the home (domestic) court to act, and act in a way such that justice will be done, that is, that the home court is an available forum; and (ii) the existence of a real connection with the jurisdiction of the third court, that cannot be impeded or invalidated by a finding of more suitable jurisdiction in a country able and willing to act.[57]

Third court jurisdiction therefore could be said to rest on the satisfaction of these two principles. In *Katanga Mining*, Tomlinson J was not satisfied that the DRC was an appropriate forum[58] because the state of affairs within the country was such that there was no demonstrable ability or will to restore the rule of law.[59] Evidence of a lack of state infrastructure, and functioning judicial system was found to compromise the interests of the parties and the ends of justice being met.[60] Furthermore, a trial in England was likely to be overwhelmingly more convenient than a trial in the DRC, where a party reasonably felt inhibited about traveling to the DRC and where there was a real risk of attempted interference with the integrity of the trial.[61]

The argument for appropriate forum was also considered in the prosecution of cartel conduct against subsidiaries in England in the case of *Provimi Limited v Aventis Animal Nutrition SA* (*Provimi)*.[62] Provimi had purchased vitamins from a global cartel. The company's English and German subsidiaries had suffered loss and the company wanted to pursue litigation in England alone rather than in multiple jurisdictions. It thus sued a subsidiary of the cartel company, located in England. The High Court of Justice of England and Wales found that all entities within a corporate structure, including subsidiaries, that behave as one economic unit, with the subsidiary undertaking or implementing measures adopted by the parent, in this case agreeing to implement a cartel.[63] The court claimed wide jurisdiction to hear claims for damages for competition law violations even by non-English parties against an English subsidiary, where there was no contractual relationship between the purchasing company and the English subsidiary, because of the tortious nature of the claim.[64] The jurisdictions of the

54 Antonio Cassese, 'When may senior state officials be tried for international crimes? Some comments on the Congo v. Belgium case' (2002) 13(4) *European Journal of International Law* 853, 857.
55 *Alberta Inc v Katanga Mining Ltd* [2008] EWHC 2679 (Comm).
56 Ibid [33] (Tomlinson J).
57 See the discussion about Canadian jurisdiction, ibid [21– 23] (Tomlinson J).
58 Ibid [2] (Tomlinson J).
59 Ibid [33] (Tomlinson J).
60 Ibid [2] (Tomlinson J).
61 *Alberta Inc v Katanga Mining Ltd* [2008] EWHC 2679 (Comm) [34] (Tomlinson J).
62 *Provimi Limited v Aventis Animal Nutrition SA* [2003] EWHC 961 (Comm). The scope of application of this case has been challenged in *Cooper Tire & Rubber Company Europe Ltd v Dow Deutschland Inc* [2010] EWCA Civ 864, though this case found *Provimi* not directly applicable, see [47].
63 *Provimi Limited v Aventis Animal Nutrition SA* [2003] EWHC 961 (Comm), [27] (Aikens J).
64 Ibid [42] (Aikens J).

contract (Switzerland, France and Germany) were found to be insufficiently wide to hear the cause of complaint.[65] Accordingly, foreign companies can bring claims of loss suffered by cartel conduct against a cartel's subsidiaries located in England.

This case could be considered similar, though not strictly the same, to that required for extraterritorial jurisdiction, which grants territorial jurisdiction over a foreigner accused of crimes in another country where the judicial authority has the 'accused' (or an affiliate of) within their territorial limits. The distinction is between the territoriality over a person accused in one instance and a subsidiary accused – for example, where subsidiary and parent operate as one entity – in the other. This is different to universal jurisdiction in that only the companies with such a territorial link to the prosecuting country can be prosecuted. Under US law, foreign cartelists can be directly sued with minimum territorial nexus, utilizing universal jurisdiction under the *ATS*. Universal jurisdiction ought to be used by third courts applying international standards, as has been done under the *ATS*, where no company-country nexus is found to the prosecuting country or where the prosecuting country standards are not severe enough to curtail illegitimate operations. Under the increasing allowances made for universal jurisdiction, national courts may be able to try breaches of universal values, where there is no connection either of a personal nor territorial nature.[66]

D *Implementation of ICC Crimes: Australia takes the lead*

This form of corporate accountability may also be fostered by national implementation of universal ICC crimes without any bar to pursuing corporate entities as well as individuals. The Australian implementation of ICC crimes, within the *Criminal Code Act 1995* (Cth) (*Criminal Code*), eschews any distinction between natural and legal persons so that it is likely that corporate entities will also come under jurisdiction of the courts for extraterritorial corporate crime in the same way individuals are accountable.[67] Division 268 of the *Criminal Code* could be considered as giving to Australian courts universal jurisdiction over extraterritorial corporate criminal conduct amounting to genocide, crimes against humanity or war crimes as defined under the *Rome Statute*.[68] Even though the *Rome Statute* crimes do not apply internationally to corporations (which seems remiss of international law), Australia has the possibility of extending jurisdiction to corporations because the *Criminal Code* equally applies to legal as well as natural persons.[69] Other jurisdictions have similar universal jurisdiction applicable to legal, as well as natural, persons.[70] In future, the application of universal crimes to corporate criminal conduct by various nations may become part of international custom. What may provide a short term remedy, though perhaps drastic, is to make plunder, well-defined, a crime against humanity to undeniably bring it within the purview of universal jurisdiction. This could be aided by the international criminalization of plunder through an international treaty.

IV INTERNATIONAL COURTS AND THE INTERNATIONAL CRIME OF PLUNDER

65 Ibid [128] (Aikens J).
66 Cassese, above n 52, 859.
67 See generally Joanna Kyriakakis, 'Australian prosecution of corporations for international crimes: the potential of the Commonwealth Criminal Code' (2007) 5 (4) *Journal of International Criminal Justice* 809.
68 Ibid 818–9.
69 Ibid 815–8.
70 Ibid 819.

The development of the international crime of plunder may prove a useful aid to expanding the jurisdiction of third and international courts and tribunals. Clearly needed would be a distinction between licit and illicit mineral extraction, perhaps dependent on defrauding peoples of a country of the freedom to dispose of their mineral wealth as incorporated in the first article of the *International Covenant on Civil and Political Rights*. Security Council resolution 1457 both condemned the plunder in the DRC, linking it to the conflict there and effectively defined plunder as the illegal exploitation of natural resources. It added that mineral 'exploitation should occur transparently, legally and on a fair commercial basis, to benefit the country and its people.'[71] Where this is not the case, prosecution should occur. The Security Council demanded States investigate companies found in potential breach though there has been a general lack of political will to do so.[72]

However, the International Court of Justice in 2005 ruled that Uganda was guilty of plundering DRC's gold, diamonds and timber and ordered reparations. In the *Case Concerning Armed Activities on the Territory of the Congo* (*Case Against Uganda)*,[73] (the DRC contended that the plunder of its resources constituted a violation of its sovereignty and territorial integrity over its natural resources,[74] citing various resolutions including *General Assembly resolution Permanent Sovereignty over Natural Resources*.[75] Whilst the court did not find a Ugandan government agenda to exploit,[76] finding that there was nothing in the General Assembly resolutions which made it applicable to the current situation, where a member of the army looted during military occupation,[77] the court did find enough evidence to conclude that plunder by the Ugandan army took place.[78] The court found that acts of Ugandan armed force members were attributable to Uganda[79] and as such 'Uganda violated its duty of vigilance by not taking adequate measures to ensure that its military forces did not engage in the looting, plundering and exploitation of the DRC's natural resources.'[80] Uganda was responsible for the conduct of its army as a whole and for individual members of the army, irrelevant of whether these individuals acted ultra vires. [81]

Furthermore, Uganda was responsible for the actions of their armed forces whether in territory under occupation or not.[82] The court found that Uganda was responsible for looting, plunder and exploitation committed by the Ugandan army in the DRC and for all actions of plunder committed in Ituri from August 1998 to 2 June 2003 as an occupying power in that region.[83] The court relied heavily on findings of the Porter Commission which recognized looting since before 1998[84] by 'senior army officers working on their own and through

71 Human Rights Watch, 'The Curse of Gold: Democratic Republic of Congo' (Report, Human Rights Watch, 2005) 120.
72 Ibid 120-2.
73 *Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda)* (*Judgement*) [2005] ICJ Rep 168.
74 Ibid 226.
75 *Permanent Sovereignty over Natural Resources*, GA Res 1803 (XVII), 17 UN GAOR Supp No 17 at 15, UN Doc A/5217 (14 December 1962).
76 *Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda)* (*Judgement*) [2005] ICJ Rep 168 242.
77 Ibid 244.
78 Ibid 242.
79 Ibid 245.
80 Ibid 246.
81 Ibid 243.
82 Ibid 245.
83 Ibid 250.
84 Ibid 241.

contacts inside the DRC',[85] by individual soldier's and private individuals resident in Uganda,[86] including omissions to act in the particular example of General Kazini who was in charge of the occupation.. Uganda's obligation to prevent plunder was thus extended to the conduct of private persons, in areas where it was an occupying power. Uganda was found to be an occupying power in Ituri[87] and was therefore culpable for the pillage carried out by businesses and businessmen in that area.[88] Under Article 43 of the *Hague Regulations of 1907*, Uganda was under an obligation to restore law and order and respect the laws in force in the DRC including international human rights and humanitarian standards which includes protecting the inhabitants against acts of violence by a third party. Contrariwise, Uganda was not found responsible for looting done by rebels as they were not found to be in effective control of these groups and therefore not responsible for their actions.[89]

Finding furthermore that Uganda had violated the principles of non-interference in the sovereignty of another nation,[90] the decision not only points to a precedent for the international crime of plunder but also re-establishes the importance of non-interference, allowing as part of the concept of territorial wholeness, compensation for the removal of property. The court made a definitive statement that acts of pillage are prohibited in article 47 of the *Hague Regulations of 1907* and article 33 of the *Fourth Geneva Convention 1949*.[91] It also noted that the African Charter applied, particularly referencing article 21 which entitles a dispossessed people the right of reclamation and compensation for natural resources taken.[92] The court considered it a well-established international legal principle that a culpable state should make full reparation for the injury caused.[93] Friendly relations at one time existent between two nations did not prevent one raising a pre-existing claim against the other.[94] Any waiver of claims or rights by the party injured could not be implied on the basis of conduct alone but rather must be unequivocal.[95]

International Court of Justice (ICJ) jurisdiction relies on the consent of the governments in disputes. In this sense it is surprising yet positive that Uganda would consent to ICJ jurisdiction. Nevertheless it has not implemented any of the recommendations to compensate the DRC. Contrarily, Rwanda, also allegedly heavily involved in the illicit extraction of natural resources from the DRC, did not consent to the ICJs jurisdiction when there was a case submitted against it by the DRC.[96] Thus, while the DRC instigated similar proceedings against Rwanda the court did not find jurisdiction to adjudge.

It appears, therefore, that there is some development in international jurisprudence of an international crime of plunder. However, the clarity of its definition and its international acceptance is questionable.

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85 Ibid.
86 Ibid.
87 Ibid 178.
88 Ibid 248.
89 Ibid 247.
90 Jeannie Shawl, *ICJ rules Uganda violated sovereignty, rights in Congo* (Press Release 19 December 2005) <http://jurist.org/paperchase/2005/12/icj-rules-uganda-violated-sovereignty.php>.
91 *Case Concerning Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v Uganda)* (*Judgement*) [2005] ICJ Rep 168, 245.
92 Ibid.
93 Ibid 259.
94 Ibid 294.
95 Ibid 293.
96 Global witness, above n 12, 24.

