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Environmental Law in Post-colonial Societies: Aspirations, Achievements and Limitations

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A. Introduction: From Colonialism to Post-colonialism

Nations differ in their aspirations and achievements concerning environmental law and policy. The starkest differences exist between the industrialised Western nations and their former colonies in the developing world.[1] While the discourse of sustainable development has been embraced by nearly all governments worldwide, its relevance to and implementation in post-colonial societies remain problematic.[2]

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[1] Good overviews of environmental law and policy in the developing world include: N Islam *et al* (eds), *Environmental Law in Developing Countries: Selected Issues* (IUCN, 2002); AM Halvorssen, *Equality among Unequals in International Environmental Law: Differential Treatment for Developing Countries* (Westview Press, 1999); B Chaytor and R Gray (eds), *International Environmental Law and Policy in Africa* (Springer, 2003); A Thomas, S Carr and D Humphreys (eds), *Environmental Policies and NGO Influence: Land Degradation and Sustainable Resource Management in Sub-Saharan Africa* (Routledge, 2001); MAM Salih and S Tedla (eds), *Environmental Planning, Policies and Politics in Eastern and Southern Africa* (St Martin's Press, 1999); JT Roberts and ND Thanos, *Trouble in Paradise: Globalization and Environmental Crises in Latin America* (Routeldge, 2003); GJ MacDonald, DL Neilson, MA Stern (eds), *Latin American Environmental Policy in International Perspective* (Westview Press, 1996); NP Peritoire, *Third World Environmentalism: Case Studies from the Global South* (UP Florida, 1999); B Boer, R Ramsay and DR Rothwell, *International Environmental Law in the Asia Pacific* (Kluwer, 1998); R Mushkat *International Environmental Law and Asian Values: Legal Norms and Cultural Influences* (UBC Press, 2004); AJ Bolla and TL McDorman (eds), *Comparative Asian Environmental Law Anthology* (Carolina Academic Press, 1999).

[2] AD Hecht, 'The Triad of Sustainable Development: Promoting Sustainable Development in Developing Countries' (1999) 8(2) *Journal of Environmental & Development* 111.

This chapter canvasses the aspirations, achievements and limitations of environmental governance in post-colonial countries. It does not probe in detail the experiences of any particular jurisdictions. Rather, it explores sustainable development policies and environmental law reforms and their set-backs through the lenses of several overarching themes. These are: the environmental regulatory challenges in the most rapidly industrialising economies (predominantly in East Asia); the tension between nature conservation and local communities' social and economic needs; and regulation of transnational corporate activity in developing countries. Before canvassing these themes, the next section outlines the key challenges for building effective environmental law in post-colonial societies. Ultimately, the chapter aims to explain why developing countries have struggled to develop effective environmental law, and what kind of reforms could turn things around.

The difficulties of post-colonial states in building effective systems of environmental governance reflect many causes, including structural weaknesses and normative flaws in international environmental law and its sustainability discourse,[3] the inequities of the global economy especially the international trade and financial systems,[4] the legacies of colonial rule, as well as various institutional and political factors endogenous to post-colonial societies.[5] The combination of unsustainable resource consumption by industrialised nations (and their companies), and the chronic conditions of poverty in the developing world, has created in post-colonial societies some of the planet's severest ecological and social problems.[6]

'Post-colonial states' are those that arose in the decolonised countries of Africa, Asia, Latin America and Oceania. These states are also commonly referred to as 'developing countries', 'less developed countries' or 'industrialising states'.[7] However labelled, they are not a homogenous group. There is immense variety and difference among the more than 130 states conveniently characterised as members of the Third World.[8] East Asia's industrialising tigers, for instance, are faced with ecological problems and governance challenges that differ markedly from the poorest agricultural economies of Sub-Saharan Africa. But what marks these nations as an identifiable group is their shared history of colonisation and

[3] For its historical roots, see D Kelly *et al, The Economic Superpowers and the Environment* (WH Freeman, 1976); and Chaytor and Gray, above n 1, for a recent perspective.

[4] S Mallaby, *The World's Banker: A Story of Failed States, Financial Crises, and Poverty of Nations* (Penguin, 2004).

[5] AH af Ornas and MA Mohamed Salih (eds), *Ecology and Politics: Environmental Stress and Security in Africa* (Scandinavian Institute of African Studies, 1989).

[6] C Zheng-Kang, 'Equity, Special Considerations, and the Third World' (1990) 1 Colorado J Intl Envtl L 57. Commission for Africa, *Our Common Interest: Report of the Commission for Africa* (Penguin Books, 2005).

[7] It should be borne in mind that the category of post-colonial states cannot always be equated with developing countries. Some countries such as China in the 19th century did not fall under direct colonial rule, although they suffered indirectly.

[8] W Langley, 'The Third World: Towards A Definition' (1981) 2 *Boston College Third World LJ* 1.

subordination to the geo-political interests of the advanced capitalist economies. Part of that shared history is the legacy of colonial resource management policies. When colonies obtained 'flag' independence, the environment they inherited was already severely damaged from years of exploitation by colonial administrations.

Today, post-colonial societies face new but equally serious threats. Trade liberalisation, foreign debt burdens, transnational corporate investments and International Monetary Fund structural adjustment programmes are elements of a global economic system that can undermine socially just and ecologically sound development for post-colonial societies. Even the remedial discourse of sustainable development seems to be mired in these inequities. Although several principles of sustainability address the plight of the most disadvantaged nations—eg, the concepts of 'intragenerational equity' and 'common but differentiated responsibilities'[9]—the sustainable development discourse has tended to reflect Western institutions and interests.[10] Thus, explains Geisinger:

> Sustainable development is not just a reflection of Western ideology, but a force for defining environmental problems in Western terms. The ecocratic discourse that has developed around the principle of sustainable development serves to further marginalize any conception of environment that does not fit into the Western framework. Its implementation assumes the ability of science to develop technologies to limit environmental damage while ensuring material growth. Such a scheme has no place for other conceptions of the human/nature relationship.[11]

Properly to evaluate the prospects for competent environmental governance in post-colonial states, one must consider the character of the colonial state and its environmental laws. The capacity of post-colonial states to internalise and enforce environmental norms is still affected by the legacy of the colonial administrative apparatus. Colonial authorities were not uninterested in the environment, and occasionally passed regulations on rivers, mining and wildlife to facilitate their orderly exploitation and management.[12] Colonial states, by definition and practice, were designed to serve economic and political ends that were often at odds with the long-term interests of the colonised. Power tended to be centralised in the colonial capital and exercised insensitively without the participation of

[9] DB Magraw, 'Legal Treatment of Developing Countries: Differential, Contextual, and Absolute Norms' (1990) 1 *Colorado Journal of International Environmental Law & Policy* 69; EB Weiss, 'In Fairness to Future Generations and Sustainable Development' (1992) 8 *American University Journal of International Law & Policy* 19.

[10] Compare Ellis and Wood, this vol. But see S Lele, 'Sustainable Development: A Critical Review' (1991) 19 *World Development* 607.

[11] A Geisinger, 'Sustainable Development and the Domination of Nature: Spreading the Seed of the Western Ideology of Nature' (1999–2000) 27 *Boston College Enivironmental Affairs L Rev* 68.

[12] Eg, in the then West African Gold Coast: Concessions Ordinance was passed in 1900, the Ordinance for the Preservation of Wild Animals, Birds and Fish in 1901, Rivers Ordinance in 1907, Mosquitoes Ordinance in 1911 and Forest Ordinance in 1927: see F Botchway, *Environmental Law in Ghana* (Kluwer, 2004) 27–9.

colonial subjects.[13] In this schema, natural resources were managed principally to serve imperial markets, while colonial administrations propagated new discourses and practices for the utilitarian and instrumental management of nature.[14]

In their preoccupation with economic exploitation of the colonies' bounty, colonial powers created few institutional structures for good governance. The institutions of 'indirect rule' established in the British colonies, which combined British-style local government with tribal authority, were perhaps a rare exception.[15] As Mgbeoji observed, 'in many cases the colonial bureaucracy was designed as a mechanism to facilitate the economic exploitation of natives and their resources in such tasks as mining, logging of forests, and the production of raw materials for the cosmopolitan imperial cities'.[16] The legacy today has been a continuation of inappropriate centralised government decision-making and frequent reliance on cumbersome, authoritarian modes of regulation, which together tend to disenfranchise local communities closest to nature.[17] Post-colonial scholars thus wish to remind us that the accession of post-colonialism was 'prematurely celebratory',[18] as significant political and economic disequilibria remain, not merely between the West and developing countries, but within post-colonial societies.[19]

B. Building Blocks for Envirnmental Law

1. Emergence of Environmental Law in Colonial and Post-colonial States

There is no shortage of environmental laws in the developing world. Apart from 'failed states' such as Afghanistan and Somalia where there is little semblance of effective government, most nations have marshalled a seemingly impressive array of environmental legislation. As with developed nations, there have been certain common steps in the historical evolution of their environmental regulatory regimes.

[13] JS Wunsch and D Olowu (eds), *The Failure of the Centralized State: Institutions and Self-Governance in Africa* (Westview Press, 1990).

[14] RH Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism 1600–1860* (Cambridge UP, 1995); AP Kameri-Mbote and P Cullett, 'Law, Colonialism and Environmental Management in Africa' (1997) 6 *Review of European Community and International Environmental Law* 23.

[15] HF Morris and JS Read (eds), *Indirect Rule and the Search for Justice* (Clarendon Press, 1972).

[16] I Mgbeoji, *Collective Insecurity* (UBC Press, 2003) 33.

[17] D Rothchild and N Chazan (eds), *The Precarious Balance: State and Society in Africa* (Westview Press, 1988); CY Thomas, *The Rise of the Authoritarian State in Peripheral Societies* (Monthly Review Press, 1984).

[18] A McClintock, *Imperial Leather* (Taylor and Francis Books, 1995) 12–13.

[19] See generally A Memmi, *The Colonizer and the Colonized* (Beacon Press, 1991); G Rajan and R Mohanram (eds), *Postcolonial Discourse and Changing Cultural Contexts* (Greenwood Press, 1995).

During the early years of post-colonialism, newly independent governments ushered in constitutional reforms that saw the elevation of economic policy matters into constitutional legal discourse. This emanated from a desire to nationalise the 'commanding heights of the economy' and achieve economic independence.[20] These constitutional provisions often had significant environmental implications. For example, the Mexican constitution of 1936 vested all natural resource exploitation in state-owned companies.[21] Such provisions did not change the ethos of environmental practice associated with the colonial economy. If anything, they supported the degradation of the environment in a self-righteous justification of the need for accelerated development of the post-colonial economy.

