The Reformative Role of the Law: Comparative Experience in Environmental Law for Water and Food Security

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Abstract

This paper compares the major legal approaches and specifically the Islamic Sharia as instruments for reform in the area of environmental law, and in particular the management of water in the context of urbanization, agriculture and food security.

One of the greatest challenges facing contemporary human societies, including Arab and Gulf societies, is development of the rule of law in the context of the management of public affairs. For security, peace and stability to be sustainable, human society requires water and food security. For millennium, Arab and Islamic society was based largely on subsistence agriculture and seasonable migration but rapid development, particularly in the last 20 years, has created massive urbanization with corresponding pressure on water supply and food production. Governments may certainly legislate to regulate infrastructure and so manage water but excessive regulation may stifle innovation and limit opportunities for investment.

Global order is moving towards great instability and possibly towards greater conflict, with the return of geopolitics and heightened nationalism in almost all of the major states in

the system, with the structural instabilities and inequalities of global capitalism, and with new and disruptive patterns of social and political mobilization. Legal institutions are often inadequately equipped to respond preemptively, and existing legal institutions are often already under immense stress with the frequent invocation of terms such as gridlock, stagnation, or fragmentation.

This is true even of the most hitherto successful institutions (such as the EU); it is true of some of the most fundamental sets of legal rules (such as those relating to the use of force); and it is true even of those areas where the alleged 'imperatives' of global cooperation have seemed most evident (as with water security).

Increased politicization is certainly visible at the domestic level in several GCC states, with new forms of domestic political pressures. It is also visible at the international level, with direct geopolitical rivalries (South China Sea, Ukraine, NE Asia), increased contestation at the regional level, and the spill over of such geopolitical rivalries into other areas such international economic relations such as trade and foreign investment, particularly in infrastructure designed to deliver water and food security both in urban areas and to more vulnerable isolated populations in Arab and Islamic states.

This paper will address three questions: First, what are the drivers of the present impetus for reform? Although nationalism and identity politics stress what is particular and distinctive, the fact that these changes are occurring is many different places across the world strongly suggest

that systemic factors and forces are at play. So we need to think about how best, analytically, to make sense of these systemic drivers. And we need to place them in a broader and longer-term historical perspective. Does it make sense to think in terms of analogies with the 1930s or the 1970s? Second, how has the idea of the global rule been understood in the GCC? Before concluding that the only choice is between a particular view of the so-called global liberal order and renewed conflict and chaos, we need to ask about the different roles that international law has played, or might play, within a far more strongly global international society. And third, what can we learn from looking in more detail at four areas: water security? food security? infrastructure development, and complex economic governance? What can we learn about the capacity of different areas of law and governance to withstand turbulent times? What is the relationship between power-political (dis)order and the different roles of international law and international institutions?

INTRODUCTION

This paper compares the major legal approaches and specifically the Islamic Sharia as instruments for reform in the area of environmental law, and in particular the management of water in the context of urbanization, agriculture and food security.

One of the greatest challenges facing contemporary human societies, including Arab and Gulf societies, is development of the rule of law in the context of the management of public affairs. For security, peace and stability to be sustainable, human society requires water and food security. For millennium, Arab and Islamic society was based largely on subsistence agriculture and seasonable migration but rapid development, particularly in the last 20 years, has created massive urbanization with corresponding pressure on water supply and food production. Governments may certainly legislate to regulate infrastructure and so manage water but excessive regulation may stifle innovation and limit opportunities for investment.

Global order is moving towards great instability and possibly towards greater conflict, with the return of geopolitics and heightened nationalism in almost all of the major states in the system, with the structural instabilities and inequalities of global capitalism, and with new and disruptive patterns of social and political mobilization. Legal institutions are often inadequately equipped to respond preemptively, and existing legal institutions are often already under immense stress with the frequent invocation of terms such as gridlock, stagnation, or fragmentation. This is true even of the most hitherto successful institutions (such as the EU); it is true of some of the most

fundamental sets of legal rules (such as those relating to the use of force); and it is true even of those areas where the alleged 'imperatives' of global cooperation have seemed most evident (as with water security). Increased politicization is certainly visible at the domestic level in several GCC states, with new forms of domestic political pressures. It is also visible at the international level, with direct geopolitical rivalries (South China Sea, Ukraine, NE Asia), increased contestation at the regional level, and the spill over of such geopolitical rivalries into other areas such international economic relations such as trade and foreign investment, particularly in infrastructure designed to deliver water and food security both in urban areas and to more vulnerable isolated populations in Arab and Islamic states.

This paper will address three questions: First, what are the drivers of the present impetus for reform? Although nationalism and identity politics stress what is particular and distinctive, the fact that these changes are occurring is many different places across the world strongly suggest that systemic factors and forces are at play. So we need to think about how best, analytically, to make sense of these systemic drivers. And we need to place them in a broader and longer-term historical perspective. Does it make sense to think in terms of analogies with the 1930s or the 1970s? Second, how has the idea of the global rule been understood in the GCC? Before concluding that the only choice is between a particular view of the so-called global liberal order and renewed conflict and chaos, we need to ask about the different roles that international law has played, or might play, within a far more strongly global international society. And third, what can we learn from looking in more detail at four areas: water security? food security? infrastructure

development, and complex economic governance? What can we learn about the capacity of different areas of law and governance to withstand turbulent times? What is the relationship between power-political (dis)order and the different roles of international law and international institutions?