V EXTRATERRITORIAL JURISDICTION FOR FAILURE TO EXERCISE DUE DILIGENCE: OPERATIONS IN CONFLICT ZONES

Demands have increased for corporations to carry out significant due diligence in order to demonstrate and ensure that their sourcing practices do not contribute to armed violence and human rights abuses. In carrying out due diligence, companies can help to create a legitimate mining sector that increases rather than decreases the security of the people living locally. Companies have a responsibility, both moral and socio-economic, that they choose their source countries wisely. Where they choose to source from countries such as the DRC, they must be held to a higher standard of corporate awareness.[97]

Corporate complicity in plunder in central Africa has been well documented, most notably by Global Witness and Human Rights Watch,[98] and most specifically in relation to the DRC. In the DRC, 'foreign companies...are perceived as playing a predatory role and 'stealing' the country's natural resources'[99] and '...75 per cent of mining resources in the DRC are owned by foreign companies...The profit is only going to the companies, not the Congoese [sic] people'.[100] The associated perpetuation of human rights abuses goes largely unreported in international press.[101]

In June 2000, the U.N. Security Council set up an independent Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of Congo to examine links between the trade in minerals and conflict in the DRC. The group published a report in October 2002, listing 85 companies in violation of business norms under the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises, and 29 companies and 54 individuals against whom it recommended travel and financial restrictions.[102] Its final report in October 2003 recommended that 33 companies be investigated.[103] Although the conclusions of the panel stressed that conflict will continue to be fueled by the mineral trade unless national and international action was taken, the Security Council terminated the group's mandate and no serious investigation into corporate conduct was initially forthcoming.[104] In time, Belgium and the UK launched investigations into possible breaches of international business norms by corporations registered in their respective territories. The clarity needed around multinational corporations (MNCs)' playing a direct role in sourcing from the DRC has also been met by a

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97 Africa Confidential, 'Congo-Kinshasa: 8 ways to clean up minerals' (2010) 51 (16) *Africa Confidential.*

98 See for example: Tim Raemaekers, 'Network War: An Introduction to Congo's Privatised War Economy' (Report, International Peace Information Service, October 2002) 4, 9 ; Tim Raeymaekers and Jeroen Cuvelier, 'Contributing to the War Economy in the DRC; European Companies and the Coltan Trade' (Report, International Peace Information Service, January 2002) 4; Raf Custers, Jeroen Cuvelier and Didier Verbruggen, 'Culprits or scapegoats? Revisiting the role of Belgian mineral traders in eastern DRC' (Report, International Peace Information Service, May 2009) 3 ; Human Rights Watch,'The Curse of Gold: Democratic Republic of Congo' (Report, Human Rights Watch, 2005); Human Rights Watch, 'Sudan, Oil, and Human Rights'(Report, Human Rights Watch, 2003).

99 Global Witness, 'Digging in Corruption: Fraud, abuse and exploitation in Katanga's copper and cobalt mines' (Report, Global Witness, July 2006) 34.

100 Denis Tougas, staff member of l'Entraide Missionnaire, cited in Gwalgen Geordie Dent (May 26 2007) *Mining the Congo: Canadian mining companies in the DRC* (26 May 2007) The Dominion <http://www.dominionpaper.ca/articles/1195>.

101 Anneke Van Woudenberg 'A New Era for Congo?' (Report, Human Rights Watch, October 2006) 7.

102 Human Rights Watch, above n 71, 119.

103 Van Woudenberg, above n 101, 5.

104 Ibid.

new law in the US, the *Dodd-Frank Wall Street Reform and Consumer Protection Act* (*Dodd-Frank Act*),[105] passed by the United States Congress which makes it compulsory for US registered companies sourcing from the DRC to state the measures they have taken to exclude conflict minerals from their supply chains.

Section 1502 of the *Dodd-Frank Act* sets out important rules. This includes that US electronic equipment producers are required to carry out due diligence on their source material to ensure their products do not contain DRC conflict minerals.[106] Within 270 days, the Securities and Exchange Commission must publish regulations that require companies who report to it to disclose each fiscal year whether they source any of four listed conflict minerals (coltan, cassiterite, wolframite, gold or other mineral determined to be financing conflict) from the DRC or an adjoining country and, if so, what they have done to check that their source and chain are conflict-free.[107] The Secretary of State must publish, every six months, an updated map of which armed groups control which mines in eastern Congo.[108]

Some argue that the *Dodd-Frank Act* is impractical in seeking to track the origins of all metal and will lead to an effective embargo on DRC minerals, leading to job loss and adding to insecurity.[109] Nevertheless, the message sent is strong and, ultimately, if there is nothing to gain from controlling mine sites and illegitimately trading in their minerals, perhaps a new system of accountable mineral exploration can emerge. Even an effective embargo on the DRC serves the people there no less than the current system - where it has been reported they are exploited and abused.

NGO Global Witness has been a staunch advocate of implementing greater obligations on companies to ensure that their suppliers do not source minerals from conflict zones, particularly the DRC. They advocate holistic supply-chain due diligence, so that the company is aware of the exact origin of the mineral they are purchasing, and penalties placed on those sourcing from conflict zones.[110] Other various schemes have been discussed for the DRC including trading centers, geological fingerprinting, the Tin Supply Chain Initiative and Certified Trading Chains which encourage buyers to use independent auditors.[111]

Increasingly, governments are involving themselves more in the conduct of business enterprises operating overseas.[112] In 2008, the British government found DAS Air, a UK

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105 *Dodd-Frank Wall Street Reform and Consumer Protection Act*, Pub.L.111-203.

106 Ibid 1502; See also Andrea Bottorff, *Rights group sues UK government over failure to report DRC conflict minerals trade* (27 July 2010) JURIST < http://jurist.org/paperchase/2010/07/rights-group-sues-uk-government-over-failure-to-report-drc-conflict-minerals-trade.php>.

107 *Dodd-Frank Wall Street Reform and Consumer Protection Act*, Pub.L.111-203, Sec 1502, (a)(1)(A), (e) 4.

108 Africa Confidential, above n 95.

109 Doug Bannerman, 'One Step Forward for Conflict Minerals, but What Impact on Congo?' on Doug Bannerman, *GreenBiz* (10 August 2010) <http://www.greenbiz.com/blog/2010/08/10/one-step-forward-conflict-minerals-what-impact-congo>.

110 Global Witness, above n 48.

111 An extensive list of corporate compliance programs are outlined in Africa Confidential, above n 96.

112 The Committee on Economic, Social and Cultural Rights held that states should take steps to prevent violations of the ICESCR rights by their citizens and companies of individuals and communities elsewhere, see Michael Dennis and David Stewart, 'Justiciability of Economic, Social, and Cultural Rights: Should There Be an International Complaints Mechanism to Adjudicate the Rights to Food, Water, Housing, and Health?' (2004) 98 (3) *American Journal of International Law*, 462, 499. See also the judgment of the African Commission on Human and Peoples' Rights in Decision Regarding Communication 155/96, (*Social and Economic Right Action Center/ Center for Economic and Social*

based cargo company, in breach of the OECD guidelines for transporting conflict minerals from eastern DRC. The case set a precedent which continues to be pursued, for holding companies responsible for operating blindly in areas of conflict where their actions lead to human rights abuses.[113]

A growing number of investigations may hint at such a jurisdiction being more widely accepted by third courts in other countries in time to come. In June 2010, Sweden's prosecutor began an investigation into the role of Lundin Petroleum in the unrest in Sudan, in response to a report released by the European Coalition on Oil in Sudan which stated that civilians had been forcibly displaced so Lundin could have access to land for oil drilling.[114] Although not directly responsible it was alleged that by carrying out activity in an unstable area, the company contributed to the inhumane treatment of civilians.[115] In yet another example, the Australian Federal Police began investigating whether there was sufficient evidence of Anvil's complicity in crimes against humanity in the Kilwa incident under the *Criminal Code*.[116] That investigation ceased when the court in the DRC acquitted the Anvil employees.[117] If the Australian investigation had gone ahead it could have proved important for defining the limits of corporate liability for extraterritorial conduct.

The Canadian judiciary also examined the Kilwa case in an action brought by the Canadian Association Against Impunity against Anvil.[118] In April 2011, the Superior Court of Quebec, Canada, found it had jurisdiction to hear a case against Anvil brought by the Canadian Association Against Impunity as a class action on behalf the collective interests of the Congolese survivors of the Kilwa massacre for human rights violations in the DRC.[119] The court found that should jurisdiction be denied, the victims would have no other forum for redress having already been denied justice in the two more appropriate forums – the DRC and Australia.[120] Unfortunately, this decision was later overturned by the Court of Appeal.[121]

Rights v Nigeria), where the Commission concluded that under the African Charter, the Nigerian government had a duty to monitor and control the activities of multinational corporations: *Social and Economic Right Action Center/ Center for Economic and Social Rights v Nigeria (Communication)* (African Commission, Case No ACHPR/COMM/A044/1, 27 May 2002).

113 Larry Catá Backer, 'Rights and accountability in development (RAID) v Das Air and Global Witness v Afrimex: Small Steps towards an Autonomous Transnational Legal System for the Regulation of Multinational Corporations' 10 *Melbourne Journal of International Law* 258. See also Rights and Accountability in Development (RAID) (2008, July 21) 'Government Condemns British Aviation Company for Fueling Congo's War' (Oxford) <www.oecd.org/investment/mne/43750985.pdf>.

114 Hillary Stemple, *Sweden prosecutor to probe possible oil company complicity in Sudan war crimes* (21 June 2010) JURIST < http://jurist.org/paperchase/2010/06/sweden-prosecutor-to-probe-possible-oil-company-complicity-in-sudan-war-crimes.php>.

115 Ibid.

116 Jonathan Rhein, *Congo military court seeks war crimes trial for foreigners involved in Kilwa incident* (16 October 2006) JURIST < http://jurist.org/paperchase/2006/10/congo-military-court-seeks-war-crimes.php>.

117 Business & Human Rights Resource Centre, *Anvil Mining lawsuit (re Dem. Rep. of Congo)* (30 June 2014) Business & Human Rights Resource Centre <http://business-humanrights.org/en/anvil-mining-lawsuit-re-dem-rep-of-congo?page=1>.

118 *Association canadienne contre l'impunité v Anvil Mining Ltd*. (2011) QCCS 1966.

119 Ibid.

120 Ibid [38–39]; see also International Crimes Database, *Canadian Association Against Impunity (CAAI) v Anvil Mining Ltd.* (2013) International Crimes Database <http://www.internationalcrimesdatabase.org/Case/210/CAAI-v-Anvil-Mining/>.

121 Global Witness, 'No Justice in Canada for Congolese Massacre Victims as Canada's Supreme Court Dismisses Leave to Appeal in Case Against Anvil Mining', (Press Release, 6 November 2012) <http://www.globalwitness.org/archive/no-justice-canada-congolese-massacre-victims-canadas-supreme-court-dismisses-leave-appeal/>; Business & Human Rights Resource Centre, *Anvil Mining lawsuit (re*

Governments of countries where international mineral traders are established (such as the US and Belgium) can also play an advisory and sensitizing role vis-à-vis extractive companies liabilities under international and national law, particularly when operating in a conflict zone.[122] This may also enhance such governments' credibility as peace-brokers in the region and adjust the persistent perception among many local stakeholders that foreign business interests are more valuable than peace.[123] The State should act as bulwark against excessive corporate power and countries should be held accountable for failure to hold their corporations to account.

VI THE ROLE OF NATIONAL CODES OF CONDUCT: STATE AS ENFORCER

There is a growing NGO movement calling for western governments to live up to their dedication to alleviate poverty by investigating on their own volition the mining contracts over which they have jurisdiction.[124] Global Witness sued the UK government in 2010, claiming it turned a blind eye to British firms who traded in Congolese conflict minerals. It claimed that the government was in violation of UN resolutions 1857 and 1896 which required countries to report companies, involved in the DRC mineral trade and believed responsible for the violence there, for sanctions.[125]

In February 2007, Global Witness made a specific complaint to the UK National Contact Point (NCP), established to examine breaches of the OECD Guidelines,[126] against Afrimex, a company who has traded in minerals (coltan and cassiterite) from the DRC since 1996. It is alleged the 'tax' payments made by the company to an armed group in control of mines in the Kivus (eastern DRC), the Rassemblement Congolais pour la Démocratie-Goma, contributed directly to human rights abuses, including forced labour and that the company should have known what its tax payments were being used for.[127] The complaint provided a platform for the UK government to demonstrate its seriousness in holding national companies to account.