On the other hand, there were other aspects of the independence constitutions that indirectly provided avenues for environmental protection and management. These were predominantly the fundamental human rights and due process administrative procedures that the constitutions mandated.[22] Judicial review by courts in the developing world has proven in some instances to offer a valuable check on administrative actions that threaten the environment,[23] such as the Philippines Supreme Court decision in *Oposa*[24] and the Indian Supreme Court decision in *Mehta*.[25]

In the aftermath of the Cold War, much more rigorous and direct efforts were made to incorporate environmental provisions in the new constitutions. The new constitutional provisions fall into three categories: preambular statements, directive principles of state policy and basic environmental rights or duties for citizens.[26] There have been doubts about the status and effect of constitutional provisions, especially the preambles. The Nigerian constitution provides that 'the state shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria'.[27] Most experts consider such statements to be standards of attainment but not justiciable nor enforceable. However, constitutional principles incorporated into legislation can be made justiciable.[28]

While constitutional principles can serve to express long-term political commitment, they clearly cannot alone provide an adequate framework for effective

[20] N Schrijver, *Sovereignty Over Natural Resources: Balancing Rights and Duties* (Cambridge UP, 1997).

[21] See A Chua, 'The Privatization—Nationalization Cycle: The Link Between Markets and Ethnicity in Developing Countries' (1995) 95 *Columbia L Rev* 223, 232.

[22] See generally A Boyle and M Anderson (eds), *Human Rights Approaches to Environmental Protection. Jan Hancock, Environmental Human Rights* (Clarendon Press, 2003).

[23] J Widener, *Building the Rule of Law: Francis Nyalali and the Road to Judicial Independence in Africa* (WH Norton, 2001).

[24] *Minors Oposa v Secretary of the Department of Environment and Natural Resources* (1994) 33 ILM 173 (Sup Ct).

[25] *MC Mehta v Union of India* [1997] AIR SC 734.

[26] C Bruch, W Coker and C Van Arsdale, 'Constitutional Environmental Law: Giving Force to Fundamental Principles in Africa' (2001) 26 *Columbia Journal of Environmental Law* 131.

[27] Constitution of the Federal Republic of Nigeria 1999, s 20: see EE. Okon, 'The Environmental Perspective in the 1999 Nigerian Constitution' (2003) 5 *Environmental L Rev* 256.

[28] See the Nigerian Sup Ct judgment (in particular Uwaifo JSC's opinion) in *AG of Ondo State v AG of the Federation & ors* (1982) 13 NSCC.567.

environmental governance. Government legislation is also necessary. Like the legal regimes of many Western states, early post-colonial environmental legislation tended to be organised around particular economic activities, and the environmental goals were neither clearly visible nor appreciated by the populace. The legislation was also piecemeal, dealing with specific environmental media—eg, forestry, water, marine resources, and air quality.[29]

Recent decades have been marked by more comprehensive legislative effort constructed in the consciousness of environmental management and advancement. Most post-colonial states have enacted national environmental framework legislation, providing for land use planning, environmental impact assessment and pollution control. Thus, for example, Pakistan has the Environmental Protection Ordinance 1983, Egypt the Environmental Protection Law 1994, Uganda adopted the National Environment Act 1994 and Brazil has the National Environment Policy Law 1981.[30] These national environmental statutes tend to concentrate decision-making among central government authorities, and rely heavily on command-and-control regulation.[31] Thus, India has the Ministry of Environment and Forests, Chile has the National Commission for the Environment, and Nigeria established the Federal Environmental Protection Agency.

In recent years, references to 'sustainable development' have increasingly surfaced in these statutory regimes.[32] With the assistance of international institutions such as the World Conservation Union (IUCN) and the United Nations Environment Programme (UNEP), post-colonial states have been embellishing their environmental laws in the language of sustainability. Thus, Vietnam's Law on Environmental Protection 1993 declares its goal as 'serving the cause of sustainable development of the country',[33] and Zambia's Environmental Protection and Pollution Control 1990 gives the national Environment Council the duty to 'identify, promote and advise on projects which further or are likely to further . . . sustainable development'.[34]

This plethora of environmental laws in the developing world masks a variety of structural weaknesses in the capacity of their legal systems to promote sustainable development. Unlike examples from some developed nations, such as New Zealand's Resource Management Act 1990,[35] most post-colonial legislation hardly provide the policy tools to implement sustainability. Its more material concepts,

[29] BJ Richardson, 'Environmental Law in Postcolonial Societies: Straddling the Local—Global Institutional Spectrum' (2000) 11(1) *Colorado Journal of International Environmental Law & Policy* 1, 22.

[30] For these and more examples, see ED McCutcheon, 'Think Globally, (En)Act Locally: Promoting Effective National Environmental Regulatory Infrastructure in Developing Nations' (1998) 31 *Cornell International LJ* 395.

[31] See U Desai (ed), *Ecological Policy and Politics in Developing Countries* (SUNY Press, 1998).

[32] SO Subedi, 'Incorporation of the Principle of Sustainable Development into the Development Policies of the Asian Countries' (2002) 32 *Environmental Policy & Law L* 85; Hecht, above n 2.

[33] Preamble, available at www.vietnamlaws.com.

[34] S 6(2)(m), Cap 204 of the Laws of Zambia.

[35] See Bosselmann, ch 5, this vol.

such as the precautionary principle and environmental risk management or internalisation of environmental costs through environmental taxation, are barely acknowledged. Yet, for some post-colonial states, especially the rapidly industrialising and urbanising countries of East Asia, these should be highly relevant policy concerns. On the other hand, for some other nations, especially those in sub-Saharan Africa, different policy concerns, such as land tenure, the position of women and agricultural trade, tend to have a greater bearing on the state of environmental management. Environmental law in this region often fails to address these structural constraints to ecologically sound and socially just development. To the extent that the sustainable development discourse and its reforms fail to be tailored to the specific needs of different types of post-colonial societies, it will remain largely a framework devised by and for Western institutions and interests.

2. Good Governance and the Rule of Law

Part of the problem with current environmental law reforms is that they are not sufficiently supported by policies and administrative or other implementation institutions.[36] Hence, there has been growing talk about the need for 'capacity-building' in developing countries.[37] Mayda observes that new environmental legislation is of questionable value unless 'accompanied by a substantial increase in each nation's capability for policy development, institutional structures, administrative competence, and ability to train management, monitoring and enforcement personnel'.[38] Unfortunately, these elements are not always present. For instance, according to the Asian Development Bank's recent *Asian Environment Outlook*, 'the root cause of the poor state of the environment in the region was a failure of policy and of institutions'.[39]

Certainly, new or better environmental laws are not enough. Governments must also have an administrative system with the capacity and the motivation to implement and enforce regulations.[40] Legal reform must include mechanisms for public participation, access to information and judicial review. Unfortunately, there has been a tendency for governments to 'relegate the consideration of legal and institutional arrangements to artificially isolated chambers, destined for sequential consideration once the necessary policy document has been developed'.[41] Not

[36] On policy and institutional frameworks, see Dovers and Connor, ch 1, this vol.

[37] OJ Ebohon *et al*, 'Institutional Deficiencies and Capacity Building Constraints: The Dilemma for Environmentally Sustainable Development in Africa' (1997) 4(3) *International Journal of Sustainable Development & World Ecology* 204.

[38] J Mayda, 'Environmental Legislation in Developing Countries: Some Parameters and Constraints' (1985) 12 *Ecology Law Quarterly* 997, 998.

[39] Asian Development Bank (ADB), *Asian Environment Outlook* (ADB, 2002) p. xv.

[40] WL Andreen, 'Environmental Law and International Assistance: The Challenge of Strengthening Environmental Law in the Developing World' (2000) 25 *Columbia Journal of Environmental Law* 17, 26.

[41] *Ibid*, 28.

uncommonly, environmental legislation in post-colonial states has been a dead letter because of insufficient skilled personnel, lack of administrative and technical support, and meagre financial resources.[42] Concomitantly, there has been a tendency to ignore the potential contributions of non-governmental organisations (NGOs), local communities, and businesses and trade unions as a means of environmental governance.

Thus, many commentators argue that environmental law will hardly promote sustainable development unless anchored to wider reforms to promote good governance and the rule of law.[43] While this is part of the picture, the danger is that we can lose sight of the fundamental political and economic constraints to such reform. In other words, there can be confusion between the symptoms and causes of failed environmental governance. Law acquires its meaning and performs its social functions through processes of implementation and enforcement, without which it has little life in any given society. While some countries have made substantial progress in addressing these encumbrances, there has been a tendency for some states naïvely to import foreign precedents incompatible with local institutional and social conditions.[44] Thus, as Wang warns, 'law becomes effective by social forces and pressures interested in and working for its implementation. Without a proper institutional setting, the law will remain a fig-leaf, pretending action without changing social reality'.[45]

The failure of the 'Law and Development' movement of the 1960s and 1970s—a programme for legal technical assistance and reform to developing countries, as part of Western development aid programmes—shattered the naïve belief that if laws are reformed and legal institutions strengthened, nothing can restrain the 'rule of law's' triumph.[46] The law and development movement has re-emerged in a new guise recently, through the 'New Public Management' and 'Good Governance' prescriptions recited by the international development assistance community.[47] Thus, corruption, lack of transparency and accountability in administration, and cumbersome and outdated decision-making processes, are targeted as the principal villains to be reformed.

[42] Richardson, above n 29, 26–7.

[43] See B Boer, 'Institutionalising Ecologically Sustainable Development: The Roles of National, State, and Local Governments in Translating Grand Strategy into Action' (1995) 31 *Willamette L Rev* 307.

[44] P Legrand, 'The Impossibility of Legal Transplants' (1997) 4 *Maastricht Journal of European & Comparative Law* 111, 119.

[45] Y Wang, *Chinese Legal Reform: The Case of Foreign Investment Law* (Routledge, 2002)28.

[46] DM Trubek and M Galanter, 'Scholars in Self-Estrangement: Some Reflections on the Crisis in Law and Development' (1974) 4 *Wisconsin L Rev* 1062.

[47] J Demmers *et al* (eds), *Good Governance in the Era of Global Neoliberalism* (Routledge, 2004). For a trenchant Third World critique, see J Gathii, 'The Limits of the New International Rule of Law on Good Governance' in EK Quashigah and OC Okafor (eds), *Legitimate Governance in Africa* (Kluwer, 1999) 207; A Anghie, *et al* (eds), *The Third World and International Order: Law, Politics and Globalization* (Martinus Nijhoff, 2003).