This paper contributes to international law and environmental security by considering the role of a international treaties(1), as part of the international legal system, in managing water and food security, and the approach of the Islamic Shariah. Early stages of the research were premised on the notion that international environmental law is the key to resolving the international water and food debates. Accordingly, the research set out to identify and analyse gaps in international environmental law, both substantive and procedural, as it relates to water and food and to suggest legal measures which might facilitate a more effective international regime. It was anticipated that this research would recommend that a new water treaty be established, and that alternatives would include the addition of protocols to existing treaties, the consolidation of existing international environmental instruments, and reform of the international legal system.

Instead, during the course of this research, it became increasingly clear that the future of water and the people and

(1) For the purpose of this thesis, an international treaty is a multilateral treaty, agreed by nation states and then ratified by each separately according to its domestic laws, after which (and subject to other conditions) it enters into force. By Article 26 of the 1969 Vienna Convention on the Law of Treaties, and by the principle of pacta sunt servanda (treaties are made to be kept) on which that Article is based, each state is bound to comply, in good faith, with the obligations imposed on it by the treaty to which it voluntarily consented. In practice, the extent of compliance varies considerably. (Compliance is discussed in Chapters Three, Four and Five of this thesis.) For international agreements generally and for the principle of pacta sunt servanda see I. Brownlie, Principles of Public International Law (6th ed.) (Oxford: Oxford University Press, 2003), 576609- and 5912-.

industries dependent on it does not lie in comprehensive (and hence unlikely) reform of national and international legal systems. Undoubtedly such reform would help, but the rapidly changing global geopolitical scene, combined with defects inherent in the international legal system, suggests that the solution is more likely to be found in a combination of smaller scale legal, financial, institutional and scientific measures.

THE CONTEXT FOR REFORM

The conceptual development of this research corresponds closely with the progress of the United Nations environment agenda[2]. In 1992, water was among the most controversial issues discussed at the United Nations Conference on Environment and Development (UNCED) at Rio de Janeiro. The failure of delegates to negotiate an effective instrument in this area demonstrated the complexity of the challenge; in general terms, the prevailing north/south polarisation prevented a consensus being reached between developed nations who were in favour of a new treaty, and developing nations who resented western intervention in issues within their sovereign territory. The result was the Rio Declaration on Environment and Development and Agenda 21[3], a 300 page plan for achieving sustainable development in the twenty first century.

The period 1992-95 was characterised by emerging north/south partnerships[4]. Throughout that period, and subsequently,

(2) For the history of the UN forest process in the period 19922002- see, for example, M. Steiner, 'The Journey from Rio to Johannesburg: Ten Years of Forest Negotiations, Ten Years of Success and Failures' (2002) 32 Golden Gate University Law Review 629.

(3) UN Document A/CONF.1511992) 26/), Resolution I, Annex II.

(4) For the international forest process in the period up to 1995 see, for example, Canadian Council on International Law (ed.), Global Forests and International Environmental Law (London: Kluwer Law International, 1996); D. Humphreys, Forest Politics: The Evolution

the focus of the UN in this area was on the development of coordinated policies, at international level, to promote the management, conservation and sustainable development of all types of forests.

The emergence of a growing international consensus enabled the UN Economic and Social Council (ECOSOC), on the recommendation of the third session(5) of the UN Commission on Sustainable Development (CSD)(6).

Arguably, after 25 years of discussion and negotiation, the prospect of establishing an international water instrument is no greater now than it was at UNCED in 1992. While substantial progress has been made in the areas of water reporting, north/south participation and institutional transparency, implementation of the 1997 UN Convention on Watercourses was delayed for almost 20 years and comprehensive reform of national and international legal system remains a distant dream.

First, however, as was intended at the outset, this paper explores why a treaty is unlikely to be the best way forward. To do this, it discusses the environmental protections currently afforded by the international legal system and identifies substantive gaps and procedural defects in that system.

This leads to the hypothesis that although national and international law has advanced substantially in the last twenty years, there is still scope for improvement.

of International Cooperation (London: Earthscan, 1996); A. Kolk, Forests in International Environmental Politics (Utrecht: International Books, 1996).

(5) UN Document E/19951995) 32/), Paragraph 204.

(6) The CSD was created by UN General Assembly Resolution 471993) 191/), to monitor and report on implementation of the UNCED agreements at local, national, regional and international levels. It is a functional commission of the UN Economic and Social Council (ECOSOC).

During the course of this research, it also became clear that any proposal will be only one of a large number of measures which will be necessary to address the human welfare issue. The complexity of the threats and opportunities facing the world's water sources does not offer the luxury of a single solution. Indeed, the intention is not to give the impression that there is, or is ever likely to be, a single solution.

Many, if not all issues can no longer be addressed only at local level for despite their geo-physical immobility, forests are subject to the political, economic and social forces of globalisation.