Dem. Rep. of Congo) (30 June 2014) Business & Human Rights Resource Centre <http://business-humanrights.org/en/anvil-mining-lawsuit-re-dem-rep-of-congo?page=1>.

122 Raf Custers, Jeroen Cuvelier and Didier Verbruggen, 'Culprits or scapegoats? Revisiting the role of Belgian mineral traders in eastern DRC' (Report, International Peace Information Service, May 2009) 3.

123 Ibid.

124 Global Witness, 'NGOs fear that DRC mining contract review process has been hijacked', (Press Release, 4 February 2008) < https://www.globalwitness.org/archive/ngos-fear-drc-mining-contract-review-process-has-been-hijacked/>.

125 Andrea Bottorff, *Rights group sues UK government over failure to report DRC conflict minerals trade* (27 July 2010) JURIST <http://jurist.org/paperchase/2010/07/rights-group-sues-uk-government-over-failure-to-report-drc-conflict-minerals-trade.php>; Global Witness, 'Global Witness takes UK government to court for failing to list UK companies trading Congo conflict minerals for UN sanctions', (Press Release, 26 July 2010) <https://www.globalwitness.org/archive/global-witness-takes-uk-government-court-failing-list-uk-companies-trading-congo-conflict/>.

126 The OECD Guidelines for monitoring corporate behavior in conflict zones is adopted by governments in all thirty OECD member countries and by eight non-members. Whilst the guidelines are voluntary and not binding on companies, it is a government- supported mechanism and the states parties are required to implement the guidelines through National Contact Points (NCPs) which are able to examine specific instances of company misconduct.

127 Global Witness, 'Afrimex (UK) Democratic Republic of Congo: Complaint to the UK National Contact Point under the Specific Instance Procedure of the OECD Guidelines for Multinational Enterprises' (Report, Global Witness, 20 February 2007); Global Witness, 'Global Witness calls upon the UK Government to hold British company Afrimex to account for fuelling conflict in the Democratic Republic of Congo', (Press Release, 21 February 2007) < https://www.globalwitness.org/archive/global-witness-calls-upon-uk-government-hold-british-company-afrimex-account-fuelling/>.

The NCP found the company guilty of breaching the OECD Guidelines by purchasing minerals from a conflict zone in the DRC; carrying out insufficient due diligence on its supply chain; and failing to exert correct influence on the practice of its suppliers, who had made tax payments to the rebel group, to ensure the business respected human rights and did not contribute to human rights abuses.[128]

As a result of this, a precedent is on the way to being established that companies can no longer operate in a business as usual approach where they are likely, through their operations, to influence the continuation and proliferation of war. The outcome of this investigation, that knowledge is a sufficient criterion, is distinctive to the judicial reasoning in the *Talisman* case, where that US court held that knowledge alone was not sufficient; there had to be the satisfaction of purpose also, that is, that the conduct in question had to support the criminal purpose, in this case to support the abuse of human rights.[129] In this the UK appears more progressive and liberal in its finding of corporate culpability.

Many companies now impose their own voluntary codes of conduct under corporate social responsibility programs, yet these programs have questionable positive impact.[130] This is obvious when one considers that business is guided by profit which means corporate social responsibility becomes a saleable marketing tool rather than one encouraging or denoting 'moral responsibility.'[131] Corporate networks operate beyond the national realm and can choose its place of regulation.[132] Yet if multinationals in the new order have the power, monetarily, politically and in terms of their ability to organize society (for example through means such as offering employment) as the old order States and Empires, then the global population ought to be demanding that these new powers take on responsibilities proportionate with this power.[133] Unless corporate accountability is aided by national legislation on due diligence standards, the legal function and importance of international corporate instruments[134] is unclear, other than an attempt at appeasing civilian accountability and transparency requirements.

Where international instruments such as the OECD Guidelines hold companies accountable to supranational law[135] then perhaps altering state accountability to the multinational enterprise is not so negative. Backer notes that the OECD Guidelines aid in providing a

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128 National Contact Points, 'Final Statement by the UK National Contact Point for the OECD Guidelines for Multinational Enterprises: Afrimex (UK) Ltd', (Report, National Contact Points, 28 August 2008) 13; Global Witness, 'UK company Afrimex broke international guidelines, says British government' (Press Release, 28 August 2008) < https://www.globalwitness.org/archive/uk-company-afrimex-broke-international-guidelines-says-british-government/>. See also Global Witness, 'Afrimex (UK) Democratic Republic of Congo: Complaint to the UK National Contact Point under the Specific Instance Procedure of the OECD Guidelines for Multinational Enterprises' (Report, Global Witness, 20 February 2007).

129 *The Presbyterian Church of Sudan v Talisman Energy*, 82 F 3d 244, 259–61 (2nd Cir, 2009).

130 Jędrzej G. Frynas, 'Corporate Social Responsibility and International Development: Critical Assessment' (2008) 16 (4) *Corporate Governance: An International Review* 274.

131 Paul Kapelus, 'Mining, Corporate Social Responsibility and the "Community": The Case of Rio Tinto, Richards Bay Minerals and the Mbonambi' (2002) 39 *Journal of Business Ethics* 275,281.

132 Larry Catá Backer, 'Private Actors and Public Governance Beyond the State: The Multinational Corporation, the Financial Stability Board, and the Global Governance Order' (2011) 18 *Indiana Journal of Global Legal Studies* 751, 763–4.

133 Ibid 777.

134 For example: OECD Guidelines for Multinational Enterprises; U.N. Draft Norms on the Responsibilities of Transnational Corporations and Other Business Enterprises with Regard to Human Rights; Extractive Industries Transparency Initiative; the Natural Resource Charter; and African Charter.

135 See especially Backer, above n 132, 773 and 779.

supranational system for corporate regulation,[136] however, regulation is not the same as accountability. Where Backer argues that multinationals are becoming new self-regulating autonomous systems of transnational governance,[137] this does not denote accountability of those entities. Corporate social responsibility could be said to be a product of consumer and shareholder interest and/or media pressure; this is the collective interest which is the basis of power for corporations. Governments and other public entities have (theoretically at least) social accountability as part of their make-up, that is, part of their continued legitimate existence.

This situation is complicated in the case of international companies who, as Morse points out 'are often urged to act in the national interest as if it and the private interest were closely similar'. [138] Even where a corporation is compelled to act in a *national interest*, what premise is there that such a company ought to act in the interest of the country hosting its operations, for example in the case of an international miner? Morse asks: 'But why is it assumed that an impersonal corporate personality should be the agent of the national interest of the investor country and not of the host country?'[139] Morse's answer is that the investor country lies not in a 'higher moral claim to the company's loyalty, but in its stronger political claim.'[140] Further, Morse suggests:

> There is no permanent basis for this stronger political claim. It reflects a historical asymmetry in private-public power relationships which lies at the root of many current problems, particularly in the sphere of private international investment in natural resources.[141]

The author argues that there is another basis for a stronger claim which is that the investor state often includes the residencies of major backers and therefore has a stronger economic claim. Either way, in noting this current dynamic and the increasing role of multinational corporations, the State is still hugely important, not as part of the dynamic of a hybrid international governance structure, or even less as a secondary regulator, as Backer would have,[142] but rather as a contester of multinational corporate power. As Backer notes 'public functions of private enterprises in weak governance zones remains contentious',[143] in other words, we cannot guarantee that private corporations who have other vested interests will carry out their corporate functions with an eye to the public good, particularly in areas where governance structures are fragile.

VII CONCLUSION

This article has reflected upon the willingness of judicial bodies, particularly those of the US (who may be seen as the current watchdog of international corporate conduct), to exercise extraterritorial jurisdiction where there are serious human rights violations, specifically with regards to extractive industry operations in countries which may not have enforceable and/or adequate liability regimes, and where there is sufficient territorial nexus. Despite the

136 See generally Backer, above n 113; Backer, above n 132, 767.
137 Backer, above n 132, 756.
138 Chandler Morse, '*Potentials and Hazards of Direct International Investment in Raw Materials,* 367-414, in Marion Clawson (Ed) 'Natural Resources and International Development (The Johns Hopkins Press, 1964) 414.
139 Ibid.
140 Ibid.
141 Morse, above n 138.
142 Backer, above n 132, 769–770 and 788.
143 Ibid 774.

problematic and various interpretations given to ‘territorial nexus’ there is scope for third courts to bring companies before the courts for suspected egregious acts. In the future, following the model of the UK, a form of direct corporate liability, where certain acts are impermissible and must be prosecuted when discovered, may develop. The author suggests that such liability ought to occur even irrespective of location and territorial ties, purely because as a global world order emerges, accountability and liability must occur at the transboundary level for transboundary acts. Finally, an international crime of plunder may aid the development of greater juridical extraterritoriality, as may the increasing use and validation given to requirements of corporate due diligence and the implementation and enforcement of national codes of conduct.

AN INTRODUCTION TO THE ILLEGAL TRADE IN WILDLIFE: A SNAPSHOT OF THE ILLICIT TRADE IN RHINOCEROS HORN

ZARA J BENDING*

The illicit trade in wildlife is a multibillion dollar global criminal enterprise that capitalises on drivers such as poverty, corruption, poor public education and ineffective regulation at great cost to both human and non-human life. Despite the remarkable value of goods traded and myriad of consequences, green criminologists such as Wyatt have lamented that the problem 'remains on the fringes of both academia and policy.'[1]

The purpose of this article is to set out the problem of the illegal trade in wildlife in the context of recent technological and scientific development. In doing so, it will demonstrate that it has, in fact, risen to prominence as an issue of global concern, now framed as one of transnational crime.[2] *It will map out the nature and extent of the trade in rhinoceros horn, as a representative case commodity, before discussing contemporary issues that may inform future regulatory action.*

I INTRODUCTION

In July 2015, two historic events positioned the illegal trade in wildlife squarely in the sights of the international legal community. Firstly, on 13 July 2015, the Wildlife Justice Commission launched in The Hague to specifically address wildlife crime as a matter of global concern. An Accountability Panel will hold hearings on one or two wildlife crimes selected each year by the Commission for examination.[3] While the Commission has no powers of arrest or penalty, the panel will publish a ruling of the facts on the selected activity, including identification of the parties involved. The weight of such rulings will be

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1 Tanya Wyatt, *Wildlife Trafficking: A Deconstruction of the Crime, the Victims and the Offenders* (Palgrave Macmillan, 2013) 9.

2 Rob White, *Crime, Criminality and Criminal Justice* (Oxford University Press, 2012) 257. White defines 'transnational crime' as 'crime that is global in scope and reflects broad socioeconomic processes and trends associated with globalisation.'

3 Wildlife Justice Commission, 'The Wildlife Justice Commission Launches- New Approach to Combat Wildlife Crime' (13 July 2015) <http://www.wildlifejustice.org/article/index.html>. See also: Cahal Milmo, 'The Wildlife Justice Commission: International body launches in effort to combat biggest 'Al Capone' poachers', *The Independent* (online) 11 July 2015 <http://www.independent.co.uk/news/world/the-wildlife-justice-commission-international-body-launches-in-effort-to-combat-biggest-al-capone-poachers-10382859.html>.

considerably aided by the use of hi-tech tools of investigation including DNA profiling and GPS tracking of shipments.[4] Secondly, on 30 July 2015, at the 69th session of the United Nations, the General Assembly unanimously adopted Resolution A/RES/69/314 entitled *Tackling the Illicit Trafficking in Wildlife (co-sponsored by Gabon, Germany and 84 other nations)*.[5] The UN resolution encourages countries to 'adopt effective measures to prevent and counter the serious problem of crimes that have an impact on the environment, such as illicit trafficking in wildlife and wildlife products…as well as poaching.'[6]

While these two landmark actions have elevated the global recognition of the illegal trade in wildlife, they have also highlighted the array of challenges for law enforcement in combatting the pervasive networks of actors involved. In light of the complexity of the problem, this paper will aim to add to the growing body of literature that seeks to better comprehend and communicate the dimensions of wildlife crime. The purpose of this paper is to set out the problem of the illegal trade in wildlife in the context of recent technological and scientific developments, utilising the trafficking of rhinoceros horn as a case study.[7] It will outline the nature and extent of the problem using recent data sets before discussing contemporary issues and research which may colour further regulatory development.