Law reform can wrongly presuppose that certain societies do not have a 'rule of law' and are characterised by anarchy and disorder, and must therefore be restructured. But a society whose members are guided by, and comply with, traditional norms of behaviour rather than a state-supported edifice of codes and rules is clearly not one devoid of law. Many indigenous and local communities in post-colonial societies retain customary environmental management traditions that provide norms and sanctions that can complement government environmental law.[48] Successful law reform in so-called 'transitional countries' therefore at a minimum requires appropriate incentives and organisations that take account of the local culture and the past constraints that shaped the existing legal system.[49]

3. International Institutions and Co-operation

Many commentators believe that the prospects for effective environmental governance hinge not so much on endogenous conditions in post-colonial societies but on exogenous ones, especially the structure of the global economy and international environmental co-operation. During the 1960s and 1970s, theories of dependency and underdevelopment figured prominently in explanations of the environmental and economic dilemmas of the developing world. Like their colonial antecedents, post-colonial economies were seen as tied to the markets of the former colonial masters.[50] The privileged position of international capital under such conditions constrained the environmental policy options for post-colonial states. During the 1980s, the deteriorating terms of trade and the ballooning foreign debts of the Third World led critics to broaden the responsibility for the failure to achieve sustainable development to the general structure of the global economy.[51] Many commentators believe that 'the present economic system is grotesquely unsustainable and for all practical purposes it is impossible for a sustainable world to emerge and be maintained via the workings of an unconfined, undirected market system',[52] in which post-colonial states are besieged on all fronts. This global market order is underpinned by the Bretton Woods institutions of the World Bank, the International Monetary Fund and the General Agreement

[48] See D Bromley, *Environment and Economy: Property Rights and Public Policy* (Basil Blackwell, 1991).

[49] PH Brietzke, 'The Politics of Legal Reform' (2004) 3 *Washington University Global Studies L Rev* 1, 25.

[50] AG Frank, *Capitalism and Underdevelopment in Latin America* (Monthly Review Press, 1957); S Amir, *Unequal Development: An Essay on the Social Formations of Peripheral Capitalism* (Monthly Review Press, 1976).

[51] G Carvalho, 'Sustainable Development: Is it Achievable Within the Existing International Political Economy Context?' (2001) 9 *Sustainable Development* 61.

[52] R Douthwhite, 'Is it Possible to Build a Sustainable World?' in R Munck and D O'Hearn (eds), *Critical Development Theory: Contributions to a New Paradigm* (Zed Books, 1999); S Kuznet, 'Economic Growth and Income Inequality' (1955) 54(1) *American Economic Rev* 1. But see P Aghion *et al*, 'Inequality and Economic Growth: The Perspective of the New Growth Theories' (1999) 37: 4 *Journal of Economic Literature* 1615;

on Tariffs and Trade (now absorbed into the World Trade Organisation).[53] For instance, the lending policies of the World Bank and its sister multilateral development banks have been condemned for favouring large-scale, environmentally intrusive projects such as dams and highways which devastate community livelihoods.[54] The World Bank, however, has implemented a range of reforms to promote more attention to the environmental dimensions of projects it finances,[55] and it has created an independent Inspection Panel to monitor compliance with its environmental and human rights policies.[56] In recent years, the so-called anti-globalisation movement has focused attention on the need for international debt relief for the poorest countries and a shift away from 'free trade' to 'fair trade' policies to help economic producers in developing countries.[57]

A second set of concerns relates to the effectiveness of current mechanisms to promote international environmental co-operation. Certainly, few doubt that international environmental treaties, organisations and assistance are necessary to assist post-colonial societies to develop sustainability. Many lack the financial resources, technical expertise and management systems to devise and implement environmental laws and policies. However, international environmental institutions arguably do not adequately address these shortcomings, and do not provide a sufficient counterweight to the egregious effects of the global economy. For example the World Heritage Convention[58] and the Ramsar Wetlands Convention[59] problematically emphasise nature conservation rather than local sustainable use and management of resources that communities often crucially depend on.[60] The financial resources they make available, with the World Heritage fund and the Ramsar fund, are too meagre to make a difference.

Encouragingly, there are some international environmental institutions attentive to the need for local environmental governance and community empowerment.

[53] R Swedberg, 'The Doctrine of Economic Neutrality of the IMF and World Bank' (1986) 23 *J Peace Research* 377; H Wachtel, *The Money Mandarins: The Making of a Supranational Economic Order* (Pantheon, 1986).

[54] B Rich, *Mortgaging the Earth: The World Bank, Environmental Impoverishment and the Crisis of Development* (Beacon Press, 1995).

[55] R Wade, 'Greening the Bank: The Struggle Over the Environment, 1970–1995' in D Kapur, J Lewis and R Webb (eds), *The World Bank: Its First Half Century* (Brookings Institution Press, 1997) ii, 611.

[56] R Bisell, 'Current Development: Recent Practice of the Inspection Panel of the World Bank' (1997) 91 *A.JIL* 741.

[57] B Hoekman and M Kostecki, *The Political Economy of the World Trading System: The WTO and Beyond* (Oxford UP, 2001); R Nader (ed), *The Case Against Free Trade, GATT, NAFTA and the Globalization of Corporate Power* (Earth Island Press, 1993); J Stiglitz, *Globalization and Its Discontents* (Norton, 2002); JB Gelinas, *Freedom From Debt; The Reappropriation of Development through Financial Self-Reliance* (Zed Books, 1998).

[58] Convention concerning the Protection of the World Cultural and Natural Heritage 1972, 11 ILM 1358.

[59] Convention on Wetlands of International Importance 1971, 996 UNTS 245.

[60] See generally M Bowman and C Redgwell (eds), *International Law and the Conservation of Biological Diversity* (Kluwer, 1996).

For example, the 1992 Earth Summit's Agenda 21 plan contained extensive prescriptions for strengthening local government, NGOs and indigenous peoples.[61] The emerging principle of 'common but differentiated responsibility' in international environmental law expresses the idea that the West has greater responsibilities to address global environmental problems because of its larger contribution to such problems and its superior financial and technological resources to address them.[62] Some international treaties are also shifting their prescriptions away from inappropriate top-down bureaucratic and scientific solutions, in favour of local government, land tenure and other institutions often essential for sustainable, community livelihoods. Thus, the 1994 Desertification Convention sees the solutions to desertification of lands as including programmes to combat local poverty, give secure property rights to farmers and enhance local self-government.[63] Emerging international legal standards for indigenous peoples also emphasise land rights and self-government as the building blocks for sustainable natural resources management.[64]

Some treaties also include provisions for environmental technology exchange and financial assistance. For example, China owes its success in reducing ozone-depleting chemicals principally to the financial and technological support it received pursuant to the Montreal Protocol.[65] The Kyoto Protocol[66] will likely become more influential, mainly due to its dedicated funds[67] to help developing countries abate greenhouse gas emissions through technology transfer for energy efficiency and by land use and waste management changes.[68] The Kyoto Protocol's Clean Development Mechanism can also support investments in non-fossil energy projects in developing countries.[69] Other important financial mechanisms include the Global Environment Facility, which disburses grants for high profile environmental projects,[70] and the debt-for-nature swaps, which reduce a government's

[61] UN Conference on Environment and Development (UNCED), *Agenda 21: Programme of Action for Sustainable Development* (UNCED, 1992) chs 26–28.

[62] Halvorssen, above n 1; see also Ellis and Wood, this vol.

[63] Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification 1994, 33 ILM 1328.

[64] SJ Anaya, 'Divergent Discourses about International Law, Indigenous Peoples, and Rights Over Lands and Natural Resources: Toward a Realist Trend' (2005) 16(2) *Colorado Journal of International Environmental Law & Policy* 237.

[65] Montreal Protocol on Substances that Deplete the Ozone Layer 1987, 26 ILM 1550.

[66] Kyoto Protocol to the Framework Convention on Climate Change 1997, 37 ILM 22.

[67] Namely, the Special Climate Change Fund, Least Developed Countries Fund and Kyoto Protocol Adaptation Fund.

[68] See European Commission (EC), *Summary of Key Elements of the Bonn Agreement on Climate Change* (Directorate-General XI—Environment, 23 July 2001).

[69] Kyoto Protocol, above n 66, Art 12(3)(b). The CDM allows industrial countries to invest in projects in non-Annex I parties and to use the 'certified emissions reductions' that derive from the projects towards compliance with their Protocol commitments.

[70] Instrument for the Establishment of the Restructured Global Environment Facility 1994, 33 ILM 1273.

foreign debt burden in exchange for additional financial resources for environmental initiatives.[71]

Regional intergovernmental co-operation can also be a useful means of modernisation of environmental laws and policies. In theory, an advantage of regional collaboration is that it is sometimes easier for states to reach agreement on environmental policy at the regional plane where there is less diversity of social and economic characteristics among the participating parties than would be found at a broader, global scale. Presently, regional agreements dealing with marine pollution and fisheries management are the most advanced instruments developed for regional environmental problems. Several regional conventions in these fields have been drafted specifically for many parts of Africa, the South Pacific, Asia and Latin America.[72] Regional environmental co-operation has also been advanced through institutions as diverse as the South Pacific Regional Environmental Programme (SPREP) and Association of South-East Asian Nations (ASEAN).[73] But despite the growth of regional environmental regimes in the Third World, there is as yet no compelling evidence that such an approach promotes sustainable development better than global institutions.

C. Evictions from Eden

Nature Parks Versus People

Having surveyed general developments in environmental governance affecting post-colonial societies, we now consider some of the more specific challenges facing developing countries. The first is the long-standing 'parks vs people' debate. The colonial confrontation was not only a political conquest but also the imposition of alien environmental norms, values and institutions. In contrast to indigenous environmental management norms and practices oriented to conservation and sustainable use,[74] the imported colonial development model emphasised large-scale, commercial exploitation of all useable natural resources. But authorities chose to set aside some natural areas as game reserves and parks, though again their purpose would primarily be to serve the recreational and scientific

[71] RT Deacon and P Murphy, 'The Structure of an Environmental Transaction: The Debt-For-Nature Swap' (1997) 73(Feb) *Land Economics* 1.

[72] See eg C Giraud-Kinley, 'The Effectiveness of International Law: Sustainable Development in the South Pacific Region' (1999) 12 *Georgetown International Environmental L Rev* 125; M Holley, 'Sustainable Development in Central America: Translating Regional Accords into Domestic Enforcement' (1998) 25 *Ecology Law Quarterly* 89.

[73] D Craig, K Kheng-Lian and NA Robinson (eds), *Capacity Building for Environmental Law in the Asian and Pacific Region: Approaches and Resources* (Asian Development Bank, 2002) 289–351.

[74] See generally D Brokensha *et al* (eds), *Indigenous Knowledge Systems and Development* (UP America, 1980).

interests of the colonisers, not the local people displaced to make way for such estates.[75]

Colonial development policies thus separated 'nature' and 'humankind', treating the former largely as a resource to be managed instrumentally in service of the latter. Colonial economic progress was conceived of and pursued as a linear process in which the 'civilised' and 'developed' nations were at the forefront, while the 'backward peoples' of the Third World brought up the rear.[76] By equating urban lifestyle with the highest state of civilisation and forest dwelling with savagery, early resource management law legitimised the forcible eviction and removal of forest-dwelling peoples from their habitats.[77]

National parks are not the only areas where local peoples have been displaced. More importantly, colonialism thrived on the most extensive land grab in human history, and one that gave rise to some of the worst environmental disasters in history.[78] The imported European concepts of property differed from those of traditional societies of the colonised world. In his evidence before the West African Lands Commission in 1908, Chief Elesi Odogbolu, a traditional chief of the Yorubas of West Africa, expounded the traditional conception of land ownership among the Yorubas thus: 'I conceive that land belongs to a vast family of which many are dead, few are living and countless members are unborn'.[79]

In many jurisdictions, land rights were pivotal to nationalist struggles for independence, yet such struggles did not necessarily lead to a restoration of traditional land tenure systems.[80] In Kenya, for instance, European settler lands were often not redistributed to their former traditional custodians, but were privatised and distributed to those allied to the new post-colonial political elites.[81] In Uganda and Zimbabwe, the post-colonial governments preferred to nationalise tribal and European-held lands in the name of nation-building.[82] Today, most traditional common property resources in Africa have been either privatised or nationalised—in either case, local communities remain disenfranchised from land management.

[75] JM MacKenzie, *The Empire of Nature: Hunting, Conservation and British Imperialism* (Manchester UP, 1988).

[76] V Tucher, 'The Myth of Development: A Critique of Eurocentric Discourse' in R Munck and D O'Hearn (eds), *Critical Development Theory: Contributions to a New Paradigm* (Zed Books, 1999) 8; M Lindley, *The Acquisition and Government of Backward Territory in International Law* (Longmans, 1926).

[77] C Geisler, 'A New Kind of Trouble: Evictions in Eden' (2003) 55(175) *Intl Social Science Journal* 69.

[78] SW Awry, 'Tenure Policy Toward Common Property Natural Resources in Sub-Saharan Africa' (1990) 30(2) *Natural Resources Policy* 403; CK Meek, *Land Law and Custom in the Colonies* (Frank Cass, 1968).

[79] West African Lands Commission (WALC), *Report* (WALC, 1908)183, para 1048.

[80] S Moyo (ed), *Reclaiming the Land: The Resurgence of Rural Movements in Africa, Asia and Latin America* (Zed Books, 2005).

[81] D Porter *et al, Development in Practice: Paved with Good Intentions* (Routledge, 1991)29.

[82] Richardson, above n 29, 34–35.

The contemporary 'bush meat' crisis in Africa and the staggering loss of biodiversity from the breakdown in traditional community resource management[83] disguise the fact that biodiversity has evolved in the region, not in spite of human habitation, but because of it.[84] There is ample evidence that many local communities have indigenous norms and practices governing human interaction and coexistence with wildlife and other manifestations of nature.[85] The key challenge now is to mobilise the accumulated traditional knowledge systems and practices in contemporary environmental governance.[86] This is unlikely without the restoration of vibrant community-level common property regimes and effective and participatory local government.[87] Inequities in access to land have been linked to deforestation and environmental mismanagement as landless peasants invade ecologically sensitive areas such as erosion-prone hillsides or thin-soiled rainforests.[88] Myers for instance has traced the relationship between agricultural colonisation of the Amazon and poverty, population growth and maldistribution of land in rural communities.[89] Government policies that marginalise traditional community institutions and customary laws further contribute to the breakdown of community livelihoods.[90]

The creation of nature parks in post-colonial states has often been done pursuant to international environmental agreements acceded to by post-colonial states. The problem is not the creation of nature parks per se, but the chronic and disastrous lack of local participation in the decision as to where the nature parks are to be located and how local communities may interact with the parks.[91]

[83] MI Bakarr *et al, Hunting and Bushmeat Utilization in the African Rain Forest: Perspectives Toward a Blueprint for Conservation Action* (Conservation International, 2001).

[84] D Wood, 'Conservation and Agriculture: The Need for a New International Network of Biodiversity and Development Institutes to Resolve Conflict' in AF Krattiger *et al* (eds), *Widening Perspectives on Biodiversity* (Natraj Publishers, 1994) 425.

[85] P England, 'Tree Planting, Sustainable Development and the Roles of Law in Bongo, North East Ghana' (1995) 39(2) *Journal African Law* 138; J Labuschagne and C Boonzaaier, 'African Perception and Legal Rules Concerning Nature' (1998) 5 *South African Journal of International Environmental Law & Policy* 58; SK Date-Bah, 'Rights of Indigenous Peoples in Relations to Natural Resources Development: An African Perspective' (1998) 16 *Journal Energy & Natural Resources Law* 389.

[86] Richardson, above n 29.

[87] *Ibid*, 31–61.

[88] EP Eckholm, *The Dispossessed of the Earth: Land Reform and Sustainable Development* (Worldwatch Institute, 1979); P Utting, *Trees, People and Power. Social Dimensions of Deforestation and Forest Protection in Central America* (Earthscan, 1993).

[89] N Myers, 'The World's Forests: Problems and Potentials' (1996) 23 *Environmental Conservation* 156.

[90] For an important IUCN case study on northern Pakistan, see A Bilal, H Haque and P Moore, *Customary Laws: Governing Natural Resource Management in the Northern Areas* (IUCN Law Programme, 2003).

[91] R Neumann, 'Primitive Ideas: Protected Area Buffer Zones and the Politics of Land in Africa' (1997) 28 *Development & Change* 559; RA Schroeder, 'Geographies of Environmental Intervention in Africa' (1999) 23 *Progress in Human Geography* 359; K Brandon, KH Redford, and SF Sanderson (eds), *Parks in Peril: People, Politics, and Protected Areas.* (Island Press, 1998); J Cordell, 'Boundaries and Bloodlines: Tenure of Indigenous Homelands and Protected Areas' in E Kemf (ed), *Indigenous Peoples and Protected Areas. The Law of Mother Earth* (Earthscan, 1993) 61.

Treaties such as the Convention on the Conservation of Migratory Species of Wild Animals[92] oblige states parties to preserve and/or restore the habitats of these species, but without concomitant obligations to take into account the social and economic needs of local communities which might be affected by implementation of the convention. Similarly, the emphasis on parks over people is implicit in the 1973 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).[93] It governs international trade in endangered species, and/or in their products and derivatives through a system of import/export permits. Though its focus has been to control trade in species rather than to conserve their habitats,[94] CITES has helped to reverse the decline in African elephant populations through a process that includes the creation of nature parks and the eviction of natives from areas hitherto shared with elephants and other wildlife. Perhaps as a sign of this success, the elephant populations of the southern African states grew to a point where those countries were allowed under the CITES arrangements to resume the cull and trade in their herds.[95]

Notwithstanding some successes recorded by CITES and other nature conservation treaties, an enduring criticism is that international legal instruments that emphasise wildlife 'preservation' in post-colonial societies ignore or understate the grinding poverty among many local communities. They fail to take into account the political and economic conditions that foster poverty, hardship and community breakdown that often fuel unsustainable exploitation of biodiversity evident in the bushmeat crisis.[96]

The 1992 Convention on Biological Diversity (CBD)[97] perhaps offers a more appropriate legal framework for addressing these issues.[98] Ratified by most developing nations, the CBD requires parties to develop national strategies for the conservation and sustainable use of biodiversity and to integrate those with development planning. Parties are required to establish protected areas to conserve biodiversity, regulate and manage resources for the same purpose, and ensure that

[92] 1979, 19 ILM 11.

[93] 1973, 993 UNTS 243. There were 49 African parties and 31 South/Meso American parties to this Convention as of July 2005.

[94] For critical reviews of the Convention's influence on the conservation of biological resources, see J Hutton and B Dickson (eds), *Endangered Species—Threatened Convention: The Past, Present and Future of CITES* (Earthscan, 2000).

[95] For a concise discussion of the political economy of getting to this point, see M Kidd and M Cowling, 'CITES and the African Elephant' in Chaytor and Gray, above n 1, 49.

[96] L Gray and W Moseley, 'A Geographical Perspective on Poverty-Environment Interactions' (2005) 171(1) *Geographical Journal* 9.

[97] 31 ILM 818.

[98] See generally D Bodansky, 'International Law and the Protection of Biological Diversity' (1995) 28 *Vanderbilt Journal of Transnational Law* 623; R Panjabi, 'International Law and the Preservation of Species: An Analysis of the Convention on Biological Diversity Signed at the Rio Earth Summit in 1992' (1993) 11 *Dickinson Journal of International Law* 187.

areas adjacent to protected zones are also managed sustainably.[99] The CBD recognises the contributions local communities can make to such efforts, reflected most prominently in Article 8(j), which provides that each party must:

> respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional life-styles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilisation of such knowledge, innovations and practices.[100]

Furthermore, the CBD obliges developed nations and foreign companies to transfer financial resources and technologies to assist developing countries to implement the Convention.[101] Sustainable utilisation of biodiversity, such as for the development of new biotechnologies, is *expected* to be for the mutual benefit of all parties, not a mechanism for developing countries or local communities to surrender intellectual property rights over their genetic resources to the interests of capital.

The challenge to post-colonial states, therefore, is to regulate access to their genetic resources with specific regard to non-nationals.[102] This is important for at least two reasons. First, the balance of rights and interests between the industrialised and developing states on this matter is skewed in favour of the former on account of the global regulatory regimes on trade, patents and related matters.[103] In particular, these regimes do not accommodate traditional knowledge,[104] yet traditional knowledge is the indispensable intangible component of the composite treasure of post-colonial states' biological resources and access to it must thus be negotiated under the CBD.[105]

[99] On the development of *national biodiversity strategies and action plans*, and their achievements, see P Herkenrath, 'The Implementation of the Convention on Biological Diversity—A Non-Government Perspective Ten Years On' (2002) 11 *Review of European Community & International Environmental Law* 29.

[100] Above n 97, and see also Arts 5–10, 15–19. A similar emphasis on the environmental rights or needs of local and indigenous peoples is evident in the Desertification Convention, above n 63. See further LP Breckenridge 'Protection of Biological and Cultural Diversity: Emerging Recognition of Local Communities Rights in Ecosystems Under International Law' (1992) 59 *Tennessee L Rev* 735.

[101] G Duncan, 'Common But Differentiated Responsibilities: The Implications of Principle Seven and the Duty to Cooperate in the Implementation of the Convention on Biological Diversity' (2002) 16 *Ocean Yearbook* 75.

[102] See further LA Firestone, 'You Say Yes, I Say No: Defining Community Prior Informed Consent under the Convention on Biological Diversity' (2003) 16 *Georgetown International Environmental L Rev* 171.

[103] J Ntambirweki, 'Biotechnology and International Law Within the North-South Context' (2001) 14 *Transnational Lawyer* 103; A Adewopo, 'The Global Intellectual Property System and Sub-Saharan Africa: A Prognostic Reflection' (2002) 33 *University of Toledo L Rev* 749; JFB Atibasay, 'The International Legal Regime for Biotechnology Patenting: An Appraisal from the Standpoint of Developing Countries' (2001) 31 *Revue Générale de Droit* 291.