II THE PROBLEM

The illegal trade in wildlife is a multi-billion dollar industry, estimated between $US5- 20 billion per annum.[8] This places wildlife crime as the fourth most lucrative form of transnational crime behind the trafficking of narcotics, humans and armaments respectively.[9] The trade includes the trafficking of live species (for example, the selling of exotic animals

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4 Ibid.

5 *Tackling the Illicit Trafficking in Wildlife, GA Res* 69/314, UN GAOR, 69th sess, 100th plen mtg, Agenda Item 13, Supp No 49, UN Doc A/RES/69/314 (30 July 2015). See also: United Nations, 'Speakers Call for Concerted Action to Crush Multibillion-Dollar Illicit Wildlife Trade as General Assembly Adopts Sweeping text' (Meeting Coverage, General Assembly, Sixty-ninth session, 100th Meeting, 30 July 2015) <http://www.un.org/press/en/2015/ga11666.doc.htm>.

6 TRAFFIC, 'UN adopts resolution on tackling wildlife trafficking' (30 July 2015) < http://www.traffic.org/home/2015/7/30/un-adopts-resolution-on-tackling-wildlife-trafficking.html>. Members States have recognised the need for action across all levels of the supply chain to undermine the market, including: influencing consumer behavior, enacting anti-money laundering mechanisms, targeting corruption and organised crime syndicates, creating 'national-level inter-agency wildlife crime task forces' and increasing the effectiveness of law enforcement, notably the judicial process.

7 Rhinoceros horn was selected as the case commodity to explore the illicit trade due to the availability of longitudinal data sets as well as representation of the broader problem. As previously identified by Kamieniecky, '[r]hino products are a significant sub-market of the global illegal species trade' and further 'in terms of monetary value per unit of weight, rhino horn is one of the most valued natural resources.' See: Gilbert Benjamin Kamieniecky, *Multilateral Wildlife Conservation Policy: A Political-Economic Analysis Of The Trade ban On African Rhinoceros Products* (Master of Studies in International Relations, presented to the Degree Committee of International Studies, University of Cambridge, 2007) 14.

8 Tom Milliken, US Aid and TRAFFIC, *Illegal Trade and Rhino Horn: an Assessment Report to Improve Law Enforcement Under the Wildlife TRAPS Project* (2014) 1. See also: World Wildlife Fund and Dalberg, *Fighting illicit wildlife trafficking: A consultation with governments* (2012) < http://www.dalberg.com/documents/WWF_Wildlife_Trafficking.pdf>. WWF and Dalberg broke down this estimation, designating US$4.2-9.5 billion per annum for unreported and unregulated fisheries trade alone, U$S7 billion for illegal trade in timber, and US$7.8billion- US$10 billion illicit per annum in wildlife trafficking (excluding fisheries and timber). This calculation was further reported by Johannes Myburgh quoted in Jeremy Haken, *Transnational Crime in the Developing World, Global Financial Integrity*, (Global Financial Integrity, 2011).

9 Ibid.

into the illegal pet trade) and their parts (for example, the sale of pangolin scales, tiger bones and elephant ivory). More precisely, South and Wyatt define 'illicit wildlife trafficking' as 'any environment-related crime that involves the illegal trade, smuggling, poaching, capture or collection of endangered species, protected wildlife (including animals and plants that are subject to harvest quotas and regulated by permits), derivatives or products thereof.'[10] The scope of 'wildlife' refers to 'all non-human animals and plants that are not companion or domesticated animals.'[11] Under this conception, pets and livestock are excluded whereas zoo animals that may be farmed but are not truly domesticated are included (for example, cattle farmed for beef would be excluded whereas rhinoceroses farmed for their horns would qualify).[12] The illicit trade has become a globally entrenched problem, with Wyatt identifying Africa, North, South and Central America and Asia as prominent supply regions, and Europe, North America, the Middle East and Far East (Japan, China and Korea) as common destinations.[13] The ramifications range from longstanding environmental concerns for species conservation,[14] public health trepidations over the international transmission of zoonotic diseases and lack of quality control in medical products,[15] to more recently uncovered links to the funding of terrorist activities and other forms of organised crime.[16]

The proliferation of the problem can be at least partially attributed to the diversity of applications for desired commodities. Patel et al list some of these uses: 'as food, pets, medicines, clothing, trophies, and religious amulets.'[17] Further, the persistence of the problem is compounded by the cultural, traditional or customary value of some of the goods trafficked. Rhinoceros horn presents a case example of a traded item of multifaceted utility, valued for its aesthetic appeal (either attached to the animal as a big game trophy or refashioned as a building material for luxury items), use in religious ceremonies and cultural rites of passage, as well as extensive history in traditional medicines, most prominently in Traditional Chinese Medicine (TCM). Poaching to acquire rhinoceros horn has wrought disastrous consequences for all five extant species of rhino. The IUCN Red List 3.1 indicates that three of the five species of rhinoceros are 'critically endangered' (Black, Sumatran and Javan). Of the remaining two species, the White Rhinoceros is classified as 'Near Threatened' and the Indian Rhinoceros is 'Vulnerable.' In 1977, the international community mobilised to ban the trade in rhinoceros horn under the *Convention on International Trade in*

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10 Nigel South and Tanya Wyatt, 'Comparing illicit trades in wildlife and drugs: an exploratory study' (2011) 32(6) *Deviant Behavior* 538-61. This definition also quoted in World Wildlife Fund and Dalberg, *Fighting illicit wildlife trafficking: A consultation with governments* (2012) 9.

11 Wyatt, above n 1, 2.

12 Ibid.

13 Tanya Wyatt, *Green Criminology & Wildlife Trafficking: The Illegal Fur and Falcon Trades in Russia Far East* (Lambert Academic Publishing, 2012) 13.

14 Daniel W S Challender, Stuart R Harrop and Douglas C MacMillan, 'Towards informed and multi-faceted wildlife trade interventions' (2015) 3 *Global Ecology and Conservation* 129-148, 129.

15 J Still, 'Use of animal products in traditional Chinese medicine: environmental impact and health hazards' (2003) 11 *Complementary Therapies in Medicine* 118-22; Diana Bell, Scott Roberton and Paul R Hunter, 'Animal origins of SARS coronavirus: possible links with the international trade in small carnivores' (2004) 359(1447) *Philosophical Transaction of the Royal Societys B* 1107-1114.

16 Damian Carrington, 'People and animals at immediate risks from wildlife crime, CITES chief warns' *The Guardian* (online) 2 March 2013 <http://www.theguardian.com/environment/2013/mar/01/people-animals-wildlife-crime>; Suzanne Goldenberg, 'Ban Ki-moon to warn UN security council of dangers of wildlife trafficking', *The Guardian* (online) <http://www.theguardian.com/world/2013/may/28/un-ban-kimoon-wildlife-trafficking-central-africa>.

17 Nikkita Gunvant Patel et al, 'Quantitative methods of identifying the key nodes in the illegal wildlife trade network' *Proceedings of the National Academy of Science of the United States of America* published online before print June 15, 2015 doi: 10.1073/pnas.1500862112, 1.

Endangered Species of Wild Fauna and Flora[18] yet current data indicates that international demand is continuing to drive rhinoceros poaching and trafficking to unprecedented heights. It is at this time that significant effort ought to be channelled into evaluating the existing regulatory framework to elucidate viable solutions to prevent extinction and undermine the resilience of criminal networks. However, as decisions to invest in reform are inherently political, particularly on an international scale, this necessitates an investigation as to what the negative consequences are for human, let alone non-human, life.

III EXTENT & SIGNIFICANCE OF THE PROBLEM

A *Wyatt's Four Dimensions of Significance*

In *Wildlife Trafficking: A Deconstruction of the Crime, the Victims and the Offenders*, Wyatt undertakes a sophisticated analysis of the significance of wildlife trafficking. Wyatt identifies four interrelated dimensions of impact: environmental, economic, human and national security.[19]

The environmental consequences are perhaps the most obvious, whereupon trafficking accrues environmental harm through: a) undermining biodiversity by endangering and/or causing the extinction of trafficked species, b) ecosystem disruption (particularly when apex predators are removed from the food chain, creating a trophic cascade) as well as c) the introduction of invasive species and diseases which threatens native species of flora and fauna.[20] Economic consequences flow from these environmental impacts by straining or destroying natural resources which may be the source of income in the form of government tax revenue, business profits (for example, where fisheries, forestry and agricultural industries require environmental security to thrive and attract ongoing investment) and personal livelihoods.[21]

Human impacts are frequently linked to economic and environmental impacts whereby ecosystem or industrial disruption leads to food scarcity or lack of job security, thus instigating the relocation of individuals or entire communities.[22] Another human impact concerns the undermining public health through the spread of zoonotic diseases, including SARS and Ebola, commencing with the consumption or mere contact with illegal wildlife products.[23] Further still, some commodities such as rhinoceros horn and elephant ivory have become as well known for their human-human bloodshed as the human-non human violence that poaching practices impose.[24] This disturbance of civil peace prompted by 'poaching wars' offers a link between human impact and the fourth and final dimension of the impact of wildlife trafficking, national security. Wildlife trafficking impacts on national security as it profits organised crime, promotes corruption, and funds terrorism and insurgency. Wyatt suggests that organised crime syndicates have made use of existing black market trade routes established for the trafficking of other commodities such as armaments, drugs and humans to import and/or export wildlife goods, with some conducting shipments in tandem. These

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18 *Convention on International Trade in Endangered Species of Wild Fauna and Flora*, opened for signature 3 March 1973, 993 UNTS 243 (entered into force I July 1975).
19 Wyatt, above n 1, 39-58.
20 Ibid 39-43.
21 Ibid 44-46.
22 Ibid 44.
23 Ibid 49-51.
24 Ibid 49-51.

syndicates, Wyatt advances, threaten national security through their undue influence 'on politics, the media, the public, the courts and the economy.'[25] A prime example arises in the extent of official corruption that participates at each threshold of the supply chain in countries of origin, transit and destination. The systemic corruption of decision makers and authorities challenges national security by undermining the rule of law and good governance. Finally, with respect to the link between wildlife trafficking and terrorism, profits from conflict resources and black market goods have been used to fund terrorist activities, with a similar concern having been raised with regard to insurgent rebel groups who threaten state order. [26] There is also a fringe concern over the possibility of employing zoonotic diseases in bio-terrorist attacks.[27]

This brief account of Wyatt's four dimensions of wildlife trafficking impacts illuminates the complex and compounding nature of its harms. However, it must be noted that these are but the known ramifications of the known incidences of the crime, and so there may well be dimensions of impact yet uncovered. Research into the illicit trade in wildlife suffers from the same 'dark figure' problem affecting criminological data generally, this being uncertainty as to the precise frequency and extent of criminal activity.[28] Mindful of this limitation, the TRAFFIC network has taken up the task of collecting and analysing existing data to form as complete a picture of the crime as possible in the fight to protect species across the globe.

B *Introducing TRAFFIC & Poaching Statistics*

The most reliable longitudinal data on the illegal trade in wildlife is provided by TRAFFIC.[29] TRAFFIC is a wildlife trade monitoring network and joint programme of the World Wildlife Fund (WWF) and International Union for Conservation of Nature (IUCN), and operates collaboratively with the Secretariat of the CITES. Founded in 1976, the network produced a seminal study into the trade in seal products in 1978, followed by an analysis of the trade in wild cat skins in 1979. That same year saw the launch of the *TRAFFIC Bulletin*, the only international journal devoted exclusively to wildlife trade issues. By way of impact, TRAFFIC's research has bolstered law reform efforts, for example the US Congress passed the *Rhino and Tiger Product Labeling Act* in 1998 citing TRAFFIC's research into North American medicines claiming to contain rhinoceros and tiger ingredients.