[104] L Godshall, 'Making Space for Indigenous Intellectual Property Rights Under Current International Environmental Law' (2003) 15 *Georgetown International Environmental L Rev* 497.

[105] R Coombe, 'The Recognition of Indigenous Peoples and Community Traditional Knowledge in International Law' (2002) 14 *St Thomas L Rev* 275.

The second and more urgent reason is that continuing efforts to implement the CBD in the developing world are often embedded within a problematic, broader environmental law framework. Though these laws and plans are increasingly informed by principles of modern international environmental law, they are not sufficiently moored away from their colonial law principles and regulatory antecedents. Nor are the requisite financial and technical resources in place to implement the CBD.[106] Yet, in many post-colonial states where national legislation exists to regulate these matters, their broadness, vagueness or outmodedness keep them out of step with the obligations and benefits of the CBD.[107]

Certainly, some developing countries are belatedly seeking to decentralise decision-making and give local peoples a greater voice in environmental management. Uganda, for instance, shows that decentralisation of decision-making and active participation by local communities in environmental governance yield positive results.[108] Uganda's National Environment Act 1994 introduced provisions for public participation through local and district environment committees.[109] Its Wildlife Statute 1996 repealed the colonial-era National Parks Act and the Game (Preservation and Control) Act. The Wildlife Statute introduced the concept of benefit sharing with the local communities surrounding wildlife conservation areas.[110] The Uganda Wildlife Authority (UWA) must pay 20 per cent of park entry fees collected to the local government responsible for the area adjacent to the park. Further, the traditional rights of occupation and resource use of individuals in conservation areas are recognised.[111] Participation of local communities in wildlife management is guaranteed by a requirement that one-third of the UWA Board members should be representatives of local communities.[112] The relevant Minister must also consult the affected local community before a new wildlife conservation area is designated. This reform has been complemented by reforms to local government (Local Government Act 1995) and property rights (Land Act 1998) that have restored some customary land rights and local control over resource management. For example, the Land Act enables individuals to obtain certificates of customary ownership, and for holders of customary tenure, who

[106] P Kameri-Mbote and P Cullet, 'Biological Diversity Management in Africa: Legal and Policy Perspectives in the Run-up to WSSD' (2002) 11 *Review of European Community & International Environmental Law* 38.

[107] AG Oludayo, 'The Convention of Biological Diversity, Access to and Exploitation of Genetic Resources and the Land Tenure System in Nigeria' (1999) 11 *African Journal of International Law* 86; G Nnona, 'Choice of Law in International Contracts for the Transfer of Technology: Critique of the Nigerian Approach' (2000) 44 *Journal of African Law* 78.

[108] J Ntambirweki and E Dribidu, *The Legal and Policy Instruments for Sustainable Management of Resources in Uganda* (Scandinavian Seminar College, 1999); BJ Richardson, 'Environmental Management in Uganda: The Importance of Property Law and Local Government in Wetlands Conservation' (1993) 37 *Journal of African Law* 109.

[109] S 4.

[110] S 70A.

[111] S 20.

[112] Sched 1.

wish to use land as a group, to establish common land associations to manage and protect their interests in the communal land.[113]

The Ugandan example exemplifies a shift from authoritarian state control of the environment to a paradigm of community-focused sustainability.[114] If ownership of land in post-colonial states were vested in members of the community rather than nationalised or privatised, local communities would be better placed to manage their environments well.[115] Decisions on how best to utilise natural resources of a given community must take into consideration the social, political and cultural realities of the local peoples affected.[116]

However, while local input is usually a necessary condition for sustainable use, it is insufficient in itself. This is evident in those countries where traditional community institutions survived the colonial period largely intact. In Western Samoa, for example, the maintenance of customary land tenure systems and strong tribal authorities has not prevented significant conversion of indigenous forest to agriculture.[117] These conversions have arisen to meet the increasing population and concomitant growth in economic demand. Paulson suggests that 'one of the unfortunate consequences of viewing indigenous forest peoples simply as victims of political economic marginalisation and exploitation is that the equally real challenges which these groups face in controlling . . . their own increasing demands on their resources tend to get neglected'.[118] Consequently, environmental reform must also address mechanisms by which local communities can collaborate with management institutions at other levels of economic policy-making and development planning. These institutions include those that shape the global economy, trade and other fundamental causes of environmental pressure in post-colonial societies.

D. Environmental Regulation in Rapidly Industrialising Economies

The economies, environmental challenges and legal regimes of post-colonial states are not homogenous. The experiences of East Asia's industrialising 'tigers' in

[113] R Mwebaza, 'How to Integrate Statutory and Customary Tenure: The Uganda Case', Paper presented at *Land Rights and Sustainable Development in Sub-Saharan Africa* (Drylands Programme Issue Paper No 83, International Institute for Environment and Development, Feb 1999).

[114] R Goodland, 'Sourcebook: Policy Options for the World Bank Group in Extractive Industries', *Independent Extractive Review for International Finance Corporation and the World Bank Group*, 26 July 2004, 9.

[115] PE Oshio, 'Indigenous Land Tenure and Nationalization of Land in Nigeria' (1990) 43 *Boston College Third World LJ* 43.

[116] K Lawal, *Ecology and Culture: Reflections on Environmental Law and Policy in Sub-Sahara Africa* (Nigeria Law Centre, 1998) 31.

[117] DD Paulson, 'Understanding Tropical Deforestation: The Case of Western Samoa' (1994) 21 *Environmental Conservation* 326, 329.

[118] *Ibid*, 330.

these respects differ in particular from those in Africa or Latin America where tensions between biodiversity conservation and local communities have been a dominant concern. East Asia's bullish economic growth in the post-World War II period has wrought massive ecological change and stress.[119] It has been estimated that while it took the West some 400 years to achieve a tenfold increase in *per capita* income, South Korea and Taiwan bolted to the same gain in merely 50 years.[120] A ubiquitous philosophy in East Asia has been to 'grow first, clean up later'. Air and water pollution engulfs many of its cities, posing inter alia serious public health risks.[121] Rapid urbanisation and industrialisation have engendered environmental problems that require legal and policy responses quite different from those found in other developing countries. The apotheosis of this economic transformation is the special economic zones (SEZs). In China, South Korea, Thailand and other industrialising hotspots in the region,[122] special areas have been designated to lure foreign investment and export production through favourable investment and trade conditions, and often exemption from certain kinds of regulation.[123]

Ostensibly, most East Asian states have amassed considerable environmental laws and policies, often borrowing from Western precedents.[124] Many states have opted for the seeming simplicity and convenience of central environmental administration, so as to bring coherence and co-ordination to policy-making.[125] Legislation often takes the form of command-and-control regulation with wide discretionary powers given to administrators.[126] This, however, can create inappropriate scales for environmental management and an institutional vacuum at local levels of governance. This institutional centripetalism is reflected in governments' preferences for national environmental strategies, national environmental agencies and other policy centralising mechanisms. Examples of national framework statutes include China's Environmental Protection Law 1979, Malaysia's Environmental Quality Act 1974, Thailand's Enhancement and Conservation of National Environmental Quality Act 1992 and Taiwan's Basic Environmental Act 2002. Further, some states have incorporated environmental protection clauses into their national constitutions as an expression of their commitment. To illustrate, the South Korean constitution was amended in 1980 to provide its citizens with the right to live in a healthy and clean environment.[127] Nonetheless, these

[119] See MC Howard (ed), *Asia's Environmental Crisis* (Westview, 1993).

[120] M Dowling, 'Industrialization in Asia: A Tale of Two Regions' (1997) 8 *Journal of Asian Economics* 295, 295.

[121] UN Economic and Social Commission for Asia and the Pacific (ESCAP) *State of the Environment in Asia and the Pacific* (ESCAP, 2000) 124–5.

[122] Others include Taiwan and Malaysia, and recently the Philippines and Vietnam.

[123] DA Rondinelli, 'Export Processing Zones and Economic Development in Asia' (1987) 46 *American Journal of Economics & Society* 89.

[124] See B Boer, R Ramsay and DR Rothwell, *International Environmental Law in the Asia Pacific* (Kluwer, 1998).

[125] Richardson, above n 29, 21–26.

[126] See generally Thomas, above n 17.

[127] South Korean Constitution, Art 35, available at www.oefre.unibe.ch/law/icl/ks00000_.html.

constitutional provisions often lack the legal significance found in Western examples. For example, the Supreme Court of Korea has construed the environmental protection provision of its constitution as not self-executing.[128] Most East Asian states have national environmental management agencies, which operate in conjunction with line ministries dealing with water, minerals and other natural resources.[129] All nations in the region have also adopted national environmental policies and plans, though their regulatory impact has been highly variable. At best, they serve to indicate long-term political commitment and, at worst, are mere public relations exercises.

Even China, the region's greatest industrialising behemoth, boasts a laudable array of environmental laws, policies and institutions—comparable to that of many Western countries.[130] Earlier, Mao Tse-tung's reign was described as a 'war against nature',[131] where Mao's grandiose aspirations led to ecologically destructive projects such as the Sanmenxia dam on the Yellow River.[132] While the gigantic Three Gorges dam reveals that the 'Think Big' mentality persists among contemporary Chinese leaders,[133] environmental issues are being acknowledged in other contexts. A raft of new environmental laws has been promulgated or revised, notably the Environmental Impact Assessment Law 2002 and the amendments to the Air Pollution Prevention and Control Law 2000, overseen by the State Environmental Protection Administration.

What factors have shaped environmental law reform in East Asia? Rising economic prosperity and democratic reform appear to have been relevant factors. Economic prosperity is said to boost the prospects for sustainable development. Kuznets' theory predicts a correlation between a society's standard of living and its rising concern for the environment.[134] This is because pollution damage supposedly receives a higher priority after rising wealth has financed basic investments in public health and education, and because wealthier societies have more resources to devote to environmental protection.[135] There is insufficient empirical research to verify these hypotheses in relation to East Asia. The growth of an

[128] Eg Dae-bup-won [DBW] [Sup Ct] 94 ma 2218 (23 May 1995) (S Korea); DBW 95 da 23378 (15 Sept 1995) (S. Korea); DBW 96 da 56153 (22 July 1997) (S Korea).

[129] BJ Richardson, 'Is East Asia Industrializing Too Quickly? Environmental Regulation in Its Special Economic Zones' (2005) 22 *UCLA Pacific Basin LJ* 150.

[130] H Zhang and RJ Ferris Jr, 'Shaping an Environmental Protection Regime for the New Century: Environmental Law and Policy in the People's Republic of China' (1998) 6 *Asian Journal of Environment Management* 35.

[131] J Shapiro, *Mao's War Against Nature: Politics and Environment in Revolutionary China* (Cambridge UP, 2001).

[132] *Ibid,* 23.

[133] RL. Edmonds, 'Recent Developments and Prospects for the Sanxia (Three Gorges) Dam' in T Cannon (ed), *China's Economic Growth: The Impact on Regions, Migration and the Environment* (St Martin's Press, 2000) 161, 165.

[134] S Kuznets, 'Economic Growth and Income Inequality' (1955) 45 *American Economic Rev* 1.

[135] *Ibid;* YS Lee and A So (eds), *Asia's Environmental Movements: Comparative Perspectives* (ME Sharpe, 1999).

urban consumer society in the region, however, appears to be generating a host of environmental problems that many governments have yet to address[136]—with the notable exception of Singapore, whose city state government is renowned for its authoritarian control of waste and pollution where even individuals can be fined for merely chewing bubble gum in public.[137]

Democracy is arguably a relevant ingredient for reform in some contexts, because it allows for the articulation of public concerns and social pressures for policy reform. The authors of a study on *Civil Society and the Future of Environmental Governance in Asia* argue that the 'growth and effectiveness of [Asian] civil society—and the process of democratisation that nourish [sic] it—are likely to be the most significant force in the emergence and implementation of [a new paradigm of sustainable development in Asia]'.[138] The corporatism and clientelism that have marked state–society relations in East Asia during the post-war period are increasingly being challenged by democratic and civil societal movements.[139] During the 1990s, Taiwan and Korea embraced Western liberal-democratic reforms to strengthen their rule of law, including constitutional and parliamentary reforms and the promotion of more effective administrative and judicial structures.[140] South Korea's and Taiwan's democratisation reforms have fuelled various environmental activist movements, which in turn have contributed to the strengthening of environmental laws.[141] As a result of environmental degradation from South Korea's 'poisoned prosperity', some people began reassessing their leaders' 'faster and faster' motto.[142] Taiwan has also experienced popular protests against pollution, particularly nuclear energy programmes.[143] But other states in the region have been slower to reform, such as Thailand and Indonesia where 'money politics' and periodic interference from the military have hampered better environmental governance.[144] But democratisation alone appears to be insufficient to pro-

[136] D Connor, *Managing the Environment with Rapid Industrialization: Lessons from the East Asian Experience* (OECD, 1994).

[137] LL Heng, 'Singapore's New Environmental Law: The Environmental Pollution Control Act, *1999*' [2000] *Singapore Journal of Legal Studies* 1.

[138] L Zarsky and S Tay, 'Civil Society and the Future of Environmental Governance in Asia' in D Angel and M Rock (eds), *Asia's Clean Revolution: Industry Growth and the Environment* (Greenleaf Publishing, 2001) ch 6, abstract.

[139] KE Brodsgaard and S Young, 'Introduction: State Capacity in East Asia' in KE Brodsgaard and S Young (eds), *State Capacity in East Asia: Japan, Taiwan, China and Vietnam* (Oxford UP, 2001) 6.

[140] S Cooney, 'The Effects of Rule of Law Principles in Taiwan' in R Peerenboom (ed), *Asian Discourses of Rule of Law* (RoutledgeCurzon, 2004) 417.

[141] Lee and So, above n 135.

[142] See generally N Eder, *Poisoned Prosperity: Development, Modernization and the Environment in South Korea* (ME Sharpe, 1996); S Kim, 'Democratization and Environmentalism: South Korea and Taiwan in Comparative Perspective' (2000) 35 *J Asian & African Studies* 287.

[143] Eg K Bradsher, 'Nuclear Dump Disrupts a Peaceful Taiwan Island', *New York Times,* 30 June 2002, 3; JH Lim and SY Tang, 'Democratization and Environmental Policy-Making in Korea' (2002) 15 *Governance* 561, 568–73.

[144] *See* CA Samudavanija and S Paribatra, 'Thailand: Liberalization Without Democracy' in JW Morely (ed), Driven by Growth: Political Change in the Asia-Pacific Region (ME Sharpe, 1993) 119;

duce major shifts in environmental policy, as the situation of the Philippines shows.[145] Conversely, high living standards can produce strong environmental laws even in the absence of vibrant civil society, as exemplified by Singapore's soft-authoritarian democracy.

Despite its achievements, East Asia's extensive body of environmental law is somewhat misleading. Their governments' success in environmental law and policy *formation* has not been matched by policy *implementation*. Persistent weaknesses in their underlying legal institutions have hampered environmental reforms. One basic problem is that legislation is often poorly drafted, framed in very general and exhortational terms, with undefined terminology, legislative gaps and inconsistent provisions.[146] Sometimes environmental legislation seems more akin to policy guidance than legal rules. For example, China's Environmental Protection Law 1989 vaguely proclaims that local governments are 'responsible for the quality of the environment within their own administrative regions'.[147] Vague provisions can pose problems in the context of legislative sanctions.

Indeed, enforcement is the weakest link in East Asia's environmental law regimes. In 1994, Lester Ross wryly commented, 'for many years, China's environmental authorities have been like a muzzled dog: plenty of bark but little bite'.[148] Occasionally, major administrative enforcement crackdowns are launched with considerable fanfare.[149] But sustained enforcement seems unlikely, given the personal relationships that flourish between regulators and industry.[150] Speaking of China, Hills and Man suggest that because of 'a cultural predisposition to harmony and consensus-building . . . heavy-handed imposition of environmental regulations is typically avoided, unless an edict is delivered from the upper echelons of the Government'.[151] So far, the courts in East Asia have been used mostly as a last resort; policies and regulations serve as guidance, and disputes are settled largely through negotiation and bargaining outside the court system.[152] A few significant public interest environmental cases have been litigated in recent years in the

DL. Tookey, 'Southeast Asian Environmentalism at its Crossroads: Learning Lessons from Thailand's Eclectic Approach to Environmental Law and Policy' (1999) 11 *Georgetown International Environmental L Rev* 307, 330–2.

[145] MS Feliciano, *Environmental Law in the Philippines* (Institute of International Legal Studies, University of the Philippines, 1992).

[146] P Crone, 'China's Legal Structure' in C Hunter *et al* (eds), *A Guide to the Legal System of the PRC* (Asia Law and Practice, 1997) 1, 1.

[147] Art 16.

[148] L Ross, 'The Next Wave of Environmental Legislation' (1994) 21 *China Business Rev* 30, 30.

[149] See eg 'China Punishes 12,000 Firms for Environmental Offences', *Xinhua News Agency,* 21 Nov 2003.

[150] P Hills and CS Man, 'Environmental Regulation and the Industrial Sector in China: The Role of Informal Relationships in Policy Implementation' (1998) 7 *Business Strategy & Environment* 53.

[151] *Ibid,* 61.

[152] BJ Sinkule and L Ortolano, *Implementing Environmental Policy in China* (Praeger, 1995)27.

region, notably in Malaysia and the Philippines.[153] Other states such as Vietnam and Indonesia lack an effective and independent judiciary willing and able to entertain such cases.[154]

Industrialisation and market transformation will remain an indelible feature of East Asia's economic policy for some time. But the region's long-term economic modernisation will ultimately not be sustainable unless its economic policy is wedded to stronger environmental regulation. The challenge is to reform environmental law and policy to take account of East Asian circumstances without accommodating them so completely as to surrender all possibilities of improvement. A model of 'ecological modernisation' reform could offer major advantages to the more advanced economies of East Asia. Ecological modernisation promises a healthy synergy between economic development and environmental protection when economies and technologies are 'modernised' to allow for more efficient and less wasteful production.[155] Modernisation can occur through corporate environmental management systems and the application of advanced, clean technologies, encouraged through policy instruments such as pollution taxes and corporate environmental reporting obligations. Although criticised by some environmentalists as a compromise that alleviates, rather than solves, the environmental crisis, the advantages of ecological modernisation would appear to outweigh its disadvantages, especially for economies rapidly industrialising.[156] The ecological modernisation model was the basis of Japan's successful response to air pollution in the 1970s, and the clean-up of West Germany's industrial and energy sectors after the acid rain-induced forest death in the 1980s.[157]

So far, command and control regulation in Asia's industrialising economies is gradually being supplemented by a mosaic of environmental governance mechanisms, spanning market incentives, business self-regulation, management system-based approaches, voluntary reporting schemes and audit requirements designed to increase the transparency and accountability of industry and regulators.[158] One such innovation is China's Clean Production Promotion Law (CPPL) 2002. It shifts China's environmental regulatory focus from traditional end-of-pipe controls to the products and processes from which pollution originates, by requiring

[153] See M Raman, 'The Malaysian High Court Decision Concerning the Bakun Hydro-Electric Dam Project' (1997) 2 *Asia Pacific Journal of Environmental Law* 93; DB Gatmaytan, 'The Illusion of Intergenerational Equity: Oposa v. Factoran as Pyrrhic Victory' (2003) 15 *Georgetown International Environmental L Rev* 457.

[154] C Warren and K Elston, *The Politics of Environmental Regulation in Indonesia* (U Western Australia Press, 1994) 12.

[155] P Christoff, 'Ecological Modernization, Ecological Modernities' (1996) 5 *Environmental Politics* 476.

[156] R Welford and P Hills, 'Ecological Modernisation, Environmental Policy and Innovation: Priorities for the Asia-Pacific Region' (2003) 2 *International Environment & Sustainable Development* 324.

[157] See SC Young and J van der Straaten, *The Emergence of Ecological Modernisation: Integrating the Environment and the Economy?* (Routledge, 2001); OECD, *Environmental Policies in Japan* (OECD, 1977).

[158] Richardson, above n 129

enterprises to recycle specified products and packaging, and it encourages some preferential measures for those who adopt the clean production model, such as preferential loans or tax cuts. Another sign of ecological modernisation reform is environmental taxation. Air pollution charges have been levied in South Korea and China; and water effluent treatment charges exacted in Thailand, Hong Kong and China; and water consumption charges exacted in virtually all countries.[159] But these initiatives are just the beginnings, and systematic reform in these directions has yet to transpire in Asia's industrialising economies.

E. Transnational Corporations and the Environment

A third seminal theme in the experiences of post-colonial states and environmental law concerns the activities of transnational corporations (TNCs). Many environmental problems in the developing world (and indeed in other regions) are closely associated with the activities of TNCs. Some TNCs wield economic resources that dwarf the size of the developing country economies that host them. While TNCs are predominantly from OECD countries, increasingly firms from emerging economies such as South Korea and Taiwan are investing internationally.[160] The growing transnational character of business has intensified concerns about the social and environmental impacts of large companies and the adequacy of their regulation.[161] A succession of catastrophes, such as the chemical spill at Bhopal, India, and the oil industry's devastation of Nigeria's Niger Delta, as well as the dumping of toxic waste in West Africa and mega-mining projects such as at Ok Tedi in Papua New Guinea, are some of the more sensational hazards of foreign investment.[162] Such investment has also been unfavourably associated with 'dangerous working conditions, child labour and the violent repression of dissent'.[163]

The environmental effects of TNC investment can be divided primarily into scale effects (expansion of economic output), structural effects (reallocation of

[159] Asian Development Bank, above n 39, ch 11; OECD, *Economic Instruments for Environmental Management in Developing Countries* (OECD, 1993).