TRAFFIC has published extensively on both the licit and illicit trade in rhinoceros horn. Following its ground-breaking success in mapping out ivory supply chains, TRAFFIC released its 1992 review of the world trade of rhinoceros horn, seeking to determine the volume and price of horn and to plot the extent of the trade.[30] The study relied much on the work of E.B. Martin and colleagues in conjunction with the files of TRAFFIC and the World Conservation Monitoring Centre.[31] The reasons for decline in wild populations were

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25 Ibid 54.
26 Ibid 51-57.
27 Ibid 51-57.
28 Ibid 8-9.
29 <http://www.traffic.org/>. TRAFFIC's mission 'is to ensure that trade in wild plants and animals is not a threat to the conservation of nature.'
30 Nigel Leader-Williams, TRAFFIC, *The World Trade in Rhino Horn: A Review* (1992, TRAFFIC International and the People's Trust for Endangered Species).
31 Ibid 3. Subsequent reports canvass topics including: the decline in the black rhino in Zimbabwe (1993), the trade in South Korea (1994), poaching and protection of the Indian rhino (1996), rhino horn and bone in China post-1993 ban (1997), the horn trade in Yemen (1997) and the South Africa- Vietnam trade

determined to be: loss of habitat, use of rhino horn in both commercial and indigenous medicines (and to a lesser extent the use of other rhino products such as skin, blood and urine) and use of the horn to construct the handles of traditional Yemeni daggers (known as 'jambiyas').[32] The use of rhinoceros parts for traditional medicine was attributed primarily to the Chinese pharmacopeia but also extended to Burmese, Thai and Nepalese practices whereas Japanese and Korean communities were found to exclusively use the horn and no other piece of rhinoceros anatomy.[33] The paper cited seizures of intended shipments in Los Angeles, San Francisco and Brussels as indicative of wider use within Asian Diasporas in western countries.[34] The 1992 report also investigated the domestic consumption of rhinoceros horn produced in Africa, concluding that unlike Asian markets which both consumed and exported locally grown rhinoceros horn, there was little evidence of domestic consumption of African rhino horn, and thus overseas demand was the primary driver for trade.[35] By way of legal exports, data from Kenya, Uganda and Tanganyika (now Tanzania) provided the most longitudinally extensive data sets correlating volume and price.[36] During the 1930s the average annual export out of East Africa was 1600kg, dropping to 500kg during WWII and rising to 2500kg immediately after the war.[37] The rates dropped to an annual mean of 1800kg in the 1950s, 1300kg in the 1960s and increased to 3400kg in the 1970s, with a rapid increase in the mid-70s in the lead up to the CITES ban taking effect in 1977.[38]

CITES entered into force on 1 July 1975 as a multilateral treaty recognising the value and need to protect wild flora and fauna intra and inter-generationally, whilst recognising the pivotal role of States (supported by international co-operation) in contending with the urgency of the problem.[39] From its inception in Washington DC in 1973, membership has grown from 80 to 176 parties now providing for the regulation of nearly 35 000 species.[40] Crawford summarises the operation of CITES as essentially providing a hierarchical framework of trade restrictions that may be applied to protect endangered species.[41] CITES offers endangered species differentiating levels of protection contingent on their classification under one of three Appendices (with Appendix I offering the most protection and Appendix III offering the least). In brief, Appendix I: lists 'all species threatened with extinction which are or may be affected by trade.'[42] Trade in Appendix I species is generally banned and

nexus (2012). The most recent report was released in 2014 entitled 'Illegal Trade in Ivory and rhino horn: an Assessment Report to improve law enforcement under the Wildlife TRAPS project.'

32 Ibid 4.

33 Ibid.

34 Ibid.

35 Ibid 9.

36 Ibid 6.

37 Ibid.

38 Ibid.

39 The text of the *CITES* Preamble is as follows: 'The Contracting States, *Recognizing* that wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems of the earth which must be protected for this and the generations to come; *Conscious* of the ever-growing value of wild fauna and flora from aesthetic, scientific, cultural, recreational and economic points of view; *Recognizing* that peoples and States are and should be the best protectors of their own wild fauna and flora; *Recognizing*, in addition, that international co-operation is essential for the protection of certain species of wild fauna and flora against over-exploitation through international trade; *Convinced* of the urgency of taking appropriate measures to this end; *Have agreed* as follows…'

40 Julie Ayling, 'What Sustains Wildlife Crime? Rhino Horn Trading and the Resilience of Criminal Networks' (2013) 16(1) *Journal of International Wildlife Law & Policy* 57-80, 58.

41 Christine Crawford, 'Conflicts Between the Convention on International Trade in Endangered Species and the GATT in Light of Actions to Halt the Rhinoceros and Tiger Trade' (1995) 7 *Georgetown International Environmental Law Review* 555, 555.

42 Ibid 557.

exports require a permit. This permit is only issued upon a scientific finding by the state of export 'that such export will not be detrimental to the survival of that species.'[43] Imports are likewise limited by permit approval and re-export occurs exclusively whereupon the re-exporting state fulfils its burden to prove that the specimen was imported in accordance with CITES. Appendix II 'lists endangered species that are not sufficiently endangered to warrant inclusion in Appendix I' yet are sufficiently threatened to require regulation of trade. Of these restrictions (and with reference to Glennon),[44] Crawford states that 'while the export and re-export provisions of Appendix II are similar to Appendix I, the limitations on import of these species are less rigorous.'[45] Appendix III lists those species that member nations may have added for inclusion on grounds that they are endangered within their borders, but are not necessarily recognized as endangered by international standards. Trade in Appendix III species is possible with an export licence demonstrating that the species was legally obtained or imported.[46] All species of *Rhinocerotidae* are included under Appendix I of CITES but for the populations of white rhinoceros in South Africa and Swaziland which appear under Appendix II.

TRAFFIC's 2014 publication provides the latest global overview, picking up from the 1990s.[47] Where the 1977 CITES ban was a key topic in the 1992 report, the 2014 publication presents the United States' use of 'pellying' as a desirable example of state action giving effect to CITES.[48] 'Pellying,' a term referring to the United States' Pelly Amendment instrument, provides a noteworthy example of a State disrupting international trade by enforcing its own domestic standards with respect to international agreements.[49] Charnovitz has written on the topic extensively and has chronicled its development from its inception.[50] The Pelly Amendment initially concerned restricting trade with countries to tackle overfishing. The *Pelly Amendment Act* was passed in 1971 to amend the *Fishermen's Protective Act* of 1967 in response to Denmark, Norway and West Germany's refusal to comply with a prohibition on salmon fishing on the high seas (after which all three countries altered their practices).[51] The mechanics of the amendment as originally conceived are as follows: it pertained to foreign persons (not governments) who directly or indirectly conducted fishing operations that diminished the effectiveness of an international fishery program.[52] Once the fact had been communicated to the President by the Secretary of Commerce, the President could direct the Secretary of the Treasury to prohibit the fish products of the offending country 'for a duration deemed appropriate by the President and to the extent permitted by the GATT.'[53] In 1978, Congress expanded the scope of the law, adding a new track for 'engaging in trade or taking which diminished the effectiveness of any international program for endangered or threatened species whether or not such conduct is

43 Ibid; *CITES* art III(2)(a).

44 Michael J Glennon, 'Has International Law Failed the Elephant?' (1990) 84 *American Journal of International Law* 1, 11.

45 Crawford, above n 41, 557.

46 *CITES* art V.

47 Tom Milliken, TRAFFIC, *Illegal Trade In Ivory And Rhino Horn: An Assessment To Improve Law Enforcement Under The Wildlife TRAPS Project* (2014, TRAFFIC International).

48 Ibid 14.

49 Steve Charnovitz, 'Environmental Trade Sanctions And The GATT: An Analysis Of The Pelly Amendment On Foreign Environmental Practices' (1994) 9(3) *American University Journal of International Law and Policy* 751.

50 Ibid.

51 Ibid 758-9.

52 Ibid 759.

53 Ibid.

legal under the laws of the offending country.'[54] This track can be triggered by determination of either the US Secretary of Commerce or Secretary of the Interior. Following certification of the fact, the President can embargo any or all wildlife products. The threshold of 'diminishing effectiveness' is broad and includes non-ratification of a treaty, non-observance of a treaty, or even actions unrelated to a treaty such as domestic sales of an endangered species.[55] It is thus crucial to note that the test for potential pellying falls below the standard of non-compliance or breach of a treaty, and that it is sufficient that the President merely deems the activity concerned to be 'diminishing effectiveness.'

In 1987, CITES passed a resolution encouraging parties to ban all domestic and international trade in rhinoceros parts and to destroy all government stockpiles. The resolution recommended that parties 'use all appropriate means, including economic, political and diplomatic, to exert pressure on countries continuing to allow trade in rhinoceros horn…'[56] In November 1992 the World Wildlife Fund and National Wildlife Federation petitioned the Secretary of the Interior to invoke the Pelly Amendment against Taiwan, China, South Korea and the Republic of Yemen for continuing trade of rhinoceros horn. Following some negotiation with the US, both Korea and Yemen agreed to comply with CITES and cease domestic trade.[57] Subsequently, the Secretary of the Interior pressured China and Taiwan, certifying both for trade in rhino horns and tiger bones.[58] In 1993 President Clinton decided against imposing trade sanctions, citing some positive efforts made towards international conservation standards, but threatened import prohibitions if the absence of substantial progress by March 1994.[59] In March 1994, the CITES Standing Committee found that China had met minimum requirements and decided that no further action was needed whereas Taiwan was found to not have met the minimum requirements.[60] In response, in April 1994, President Clinton ordered a ban on certain wildlife specimens and products from Taiwan. China, Taiwan, and South Korea designated rhinoceros horn as a prohibited substance in the traditional pharmacopeia as a direct result of the US Pelly.

The mobilisation of CITES between the late 1980s and early 1990s, together with the United States' response, drastically diminished the global trade in rhinoceros horn as reflected in poaching data sets. According to the 2014 report, TRAFFIC identifies that poaching essentially came to a halt in the early 1990s.[61] This remained limited during the early 00s, for example, from 2002-2005 an average of 56 rhinos were illegally killed annually across Africa, increasing to an average 61 rhinos per year in 2006 and 2007.[62] A sudden boom in rhino losses then struck in 2008 with a loss of 262 animals, with nearly two-thirds killed in Zimbabwe during a period of economic turmoil and mass land reforms.[63] TRAFFIC correlates the year 2008 with the resurgence of horn trade in Vietnam.[64] By way of

54 Ibid.
55 Ibid 760.
56 Trade in Rhinoceros Products, CITES Resolution of the CoP 6.10 (Ottawa, 1987).
57 Charnovitz, above n 49, 770.
58 Ibid.
59 Ibid.
60 The case against Taiwan was ongoing and course of action had not yet been committed to at the time of Charnovitz's publication. In April 1994, Clinton ordered a ban on certain wildlife specimens and products from Taiwan.
61 Milliken, above n 47, 14.
62 Ibid, 15. During this time a poaching decline in Kenya was offset by a major increase in Zimbabwe.
63 Ibid.
64 Vietnam has been a signatory to CITES since 1994, becoming the 121st Party to the Convention. CITES is implemented in Vietnam through *Decree 82/2006/ND-CP on Management of Export, Import, Re-*

international trends, TRAFFIC reported global killings of 745 rhino in 2012 and 1090 rhino in 2013.[65]

To truly gauge the enormity of the problem, it helps to more closely examine the official regional statistics. From 2007- 2008 losses in South Africa rose from 13 to 83.[66] Since then, rates surged to 668 rhinos in 2012, 1004 rhinos in 2013,[67] and 1215 in 2014.[68] The world famous Kruger National Park was hit the hardest with 827 killed inside its bounds, demonstrating just how pervasive the problem has become.[69] The government data set, however, has come under scrutiny, with the NGO 'Saving the Survivors' alleging that official statistics account only for animals who have died and been dehorned.[70] This would discount two notable categories of fatalities caused by poaching: firstly, infant rhinos that perish after their mothers have been killed (and similarly rhino calves *in utero* that die if their mothers are killed or are aborted if their mothers are unable to recover from the stress of poaching attacks if they survive) and secondly, rhinos that have been killed but have not been dehorned (for example, in the event of a botched attempt). The data also excludes incidents where the horn has been taken but the rhino has survived. Based on anecdotal evidence from Dr Johan Marais, official estimates should be increased by of 30% to be more indicative.[71]

On 21 January 2016, TRAFFIC released its 2015 Africa-wide statistical breakdown. It noted a slight decrease in poaching in South Africa (from 1215 in 2014 down to 1175 in 2015) but emphasised that the Africa-wide figures are the worst in the continent's history (from 1299in 2014 up to 1305 in 2015). The decrease in South Africa's numbers was offset by increases in Zimbabwe (up from 12 in 2014 to 'at least 50' in 2015) and Namibia (from 24 in 2014 to 80 in 2015).

C *An International Criminal Enterprise: Numbers of Illegal Horn in Circulation & Syndicate Typologies*

Tracking the supply chain of illegally traded rhinoceros horn is vital to uncovering the conditions driving its demand as well as the prevalence of the criminal organisations involved. TRAFFIC has been cataloguing the number of rhino horns in illegal circulation since 2000 using a number of data sets.[72] The IUCN/TRAFFIC report to CITES CoP15 (Doha, Qatar, March 2010) estimated that an average of 360 horns were reaching Asia each year during the period 2006 - September 2009.[73] By comparison, the IUCN/TRAFFIC report

export, Introduction from the Sea, Transit, Breeding, Rearing and Artificial Propagation of Endangered Species of Precious and Rare Wild Fauna and Flora of 10 August 2006.

65 Milliken, above n 46, 15.

66 Ibid16.

67 Ibid.

68 'SA rhino poaching record set in 2014', *BBC News* (online), 22 January 2015 <http://www.bbc.com/news/science-environment-30934383>.

69 John R Platt, '1,215: The Record Number of Rhinos Poached in 2014', *Scientific American* (online), 23 January 2015 <http://blogs.scientificamerican.com/extinction-countdown/a-record-1-215-rhinos-were-poached-in-2014/>.

70 'Poaching stats just the tip of the horn: Annual statistics in rhino poaching should be 30% higher' *Lowvelder* (online), 29 January 2015 <http://lowvelder.co.za/247402/poaching-stats-just-tip-horn/>.

71 Ibid.

72 Milliken, above n 47, 16. Data sets include accounts of numbers of rhino horns poached, stolen from natural rhino deaths, thefts from government stockpiles and other sources, illegal private sector sales and the re-direction of legally sport-hunted trophies. This data is then offset by the number of rhino horns seized, confiscated or recovered in the field.

73 Ibid 17.

to CITES CoP16 (Bangkok, Thailand, March 2013) estimated that 1083 horns were in illegal circulation during the period 2009 - September 2012.[74] From 2009 - March 2014, TRAFFIC documented a total of 148 rhino horn seizure cases in 21 countries worldwide.[75]

Through further data analysis, TRAFFIC has begun to build criminological profiles of the actors involved in poaching organisations, drawing upon the five-level pyramid structure of rhino horn trade syndicates used by South Africa's National Wildlife Crime Reaction Unit.[76] Organisations are 'typically led by African-based Asian nationals' and 'are directly involved in procurement and illegal movement of rhino horn out of Africa to markets in Asia, especially Vietnam.'[77]Level 1 is comprised of 'the individuals and *ad hoc* gangs who poach rhinos. The players in the this category generally function as the expendable "foot soldiers" who risk their lives to illegally hunt rhino, but earn the least in terms of the value of the rhino horn.'[78] For this echelon, poverty is a catalytic behaviour driver, with locals from African communities being recruited due to proximity to protected areas and private game reserves.[79] Level 2 consists of higher functioning and better organised poachers 'who operate in better structured, mobile associations or gangs consisting of trackers and shooters that may move considerable distances to poach rhino in loosely organized situations, including across borders of neighbouring countries' as well as poaching gangs operating within game ranching comprised of professional hunters, veterinarians and other game industry operators targeting rhinos on other private properties.[80] These groups may also simultaneously function as low ranking buyers or local couriers. Level 3 represents 'middlemen buyers, exporters and couriers' who are typically African nationals operating within their countries of origin at the peripheries of national or regional supply chains.[81] These individuals operate 'through local and regional networks that procure horns through various channels, including pseudo-hunting, thefts, illegal private sector dehornings or unregistered stock sales.'[82] Level 4 individuals are those who illegally export rhino horns out of Africa to Asia and are often financially enriched enough to move between the two continents organising deals. These individuals are generally African-based, Asian operatives with permanent or long-term residency within key countries including South Africa. The activities of Level 4 players are facilitated by networks of corrupt 'collaborators' within the public and private sector.[83] Lastly, Level 5 encompasses buyers and consumers who are residents of foreign countries of receipt. These operatives 'control the delivery of the rhino horns into end-use markets and often foster corrupt relationships with government regulators to prevent disruption of the trade at ports of entry.'[84] TRAFFIC's intelligence gathering and profiling has contributed significantly to the understanding of wildlife crime and will no doubt provide bodies including the newly established Wildlife Justice Commission the opportunity to deliver impactful and evidence-based determinations of fact. What is more, the timing could not be more critical.

74 Ibid.
75 Ibid 18.
76 Ibid.
77 Ibid 17.
78 Ibid.
79 Ibid.
80 Ibid 17-8.
81 Ibid 18.
82 Ibid.
83 Ibid.
84 Ibid.

With the wildlife trade threatening approximately one third of birds and mammals worldwide[85] there is now a push to research the networks responsible to calculate a targeted and sustained response. Ayling's 2013 article *What Sustains Wildlife Crime?* presents a chief example of academic inquiry addressing these actor-networks, in particular focusing on their resilience.[86] The stark reality is that syndicates may very well be investing in extinction as a lucrative enterprise. The relationship between rarity and price was best articulated by Secretariat General of CITES, John Scanlon, whereby '[i]f something is rare it becomes more attractive…[a]nd the rarer something is, the more valuable it becomes.'[87] Evidence of the sheer reach of organised crime arises constantly and has become an ongoing theme in media reporting on the topic. A 2015 example from Mozambique offers one of many such instances, where only a few weeks following the country's most lucrative seizure of illegal wildlife products, four state officials guarding the stockpile were arrested under suspicion of aiding in the theft of 13 rhinoceros horns.[88] The following two parts of this paper will canvass some of the contemporary themes and issues in the dialogue addressing the illicit trade in rhinoceros horn before proffering some observations moving forward.

III CONTEMPORARY ISSUES

The challenges facing the five extant species of rhinoceros and those striving to protect them are formidable. In addition to the already multifarious range of problems examined in this paper, new trials have begun to surface from new uses and new markets for rhinoceros horn. A 2012 TRAFFIC report identified four user typologies in the then burgeoning Vietnamese market: the 'terminally or seriously ill' (for example, cancer sufferers), 'habitual users on the social circuit' (for example, affluent, middle-aged, conspicuous consuming, urban-dwellers who consume the horn as a supposed sexual enhancer, hangover cure, detoxifying agent, or as the chief ingredient in 'rhino wine'), 'protective young mothers' (who use the horn to reduce fever in infants and young children) and 'elite gift givers' (who gift the horn to increase their social capital as a means to socio-political mobility).[89]

Further, the rise of social media, anonymous online currency and 'Dark Net' markets have provided new means to obtain contraband goods from anywhere in the world. This was alluded to on the cover of American magazine 'Newsweek' (dated 11 July 2014) which

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85 Philippe Rivalan et al, 'Can bans stimulate wildlife trade?' (2007) 447 *Nature* 529, 529.

86 Ayling, above n 40.

87 Duncan Graham-Rowe, 'Endangered and in demand' (2011) 480 *Nature* 101, 103.

88 Manuel Mucari, 'Mozambique police seize 1.3 tonnes of poached rhino horn and ivory' *Reuters* (online) 14 May 2015 <http://uk.reuters.com/article/2015/05/14/uk-africa-poaching-mozambique-idUKKBN0NZ20I20150514>. The seizure resulted in the confiscation of 1.3tonnes of elephant ivory and rhino horn (340 tusks and 65 horns) from the residence of a Chinese national. The store room housing the haul was secured by a mere three padlocks. See also: Karl Mathiesen and David Smith, 'Thieves steal £700,000 of rhino horn from Mozambique police' *The Guardian* (online) 28 May 2015 <http://www.theguardian.com/environment/2015/may/27/thieves-steal-ivory-rhino-horn-mozambique-police>. Months later, in August, 2015, a large shipment of rhino horn and elephant tusks were seized in Vietnam. The shipment of 593kg of tusks and 142kg of rhino horn had arrived at Da Nang via Malaysia from Mozambique. 'Rhino horns, elephant tusks seized in Vietnam' *Inquirer.net* (online) 14 August 2015 <http://newsinfo.inquirer.net/712993/rhino-horns-elephant-tusks-seized-in-vietnam>.

89 Tom Milliken and Jo Shaw, TRAFFIC, *The South Africa-Viet Nam Rhino Horn Trade Nexus: A deadly combination of institutional lapses, corrupt wildlife industry professionals and Asian crime syndicates* (2012, TRAFFIC) 134-137. Contributions to the publication were also made by Richard H Emslie, Russell D Taylor and Chris Turton. As was noted by Ronald Orenstein, *Ivory, Horn And Blood: Behind the Elephant and Rhinoceros Poaching Crisis* (Firefly Books, 2013) 90, the Vietnamese government dismissed the entire 176-page TRAFFIC report as 'not objective and evidence-based,' suggesting instead that 'rhino horn is not used in Vietnam but rather it arrives in transit to a third country.'

identified 'facebook traders' as the newest threat to rhinos as well as by the International Fund for Animal Welfare (IFAW) in August 2015. IFAW reported that internet sites and private online forums including eBay, Craiglist, Baidu Bar, WeChat (China's version of Twitter) and QQ Group were being used to sell illegal wildlife products. [90] One such online trader, Yiwei 'Steve' Zheng, pled guilty to two counts of 'smuggling elephant ivory and illegally exporting rhinoceros horns from the United States in violation of the *Lacey Act*' on 14 January 2016. [91] The professor at St Cloud State University, Minnesota, who listed many of his items on eBay, agreed to a fine of US$500,000 and is awaiting sentencing set for May 2016. In 2014, IFAW analysed the online trade in 16 countries over a six-week period, finding over 33,000 internationally protected animals and items listed with a total value of US$11 million.[92]

The reality on the ground is also changing due to technological advances threatening *in situ* populations. In April 2015, it was reported that rhino syndicates were browsing the social media sites of tourists on safaris to track target species with the assistance of the geo-tags of images uploaded by smartphones.[93] This technological shift in the poaching toolkit has also become evident in the use of weaponry and machinery employed. In South Africa, rhinos are typically killed with AK-47 rifles however a growing number have been found bearing a single shot from the sort of high calibre weapons generally used by wildlife industry professionals, and less frequently darted with immobilisation drugs with their horns removed. [94] There has also been evidence of helicopters at crime scenes. [95] What is demonstrated here is that poaching has entered a new era facilitated by wildlife professionals including 'rogue game ranch owners, professional hunters, game capture operators, pilots and veterinarians.'[96] These new 'rhino wars' have resulted in heavy losses to non-human and human life alike, with poachers and anti-poaching patrols shooting-to-kill.[97] The anticipation of violence by

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90 Mary Catherine O'Connor, 'Inside the complicated world of online wildlife trafficking', *The Guardian* (online) 3 August 2015 <http://www.theguardian.com/vital-signs/2015/aug/03/cecil-lion-ivory-online-wildlife-trafficking-ebay>.