[160] HF French, 'When Foreign Investors Pay for Development' (1997) 10 *World Watch* 8.

[161] See N Hood and S Young (eds), *The Globalization of Multinational Enterprise Activity and Economic Development* (St Martin's Press, 2000); HM Kim, *Globalization of International Financial Markets: Causes and Consequences* (Ashgate, 1999).

[162] See PR Kleindorfer and HC Kunreuther (eds), *Insuring and Managing Hazardous Risks: From Seveso to Bhopal and Beyond* (Springer, 1987); A Ekpu, 'Environmental Impact of Oil on Water: A Comparative Overview of the Law and Policy in the United States and Nigeria' (1995–97) 24–25 *Denver Journal of International Law & Policy* 64; L Starke (ed), *Breaking New Ground: Mining, Minerals, and Sustainable Development. The Report of the MMSD Project* (Earthscan, 2002); S Holwick, 'Transnational Corporate Behavior and its Disparate and Unjust Effects on the Indigenous Cultures and the Environment of Developing Nations: Jota v. Texaco, a Case Study' (2000) 11(1) *Colorado Journal of International Environmental Law & Policy* 183.

[163] French, above n 160, 10.

production and consumption) and technological effects (technology innovation and diffusion).[164] In general, the former two effects tend to be negative, while the technology effects are anticipated to be positive.[165] Foreign investment may exacerbate the inadequacies of local environmental regulation by increasing the scale of production and consumption.[166] Even if increased foreign investment leads to local environmental improvements through the infusion of cleaner technologies, these benefits may be offset on an international scale if production of pollution-intensive products is simply shifted to other countries.

It can be difficult for governments to regulate TNCs, especially their environmental behaviour. A report by the UN Centre on Transnational Corporations explained that this difficulty arose 'due to transnational corporate flexibility, mobility, leverage, communication and control gaps, secrecy, non-transparency, limited accountability, [and] divided loyalties'.[167] More specifically, the environmental impacts of TNCs are seen by some commentators as primarily a result of inter-jurisdictional competition for economic investment. Their theories predict that competition between nations for economic investment affects regulatory behaviour by leading to a 'race to the bottom', 'regulatory chill' or a 'pollution haven'.[168] The gist of the argument is that stringent environmental standards in industrial countries push businesses to relocate operations to developing countries, where standards are relatively weaker, which results in financial savings. Concomitantly, post-colonial states, in their drive to join the ranks of developed countries, prefer to endure environmental abuse as a trade-off for rapid industrial development.[169] This generates a 'race to the bottom' as governments compete to lower environmental and social regulation to attract investment. Even if there is no race, competitive concerns may still affect environmental decision-making in host countries by causing a 'regulatory chill'.[170] This arises where states refrain from stricter environmental controls for fear of alienating existing or potential foreign investors.[171]

[164] T Jones, 'Trade and Investment: Selected Links to Domestic Environmental Policy', paper presented at the International Conference on Globalization and National Environmental Policy, Sept 2003, 6.

[165] *Ibid.*

[166] *See* A Markandya, 'Overview and Lessons Learnt' in V Jha *et al* (eds), *Reconciling Trade and the Environment: Lessons from Case Studies in Developing Countries* (Edward Elgar, 1999) 1.

[167] UN Centre on Transnational Corporations (UNCTC), *Environmental Aspects of the Activities of Transnational Corporations* (UNCTC, 1985).

[168] For an overview of these debates, see H Nordstrom and S Vaughan, *Trade and Environment* (World Trade Organisation, 1999).

[169] G Handl, 'Environmental Protection and Development in Third World Countries: Common Responsibility-Common Destiny' (1998) 20 *NYU Journal of International Law & Policy* 603.

[170] DC Esty and D Geradin, 'Environmental Protection and International Competitiveness' (1998) 32 *J World Trade* 5; HJ Leonard, 'Confronting Industrial Pollution in Rapidly Industrializing Countries: Myths, Pitfalls, and Opportunities' (1995) 12 *Ecology Law Quarterly* 779.

[171] Nordstrom and Vaughan, above n 168.

Despite numerous empirical studies and individual examples on this subject, there are no conclusive data on whether foreign investment is overall beneficial or harmful to the environment.[172] The majority of studies suggest that the evidence of a race to the bottom or pollution haven is uncommon, though it seems more likely to arise in poor developing countries and rapidly industrialising regions.[173] Countering the pollution haven theory, there are examples where TNC investment has stimulated improvements to the host country's environmental regulations. Wheeler, for instance, found improvements in air quality in the major cities of the US, China, Brazil and Mexico during the 1990s, the latter three representing the top three shares of foreign direct investment for developing countries during this period.[174] Some research suggests that investors rarely give environmental costs a high priority in their decision-making on investment locations.[175] Environmental compliance costs are more likely to influence the choice of location of a *new* production facility than the relocation of an *existing* facility. The availability of cheap labour, raw materials, existing infrastructure, taxes, transportation costs and market size is usually higher priority for corporate managers in both situations.[176]

On the other hand, some evidence suggests that governments have eased their environmental regulations to entice investment. For instance, some Japanese companies relocated to their poorer South-east Asian neighbours apparently to take advantage of more lenient environmental controls.[177] Mexico's *maquiladora* border region is often seen as proof of industrial flight and pollution haven.[178] Low pollution abatement costs due to lax environmental regulation appear to have been a determinant for drawing foreign investment to this industrial development region bordering the US.[179] Evidence of business relocation was seen in

[172] See eg DC Esty, 'Private Sector Foreign Investment and the Environment' (1995) 4 *Review of European Community & International Environmental Law* 99; E Neumayer, *Greening Trade and Investment* (Earthscan, 2001).

[173] See eg G Porter, 'Trade Competition and Pollution Standards: "Race to the Bottom" or "Stuck at the Bottom"?' (1999) 8 *Journal of Environment & Development* 133; M Mani and D Wheeler, 'In Search of Pollution Havens? Dirty Industry in the World Economy, 1960–1995' (1998) 7 *Journal of Environment & Development* 215; Esty and Geradin, above n 170.

[174] D Wheeler, 'Racing to the Bottom? Foreign Investment and Air Pollution in Developing Countries' (2001) 10 *Journal of Environment & Development* 225, 227–31.

[175] L Zarsky, 'Havens, Halos and Spaghetti: Untangling the Evidence about FDI and the Environment' in OECD (ed), *Foreign Direct Investment and the Environment* (OECD, 1999) 47.

[176] Esty and Geradin, above n 170.

[177] See O Cameron, 'Japan and Southeast Asia's Environment' in MJG Parnwell and RL Bryant (eds), *Environmental Change in Southeast Asia* (Routledge, 1996) 67; AJ Ferreria *et al*, 'Investments and TNCs in the Philippines: Towards Balanced Local and Regional Development' (1997) 14 *Regional Development Dialogue* 67, 78.

[178] *See* EJ Williams, 'The Maquiladora Industry and Environmental Degradation in the United States–Mexico Borderlands' (1996) 27 *St Mary's LJ* 765; DC Esty and BS Gentry, 'Foreign Investment, Globalisation and the Environment' in OECD (ed), *Globalisation and the Environment: Preliminary Perspectives* (OECD, 1997)141, 161.

[179] DJ Molina, 'A Comment on Whether Maquiladoras are in Mexico for Low Wages or to Avoid Pollution Abatement Costs' (1993) 2 *Journal of Environment & Development* 221.

the chemical industry where investment in Mexico ballooned over 20-fold from 1982–1990, following a tightening of environmental regulations in the US.[180] Leonard, however, sees the Mexican situation as more a product of regulatory chill than a race to the bottom, as the environmental regime in the *maquiladora* region area has apparently always been quite easy on industry.[181]

The experience of East Asia's special economic zones (SEZs) is an important example that helps clarify the relationship between environmental regulation and TNCs. The SEZs are specific areas designated by governments for foreign investment and export-oriented industrialisation, to which are conceded favourable investment and trade conditions, and reduced red tape.[182] Taiwan and South Korea established Asia's first SEZs in the mid-1960s and the model soon spread. China has since engineered the most comprehensive SEZs in the region.[183]

Given their strategic economic significance, one might expect environmental regulation in the SEZs, and particularly in relation to TNC investors, to be relatively lenient compared to non-SEZ areas or domestic businesses. Certainly, there are some notorious instances where authorities have waived environmental rules to avoid jeopardising foreign investment deals.[184] An OECD environmental performance review of China noted 'foreign firms promoted imports of outdated technologies and polluting or toxic substances, taking advantage of the lower (or more flexible) environmental standards in China'.[185] And pollution conditions in East Asia's SEZs have attracted some vituperative criticism from observers.[186]

Environmental regulations developed for Asia's SEZs vary, however, in the extent to which they accommodate TNCs. South Korea's Act on Designation and Operation of Free Economic Zones 2002 provides that, when selecting potential sites, the Free Economic Zone Committee must take into account 'securing the environmentally sound and sustainable development'.[187] Further, the plan for each zone must include a 'programme for environmental preservation'.[188] But, controversially, the Korean legislation permits the authorities to reduce or waive

[180] J Clapp, 'Foreign Direct Investment in Hazardous Industries in Developing Countries: Rethinking the Debate' (1998) 7 *Environmental Policy* 92, 99.

[181] Leonard, above n 170.

[182] Among the extensive literature on the history and economics of East Asia's SEZs, see JA Mathews, 'High Technology Industrialization in East Asia' (1996) 3 *Journal of Industry Studies* 1; Rondinelli, above n 123; KY Wong and D Chu, 'Export Processing Zones and Special Economic Zones as Generators of Economic Development: The Asian Experience' (1984) 66B *Geografiska Annaler* 1; KV Vuoristo, 'The Special Economic Zones and Regions in Southeast Asia' (1994) 106(2) *Terra* 96.

[183] GT Crane, *The Political Economy of China's Special Economic Zones* (ME Sharpe, 1990).

[184] Eg, from China: see C Wing-Hung Lo and P Kwong-To Yip, 'Environmental Impact Assessment Regulation in Hong Kong and Shanghai: A Cross-city Analysis' (1999) 42 *Journal of Environmental Planning & Management* 355, 366.

[185] OECD, *Environmental Priorities for China's Sustainable Development* (OECD, 2001) 28.

[186] Eg F Tester, 'Existential Landscape: China and the Modern Superstore' (1995) 16 *New City Magazine* 41.

[187] Art 5(5).

[188] Art 6(11).

any applicable pollution levies and other environmental charges where they consider this necessary 'for smoothly carrying out the development project of any free economic zone'.[189] In another example, the Philippines' Special Economic Zone Act 1995 provides that the Philippine SEZ Authority 'in coordination with the appropriate agencies, shall take concrete and appropriate steps and enact the proper measures for the protection of the local environment'.[190] The legislation unfortunately gives no hint as to what constitutes 'concrete and appropriate steps'.

China has the most extensive SEZ environmental regulations in Asia. Its Provisional Regulations on Environment Control for Economic Zones Open to Foreigners 1986 state the aim: 'to prevent and control environmental pollution and ecological damage, to ensure the health of human beings, to protect and create a sound investment environment and to promote economic and social development'.[191] These regulations require SEZ authorities to include environmental protection measures in their development plans;[192] to conduct environmental assessments of development proposals;[193] and to prohibit new projects that pose specified serious harms.[194] Local authorities are permitted to introduce supplementary environmental controls, which may be stricter than baseline provincial or national standards.[195] These local SEZ regulations typically encompass land use planning, provision of urban amenities, pollution licensing and waste disposal.[196] Poor legislative drafting, reflected by vague or unworkable provisions, plagues many local regulations however.[197]

Some research suggests that environmental conditions in Asia's SEZs are no worse than other areas of their economies, and indeed may be superior owing to the greater availability of pollution control technologies from foreign investors, as well as the more systematic land use planning of the zones.[198] This phenomenon is known as the 'pollution halo' effect, which posits that host country environmental standards are improved as a result of TNC investment imports of advanced, cleaner technologies and corporate environmental management systems.[199]

[189] Art 15(2).
[190] S 33.
[191] Art 1.
[192] Art 3.
[193] Art 4.
[194] *Ibid.*
[195] Art 5.
[196] Eg Q Du and J Davis, 'Local Enactment of Urban Environmental Management Law: The Case of Shenzhen City, China' (2001) 6 *Asia Pacific Journal of Environmental Law* 79.
[197] Richardson, above n 129.
[198] World Bank, *Export Processing Zones* (World Bank, 1992); G Sivalingam, *The Economic and Social Impact of Export Processing Zones: The Case of Malaysia,* ILO Working Paper no 66 1994; Asian Development Bank, above n 39, 31; Richardson, above n 129.
[199] Zarsky, above n 175; and T Tsai, *Corporate Environmentalism in China and Taiwan* (Palgrave Macmillan, 2002).

It also appears doubtful that TNCs are regulated relatively leniently compared to their domestic counterparts. It is worth pausing to look again at China, which has attracted more foreign investment than any developing country. Ostensibly, Chinese environmental law applies equally to all entities, whether a TNC, state-owned enterprise (SOE) or a domestic private company.[200] The procedures governing approval of foreign investments seek to 'encourage' projects that use renewable resources or new pollution control technology, and to 'prohibit' or 'restrict' projects that inter alia seriously pollute the environment or endanger human health.[201] Furthermore, in practice foreign investment projects 'are almost always monitored at the national level . . . because of the widely acknowledged fact that local regulators may be overly sensitive to the need to attract outside investment'.[202]

Existing research suggests that TNCs' investment in China are regulated more stringently than domestic firms' investment. Klee and Thomas argue that, 'because many Chinese officials consider international companies to have more resources and more experience in meeting pollution-control requirements, they often expect them to be in full and immediate compliance with the requirements'.[203] Sims found that authorities are much more likely to collect environmental fines from foreign companies 'that are believed to have deep pockets', than from SOEs, which are often at the margins of solvency.[204] Huang suggests that the foreign investor enterprise–government relations are typically at 'more arm's length' than equivalent relations between regulators and domestic enterprises.[205] Concomitantly, foreign enterprises are also less likely to be immersed in local political networks (*guanxi*), which can impede impartial enforcement of the law.[206]

Whereas the letter of the law is more likely to be applied to foreign entities, a pragmatic and tolerant approach is often displayed towards local enterprises.[207] Enforcement action against SOEs is less likely than against foreign enterprises because SOEs function as more than mere factories. Because they provide important local social services to workers and their families, such as housing and health care,[208] many SOEs are allowed to continue operations despite grave

[200] See generally Y Huang, 'One Country, Two Systems: Foreign-Invested Enterprises and Domestic Firms in China' (2003) 14 *China Economic Rev* 404; GO White, 'Enter the Dragon: Foreign Direct Investment Laws and Policies in the PRC' (2003) 29 *North Carolina Journal of International Law & Commercial Regulation* 35.
[201] Wang, above n 45. Listed in State Environmental Protection Administration, available at www.zhb.gov.cn/english/chanel-3/chanel-3-end-2.php3?chanel=3&column=2.
[202] Zhang and Ferris, above n 130, 50.
[203] JE Klee and FC Thomas, 'An Evolving Environmental Framework' (1997) 24 *China Business Rev* 34, 39.
[204] H Sims, 'One-fifth of the Sky: China's Environmental Stewardship' (1999) 27 *World Development* 1227, 1241.
[205] Huang, above n 200, 410.
[206] *Ibid,* 409.
[207] U Steger *et al, Greening Chinese Business* (Greenleaf Publishing, 2003) 25.
[208] X Ma and L Ortolano, *Environmental Regulation in China: Institutions, Enforcement and Compliance* (Rowman and Littlefiled, 2000) 145.

pollution.[209] These polluting SOEs, argue Klee and Thomas, 'frequently lack the capital to invest in clean technologies to meet the requirements of environmental regulation and, thus, receive deferential application, if any, of environmental requirements'.[210]

While the East Asian experience suggests that we should eschew sweeping criticisms of TNCs and their environmental regulation, there is nonetheless plenty of evidence from other jurisdictions to give cause for concern.[211] Arguably, some international co-operation and regulation of TNCs would seem necessary.[212] The right of states to regulate TNCs operating within their jurisdiction is explicitly recognised in international law.[213] But, as shown above, the national exercise of such prerogatives is another matter. The UN has pursued proposals for international regulation of TNCs without much success. In 1972, the UN Economic and Social Council established the Commission on Transnational Corporations for the purpose of formulating a Code of Conduct on Transnational Corporations. The draft Code it prepared in 1984 was eventually abandoned for lack of government support.[214]

Among other initiatives, the OECD also prepared in 1976 (and revised in 2000) a set of non-binding Guidelines for Multinational Enterprises, but these are aimed specifically at improving the climate for investment and restricting discrimination against TNCs.[215] In recent years, more effort has gone into creating a more liberal environment for TNC investment, for example through the North American Free Trade Agreement's provisions for investor protection,[216] the aborted Multilateral Agreement on Investment,[217] the proposed Free Trade Area of the Americas[218] and numerous bilateral investment treaties.

The corporate sector itself has advanced policies and procedures for corporate social and environmental responsibility. Environmental issues have become more included in businesses' decision-making, through new markets for environmental technologies and subscription to relevant corporate environmental systems and

[209] JG Taylor and Q Xie, 'Wuhan: Policies for the Management and Improvement of a Polluted City' in Cannon, above n 133, 143.

[210] Klee and Thomas, above n 203.

[211] M Flahery, *Multinational Corporations and the Environment: A Survey of Global Practices*. (Center for Environmental Management, Tufts University, 1990); DL Levy, 'The Environmental Practices and Performance of Transnational Corporations' (1995) 4(1) *Transnational Corporations* 44.

[212] RJ Fowler, 'International Environmental Standards for Transnational Corporations' (1995) 25(1) *Envtl L* 1.

[213] UN Charter of Economic Rights and Duties of States 1974, 14 ILM 251, Art 2(2).

[214] (1984) 23 ILM 626. But recently the UN revived work on developing standards to govern TNCs. In 2003 it released its draft UN Norms on the Responsibilities of Transnational Corporations and other Business Enteprises with Regard to Human Rights: UN Doc E/CN.4/Sub.2/2003/12/Rev.2 (2003)

[215] OECD, *The OECD Declaration and Decisions on International Investment and Multinational Enterprises: Basic Texts* (OECD, Nov 2000) 5–6.

[216] (1993), 32 ILM 289, ch 11.

[217] OECD, *The MAI Negotiating Text* (OECD, 1998); for a critique, see M Berlow and T Clarke, *The MAI: A Charter for Corporate Rule* (Lorimer Publications, 1997).

[218] See www.ftaa-alca.org.

codes of conduct.[219] The Business Council of Sustainable Development and the International Chamber of Commerce have promoted initiatives in these areas.[220] A flourishing corporate social responsibility movement has already arisen among some companies predominantly in developed nations.[221] It has been structured in part around corporate environmental management systems, such as the International Standard Organisation (ISO) 14000 series.[222] Some TNCs see advantages from taking the environment more seriously, including access to green consumer markets, material savings from greater energy efficiencies, as well as helping them to pre-empt unwanted external environmental regulation.[223]

F. Conclusion

This chapter has canvassed some of the salient environmental law developments, setbacks and possible future directions of reform in post-colonial states. Since the end of colonial rule, many developing countries have pioneered extensive environmental laws and policies. Many such initiatives are now framed around concepts of sustainable development. But their implementation has often lagged, and environmental conditions in much of the developing world are worsening to crisis proportions.

There is no single blueprint for more effective environmental governance in these countries for many reasons: they differ in their economic structures and resources, colonial histories, and legal traditions, among many other factors. This chapter has highlighted major differences between East Asia's industrialising economies and the poorest countries of Sub-Saharan Africa. Consequently, it would be naïve to draw simple conclusions about what sustainable development means for the developing world's, evolving environmental legal systems. If anything, the developing countries experience adds further evidence to the arguments made elsewhere in this book that sustainability is essentially a fluid concept in which basic principles and standards are contestable. So far, many post-colonial states have problematically relied on imported foreign precepts of sustainable development. Sustainability's most promising institutionalisation perhaps resides in those countries that realise that policies that address social justice, poverty, fair trade are likely to be the strongest foundations for good environmental governance.

[219] See HS Brown *et al, Corporate Environmentalism in a Global Economy: Societal Values in International Technology Transfer* (Greenwood Press, 1998); B Gentry, 'Foreign Direct Investment and the Environment: Bone or Bane?' in OECD, *Foreign Direct Investment and the Environment* (OECD, 1999)21; see further Wood, this vol.

[220] CO Holliday Jr *et al, Walking the Talk: The Business Case for Sustainable Development* (Greenleaf Publishing, 2002).

[221] D Crowther and L Rayman-Bacchus (eds), *Perspectives on Corporate Social Responsibility* (Ashgate, 2004).

[222] R Hillary (ed), *ISO 14001: Case Studies and Practical Experience* (Greenleaf Publishing, 2000).

[223] For detailed consideration of these 'voluntary' approaches see Wood, this vol.