91 ' Scholar Pleads Guilty to Smuggling Ivory from US to China', *Macau Daily Times* (online) 15 January 2016 <http://macaudailytimes.com.mo/scholar-pleads-guilty-to-smuggling-ivory-from-us-to-china.html>. See also: Abby Phillip, 'Minnesota philosophy professor arrested for illegally trading rhino horns and ivory' *The Washington Post* (online) 1 April 2015 <https://www.washingtonpost.com/news/morning-mix/wp/2015/04/01/minnesota-philosophy-professor-arrested-for-illegally-trading-rhino-horns-and-ivory/>. While Zheng alleges that the goods were 50-100 years old, he had failed to obtain appropriate permits to trade under *CITES*. The elephant ivory and rhinoceros horn products documented were valued between US$550,000 and US$1.5m. In attempts to thwart customs officials, Zheng had labelled the materials as 'plastic' or 'resin.'

92 Damian Carrington, 'Wildlife crime study finds 33,000 items worth £7m for sale online', *The Guardian* (online) 25 November 2014 <http://www.theguardian.com/environment/2014/nov/25/wildlife-crime-study-sale-online>. The sixteen countries and their contribution to the total value are as follows: China (US$2.74m), Russia (US$1.95m), Ukraine (US$1.42m), France (US$1.35m), Germany (US$0.68m), United Kingdom (US$0.5m), United Arab Emirates (US$0.40m), Canada (US$0.39m), Qatar (US$0.31), Kazakhstan (US$0.27m), Belgium (US$0.27m), Kuwait (US$0.17m), Poland (US$0.14m), Netherlands (US$0.11m), Belarus (US$0.016m) and Bahrain (US$0.014m).

93 Andy Lines, 'Endangered rhinos and elephants hunted by Facebook poachers', *The Mirror* (online) 7 April 2015 <http://www.mirror.co.uk/news/world-news/endangered-rhinos-elephants-hunted-facebook-5475471>.

94 Milliken and Shaw, above n 89, 11.

95 Ibid.

96 Ibid.

97 For example, a shootout in Kruger National Park resulted in two poachers being shot by rangers: 'South African rangers kill two rhino poachers in Kruger National Park', *The Telegraph* (online) 5 January 2015 <http://www.telegraph.co.uk/news/worldnews/africaandindianocean/southafrica/11325513/South-African-rangers-kill-two-rhino-poachers-in-Kruger-National-Park.html>.

units was best summed up in a recent SBS report on the mostly female anti-poaching unit known as the 'Black Mambas.' Mamba Leitah Michabela, explains: '[i]f a person is attacking me, I know that person wants to kill me, then if I don't kill him first, he will kill me.'[98]

This progression in technology has also activated changes in the tactics employed by those on the front line to mitigate the unprecedented levels of harm. The Lindbergh Foundation's Air Shepherd Project is one such successful initiative, through its use of super-computer directed anti-poaching drones in Tanzania. Results from the Minnesota-based non-profit demonstrated a complete eradication of rhinoceros poaching over six months in South Africa's Hluhluwe Imfolozi Park in contrast to the prior rate of 12-19 deaths a month. The drones are directed by an algorithm developed by Professor Thomas Snitch which predicts where the rhinos will be at any given time with 93% accuracy as well as where poachers are most likely to strike.[99] Rangers patrol the park during the day whereas the drones patrol at night when most big-animal poaching occurs. A ground crew is stationed in the region equipped with a 3-D printer ready to create replacements parts for the drones as needed. British efforts are also breaking new ground, with Dr Paul O'Donoghue of Chester University creating RAPID (Real-time Anti-Poaching Intelligence Device), a system integrating heart rate monitors, horn cameras and satellite tracking devices to trigger a prompt and targeted response by rangers (pinpointed to the relevant location with a few metres). Rangers can be on scene via helicopter or truck within minutes and video from the horn cameras can be used as evidence against poachers.[100]

The law is incrementally adapting in some affected jurisdictions to capitalise on new equipment and tactics. The use of tracker dogs in Kruger National Park has seen a number of successful arrests and recently assisted in the conviction of two poachers. On 5 October 2015, Helene Eloff reported that a South African Local Magistrates Court had admitted a demonstration by a rhino poaching tracker dog and his handler as evidence for the first time. The now convicted poaching pair, Mozambicans Andelius Mukwebe and Jermano Thive, pled guilty to illegally entering the country but not to poaching despite being located hiding in vegetation 1.6km from a rhino carcass in the N'wantesi region of Kruger National Park in 2013, carrying two white rhino horns, an axe, a knife and sharpener.[101]

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98 SBS, 'Rhino Angels: World's first female anti-poaching unit', *Dateline*, 30 June 2015, (Evan Williams) <http://www.sbs.com.au/news/dateline/story/rhino-angels-worlds-first-female-anti-poaching-unit>. In September 2015 the Black Mambas were received the UNEP Champions of the Earth award.

99 Taylor Hill, 'Supercomputer-Powered Drones Shut Down Rhino Poaching in This Park- Can They Save Africa's Elephants Too?', *Takepart* (online), 9 March 2015 <http://www.takepart.com/article/2015/03/09/drones-shut-down-rhino-elephant-poaching>. The same algorithm is used to predict where insurgents will leave roadside bombs in Iraq and Afghanistan.

100 Ian Johnston, 'Rhino' horns to be fitted with spy cameras and alarms to help catch poachers', *The Independent* (online) 23 August 2015 <http://www.iol.co.za/scitech/science/environment/rhino-horns-to-be-fitted-with-cameras-1.1888188 >.

101 Helen Eloff, 'KNP Tracking dog's conduct noted in court', *Lowvelder* (online), 5 October 2015 <http://lowvelder.co.za/295966/knp-tracking-dogs-conduct-noted-in-court/>. The dog named 'Killer'was awarded a People's Dispensary for Sick Animals (PDSA) Gold Medal in January 2016, presented by British actor and animal welfare advocate Ricky Gervais. The Belgian Malinois has been in active service for four years and has been involved in investigations leading to 77 arrests. See also: Katie Grant, 'K9 Killer: Dog receives PDSA Gold Medal for helping to save rhino from extinction' *The Independent* (online), 8 January 2016 < http://www.independent.co.uk/news/world/africa/k9-killer-dog-receives-pdsa-gold-medal-for-helping-to-save-rhino-from-extinction-a6801611.html>.

Further, the execution of targeted intelligence-led strategies has garnered momentous results including two high profile 'ivory kingpin' arrests executed by the Tanzanian National and Transnational Serious Crimes Investigation Unit Task Force in October 2015. The first arrest was of Yang Feng Glan, otherwise known as the 'Queen of Ivory.'[102] Glan, a 66 year old Chinese National and fluent Swahili speaker who was secretary-general of the Tanzania China-Africa Business Council, has been charged with smuggling 706 elephant tusks worth approximately US$2.5m. The second arrest was of a direct supplier of Glan, Boniface Matthew Mariango, also known infamously as 'Shetani' or 'The Devil.'[103] Mariango became an active target of the Task Force in June 2014 and evaded capture on seven occasions. Evidence before the courts indicates that he managed over fifteen poaching syndicates across Tanzania, Burundi, Zambia, Mozambique and Southern Kenya, supplying them with weapons, ammunition and cars. Bolstering domestic efforts, INTERPOL has been active in guiding major operations internationally. Following the success of Operation Worthy in 2012 which saw the seizure of almost 2000kg of ivory and over 20kg of rhinoceros horn, INTERPOL reported on the success of Operation Worthy II on 22 December 2015 which produced 376 arrests, the investigation of 25 criminal groups, the issuing of 25 INTERPOL notices[104] and the seizure of 4.5 tonnes of elephant ivory and rhinoceros horn.[105]

Current debate around the poaching crisis has begun to centre on the development of an ethical and viable response, with the recurring common theme of harm minimisation. Strategies on the table include: poisoning rhinoceros horns or dehorning altogether as deterrence, conservation hunting, the legalisation of trade as well as meeting market demand with synthetic horn. The practice of preemptive dehorning has become more widespread to prevent poaching in both Asian (for examples in Assam)[106] and African populations (for example, Namibia).[107] In April 2013, South African game reserve Sabi Sand announced it had injected a mix of parasiticides and pink dye into over 100 horns over the course of 18

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102 David Smith, 'Chinese 'ivory queen' charged with smuggling 706 elephant tusks' *The Guardian* (online) 9 October 2015 < http://www.theguardian.com/environment/2015/oct/08/chinese-ivory-queen-charged-smuggling-706-elephant-tusks>.

103 Elephant Action League '"The Devil", most wanted ivory trafficker in Tanzania arrested' (Media Release, October 29 2015) < http://elephantleague.org/the-devil-most-wanted-ivory-trafficker-in-tanzania-arrested/>.

104 INTERPOL, *Elephant ivory and rhino horn trafficking targeted across Africa in Operation Worthy II* (Media Release, 22 December 2015) <http://www.interpol.int/News-and-media/News/2015/N2015-231>. The objective of Operation Worthy II was 'to enhance coordinated law enforcement responses to wildlife crime through cross-border, multi-agency collaboration, a systematic intelligence exchange and analysis, and the use of advanced investigative techniques.' A plethora of notices were issued internationally: seven Red Notices for wanted persons, four Blue Notices for information concerning individuals, ten Purple Notices for providing information on common modus operandi, and one Green Notice warning other nations of known criminals.

105 Ibid. Operation Worthy II involved law enforcement from eleven African countries (Ethiopia, Kenya, Malawi, Mozambique, Namibia, South Africa, Sudan, Swaziland, Tanzania, Uganda and Zambia) and operated between January and October 2015. Seizures also included 2,029 pangolin scales, 173 lives tortoises, 55kg of sea cucumber, warthog teeth, big cat, pangolin and python skins and impala carcasses, as well as 532 rounds of ammunition, five firearms and two home-made rifles. Investigative Support Teams were deployed to Singapore and Thailand.

106 Prasanta Mazumdar, 'Assam to dehorn rhinos to save them', *Daily News & Analysis* (online) 14 February 2014 <http://www.dnaindia.com/india/report-assam-to-dehorn-rhinos-to-save-them-1961855>.

107 Robert S Eshelman, 'Namibia Is Dehorning Rhinos to Combat Rising Poaching', *Vice News* (online) 14 October 2014 <https://news.vice.com/article/namibia-is-dehorning-rhinos-to-combat-rising-poaching>.

months to prevent poaching as consumption of the horn would cause serious illness.[108] In May of 2015, Texas Hunter Corey Knowlton won an auction for a hunting permit from the Namibian government to shoot an endangered black rhino (with a winning bid of $US350, 000). Since 2012 Namibia has sold five such licences claiming the money is spent on conservation projects and anti-poaching protection.[109] In May of 2015 it was reported that the Department of Environmental Affairs in South Africa was to establish a committee to investigate a potential licit trade in rhino horn. This push for a well-regulated legal trade in rhinoceros horn had been raised in the past, for example Leader-Williams notes that by 1992 the governments of South Africa, Zimbabwe and Namibia were not satisfied with the international trade ban.[110]In November 2015, South African judge Francis Legodi ruled in favour of game breeders John Hume and Johan Kruger to set aside the moratorium on domestic trade in rhino horns imposed by the government in 2009.[111] The government's appeal against the decision was rejected on 20 January 2016 by the North Gauteng High Court.[112] Finally, Biotech company Pembient and competitor Rhino Horn LLC both have current projects underway to manufacture 3-D printed imitation rhino horn for commercial use.[113]

It is imperative to locate these potential strategies, and indeed the issue as a whole, within the broader context of mass extinction to appreciate the urgency for sustainable solutions. A recent study conducted by Ceballos et al[114] confirmed that Earth has entered the sixth (Holocene) age of extinction. Unlike previous studies that have been criticised for being hyperbolic in their estimations of extinction rates, this study utilised conservative metrics so as to determine whether human activities are causing a mass extinction. That is, the study was designed to minimise evidence of mass extinction as measured against the rates prevailing in the five previous mass extinctions. The findings indicate that a sixth mass extinction is underway due to an 'exceptionally rapid loss of biodiversity over the last few centuries.'[115] The authors conclude, stating that '[a]verting a dramatic decay of biodiversity and the subsequent loss of ecosystem services is still possible through intensified conservation efforts, but that window of opportunity is rapidly closing.'[116]

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108 David Smith, 'South African game reserve poisons rhino's horns to prevent poaching', *The Guardian* (online) 5 April 2013< http://www.theguardian.com/environment/2013/apr/04/rhino-horns-poisoned-poachers-protect>.

109 Anna M Tinsley, 'Texas hunter Corey Knowlton shoots endangered rhinoceros in Namibia after winning auction', *The Sydney Morning Herald* (online) 21 May 2015 <http://www.smh.com.au/environment/animals/texas-hunter-corey-knowlton-shoots-endangered-rhinoceros-in-namibia-after-winning-auction-20150521-gh6874.html>.

110 Nigel Leader-Williams 'Regulation and protection: successes and failures in rhinoceros conservation' in Sara Oldfield, *The Trade in Wildlife: Regulation for Conservation* (2014, Routledge) 89-99, 92.

111 'South African judge lifts domestic ban on rhino horn trade' *The Guardian* (online) 26 November 2015 < http://www.theguardian.com/environment/2015/nov/26/south-african-judge-lifts-domestic-ban-on-rhino-horn-trade>.

112 'South Africa reports small decrease in rhino poaching, but Africa-wide 2015 the worst on record' *TRAFFIC* (online) 21 January 2016 <http://www.traffic.org/home/2016/1/21/south-africa-reports-small-decrease-in-rhino-poaching-but-af.html>.

113 Zoë Corbyn, 'Can we save the rhino from poachers with a 3D printer?', *The Guardian* (online) 24 May 2015 <http://www.theguardian.com/environment/2015/may/24/artificial-3d-printed-fake-rhino-horn-poaching>.

114 Gerardo Ceballos et al 'Accelerated modern human-induced species losses: Entering the sixth mass extinction' (2015) 1(5) *Science Advances* (forthcoming).

115 Ibid.

116 Ibid.

While these specific strategies are constantly being deliberated, conservation organisations globally have committed to meeting this newest age of extinction. The 2014-2015 period appears to have begun a new phase in the conservation movement, one which values public-private partnerships, intelligence gathering and analysis, community calls to action and innovative methods.[117] The IUCN World Parks Congress (held once every ten years) was held in Sydney to celebrate 50 years of the IUCN Red List and to launch the IUCN Green List. Conference delegates presented trail blazing advancements in including financial mechanisms such as 'Rhino Bonds' and the use of technology such SMART to monitor wildlife, threats, ranger performance and human activity to ensure decisions on the ground are well informed. Further on the subject of technology, a new intelligence gathering app called 'Wildlife Witness' was launched in April 2014. The app was developed in partnership between Taronga Zoo, Sydney and TRAFFIC enabling users to directly report illegal wildlife trade by taking a photo, geo-tagging the precise location and sending the data to TRAFFIC to be analysed by a Wildlife Crime Data Analyst to be used to inform enforcement decisions. As explained by Dr Kira Mileham (one of the architects of Wildlife Witness) tourists, particularly in South-East Asia are in a position to directly observe goods being placed for sale in markets and so possess capacity to make a difference.[118] Another example of Australia's recent involvement in global conservation efforts was announced by Ray Dearlove of the Australian Rhino Project who stated that government support had been received for the importation of rhinos from Africa for breeding insurance populations.[119] The 2014-2015 period has also seen the stories of individual rhinoceroses told to great effect in shaping the global public's awareness of the poaching problem. The popular international conservation conversation has shared all-too-familiar narratives of loss and, in rare cases, miraculous survival through traditional and social media. Some examples of these 'trending rhinos' now celebrated as ambassadors for their species include Thandi (and her calf Thembi),[120] Sudan[121] and Hope.[122]

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117 2014 also saw the passing of the father of rhino conservation in South Africa, Dr Ian Player on 30 November 2014.

118 Neil Keene, 'Taronga Zoo's high-tech solution to trafficking', *The Daily Telegraph* (online) 11 October 2014 <http://m.dailytelegraph.com.au/news/nsw/taronga-zoos-hightech-solution-to-trafficking/story-fni0cx12 1227086751097?sv=d7ed02f874b00ceec3162977b5996163>.

119 Sue Williams, 'Rhino Ray's War', *The Age* (online) 27 June 2015 <http://www.theage.com.au/good-weekend/rhino-rays-war-20150624-ghwcb5.html>. A recent web update by the Australian Rhino Project on 'Operation Rhino Drop' states that it aims to secure eighty rhinos in Australia to develop black and white rhinoceros insurance breeding herds (twenty individuals annually between 2016 and 2019).

120 ''Miracle' rhino calf named Thembi', *BBC* (online) 2 March 2015 <http://www.bbc.co.uk/newsround/31690291>. A female white rhino named Thembi was delivered at 8:50am on January 14th 2015 at Kariega Game Reserve, South Africa. The newborn's mother, Thandi, survived a brutal and bloody dehorning by poachers armed with machetes and chainsaws in March 2012 which left one unnamed bull dead at the scene and another, Themba, fighting for his life for 28 days.

121 Murithi Mutiga, 'At home with the world's last male northern white rhinoceros', *The Guardian* (online) 27 April 2015<http://www.theguardian.com/environment/2015/apr/27/ol-pejeta-kenya-sudan-worlds-last-male-northern-white-rhinoceros>. Sudan is the last male northern white rhino in existence. The 42 year-old lives at the Ol Pejeta Conservancy in Kenya under 24-hour armed guard. Females Najin and Fatu also reside at Ol Pejeta and are the only females in existence since the deaths of Nabire (Dvur Kralove Zoo, Czech Republic) and Nola (San Diego Zoo Safari Park) on 27 July 2015 and 22 November 2015 respectively.

122 Zi-Ann Lum, 'Young Rhino Named Hope Survives Brutal Attack After Being Left For Dead', *The Huffington Post Canada* (online) 26 May 2015 <http://www.huffingtonpost.ca/2015/05/26/rhino-poaching-south-africa-hope_n_7444060.html>. Hope was found in South Africa's Lombardini Game Farm days after her mother had been found dead. Both were shot with large-calibre rifles and dehorned. She has been receiving ongoing treatment, undergoing multiple procedures (including the fastening of an elephant hide as a shield for her wound) from Saving The Survivors after relocation to Shamwari Game Reserve.

IV WHERE TO FROM HERE?

Leader-Williams reflected on the primary mechanisms used to protect rhinos from poaching over the past quarter century and derived two main approaches: the first which dictates regulation to stop the international trade, and the second that attempts to protect rhinos *in situ*.[123] Whatever strategy is adopted, it must achieve extensive disruption of the illicit trade while educating the most prolific user countries against the use of rhinoceros horn. Mindful of these dual objectives, a 2015 study by Patel et al may hold the key. The study applied a nodal governance approach to identify which wildlife trafficking nodes to disrupt through law enforcement and public education policies, aided by the new online surveillance tool HealthMap Wildlife Trade which accumulates official reports, NGO reports and media coverage of global incidents. Patel et al researched elephant, tiger and rhino products to locate '(i) the key exporter, intermediary, and importer countries, and (ii) the countries where enforcement activities and educational campaigns might most effectively disrupt the networks'[124] The study found that disruption to the six most vital nodes for each species would result in disruption to: 89.5% of the network for elephants, 92.3% for rhinoceroses and 98.1% for tigers.[125] China, Vietnam, Thailand and India were also identified as the most important countries for educational programs. In particular it noted that 'with its increasing economic importance, China has to be a major focus for wildlife trade reduction to make a real impact.'[126] While the execution of resource efficient trade interventions appears to be the logical way forward, these must be supported by effective international and domestic regimes so as to not transplant the problem to other regulation-weaker nations. However, the question remains as to what will incentivise law and policy makers to construct and maintain a sustained response to the illegal trade in wildlife, given that the intrinsic value of species clearly has not served reason enough thus far. The tipping point may well be economic interest.

In moving forward, law and policy makers may wish to emphasise the economic and human impacts of the illegal trade in wildlife to build momentum for their reforms, particularly in nations relying on wildlife tourism in developing countries. A recent report from the United Nations World Tourism Organization found that wildlife watching constitutes 80 % of all African tourism (with sales increasing), with the most desirable animals being some of the most endangered (elephants, rhinos, cape buffalos, lions and leopards to name a few).[127] If the current poaching crisis continues and the market dries up, most jobs would not be absorbed into other industries (these jobs include: guides, hotel and restaurant staff, drivers and pilots and cultural performers). Echoing this fear, Tanzania's permanent secretary in the

123 Nigel Leader-Williams in Oldfield , above n 110, 89.

124 Patel et al, above n 17. Research analysed 232 shipments of elephants, 165 of rhinoceroses and 108 of tigers for the period August 2010- December 2013 following exclusion of reports with incomplete data or that did not involve international exchange (excluded reports totalled 153 shipments for elephants, 70 for rhinoceroses and 197 for tigers).

125 Ibid 3. The 'key sets of nodes for best fragmenting the illegal wildlife trade network' for each species surveyed are as follows: Elephant (China, Hong Kong, Kenya, Thailand, United States and Vietnam), Rhinoceros (China, Mozambique, South Africa, Thailand, United Kingdom and Vietnam) and Tigers (China, India, Laos, Myanmar, South Africa and Thailand).

126 Ibid 4. See also: Vincent Nijman and Chris R Shepherd, 'Trade in tigers and other wild cats in Mong La and Tachilek, Myanmar: A tale of two border towns' (2015) 182 *Biological Conservation* 1-7.

127 World Tourism Organization, Towards Measuring the Economic Value of Wildlife Watching Tourism in Africa- Briefing Paper (2014, United Nations World Tourism Organization) < http://dtxtq4w60xqpw.cloudfront.net/sites/all/files/docpdf/unwtowildlifepaper.pdf> 25.

Ministry of Natural Resources and Tourism, Adelhem Meru, stated that poaching will cost Africa 3.8 million jobs over the next 10 years.[128] Thus, even if one were to deny the proposition that wildlife possesses any intrinsic value, the inescapable economic value of the wildlife tourism industry cannot be discounted. A sustainable solution is required to ensure that the industry survives, and with it the likelihood that developing countries are able to meet their development targets.

The survival of the rhinoceros and other endangered species requires action from actors at every level of domestic and international governance, based on accurate evidence tendered from an interdisciplinary perspective; one mindful of the ecological implications of extinction, drivers of market forces (financial, social and cultural), criminological profiles of those who choose to breach laws, and the impact (or there lack of) of existing domestic and international regulatory systems. This paper sought to provide a contemporary snapshot of the illegal trade in wildlife using rhinoceros horn as a case commodity. While relentless demand continues to drive rhino poaching to unprecedented heights, this has been met by innovation and greater tenacity on the part of conservation actors, increased interest from the public, legal and criminological communities, and a sustained campaign of major policing operations. 2016 promises to be a pivotal year as the global community awaits the first ruling of facts by the Wildlife Justice Commission. How the Commission contends with the complexity of the problem as well as what action is taken in response to the information communicated may influence future regulatory responses, and hopefully generate more positive outcomes for human and non-human nature.

[128] John R Platt, 'Poaching Could Cost Africa Millions of Jobs', *TakePart* (online), 2 July 2015 <https://www.takepart.com/article/2015/07/02/poaching-could-cost-africa-38-million-jobs>.