During the past millennium, most of the world, as we know it, was discovered. Today, we know more about the world's geography and natural resources than ever before. One notable phenomenon is that the focus has changed, from the local to the global. Just as water was central to local economies in the GCC, today it is central to the global economy.

During the early stages of industrialisation, some of the local effects of water scarcity were offset by migration and trade.

Today, such mechanisms are less applicable. Water resources are becoming increasingly scarce and those which remain often fulfil conflicting functions, ranging from the provision of livelihoods for local communities to the production of raw material for industry. In an increasingly interdependent world, cooperation on a global scale is essential.

This paper considers the means by which cooperation on environmental issues may be achieved and sustained.

PREVIOUS LITERATURE

Three streams of literature are relevant to this paper. First and most importantly, the literature of international and international environmental law provides the context in which this thesis is located, underpins its methodology and informs its conclusions(7). Second, the thesis relies on literature of international relations for analyses of the international water processes and for the relationship between national and international policy. Third, the literature of natural resource management provides detailed analyses of specific food and water issues.

This inter-disciplinary approach is necessary because there have been few prior analyses of water as a subject of international law so there are few previous legal studies on which to build. An extensive literature on international environmental law developed in the mid 1980s and major works were published in 1989(8), 1992(9) and 1994(10) but those works considered forests only in the context of biological diversity.

From about 1990 onwards, legal scholars began to identify links between the environment and sustainable development(11)

(7) The relationship between international and international environmental law is discussed in Chapter Two of this thesis.

(8) A. Kiss, Droit international de l'environnement (Paris: Etudes internationales, 1989).

(9) P. Birnie and A. Boyle, International Law and the Environment (Oxford: Clarendon, 1992).

(10) P. Sands, Principles of International Environmental Law Vols.13- (Manchester: Manchester University Press, 1994).

(11) See, for example, A. Boyle and D. Freestone (eds.), International Law and Sustainable Development: Past Achievements and Future Challenges (Oxford: Oxford University Press, 1999); M. A. Drumbl, 'Poverty, Wealth and Obligation in International Environmental Law' (2002) 76 Tulane Law Review 843; C. E. Di Leva, 'International Environmental Law and Development' (1998) 10 Georgetown International Environmental Law Review 501; W. Lang (ed.), Sustainable Development and International Law (London: Graham and Trotman, 1995); A. B. M. Marong, 'From Rio to Johannesburg: Reflections on the Role of International Legal Norms in Sustainable Development' (2003) 16 Georgetown International Environmental Law

and to argue for more effective international environmental law[12]. At the same time, there emerged a stream of international relations literature which discussed the nature of international environmental regimes, analysed the implementation of international environmental commitments, and proposed means by which the effectiveness of those regimes could be increased[13]. This overlapped, in part, with legal literature which

Review 21; M. Pallemaerts, 'International Environmental Law in the Age of Sustainable Development' (1996) 15 Journal of Law and Commerce 623; B. Richardson, 'Environmental Law in Post Colonial Societies: Straddling the Local-Global Institutional Spectrum' (2000) 11 Colorado Journal of International Law and Policy 1; P. Sands, 'International Law in the Field of Sustainable Development' (1994) 65 British Yearbook of International Law 303; M. Sanwal, 'Sustainable Development, the Rio Declaration and Multilateral Cooperation' (1993) 4 Colorado Journal of International Environmental Law and Policy 45; B. Stark, 'Sustainable Development and Postmodern International Law: Greener Globalization?' (2002) 27 William and Mary Environmental Law and Policy Review 137.

(12) See, for example, W. L. Andreen, 'Environmental Law and International Assistance: The Challenge of Strengthening Environmental Law in the Developing World' (2000) 25 Columbia Journal of Environmental Law 17; A. Bernabe-Riefkohl, 'To Dream the Impossible Dream: Globalization and Harmonization of Environmental Laws' (1995) 20 North Carolina Journal of International Law and Commercial Regulation 205; D. M. Driesen, 'Thirty Years of International Environmental Law: A Retrospective and Plea for Reinvigoration' (2003) 30 Syracuse Journal of Law and Commerce 353; J. L. Dunoff, 'From Green to Global: Toward the Transformation of International Environmental Law' (1995) 19 Harvard Environmental Law Review 241; B. L. Hicks, 'Treaty Congestion in International Environmental Law: The Need for Greater International Cooperation' (1999) 32 University of Richmond Law Review 1643; M. J. Kelly, 'Overcoming Obstacles to the Effective Implementation of International Environmental Agreements' (1997) 9 Georgetown International Environmental Law Review 447; E. Louka, 'Cutting the Gordian Knot: Why International Environmental Law is Not Only About the Protection of the Environment' (1996) 10 Temple International and Comparative Law Journal 79; G. Palmer, 'New Ways to Make International Environmental Law' (1992) 86 American Journal of International Law 259.

(13) See, for example, S. Barrett, Environment and Statecraft: The Strategy of Environmental Treaty Making (Oxford: Oxford University Press, 2003); N. Choucri (ed.), Global Accord: Environmental Challenges and International Responses (Cambridge: MIT Press, 1993); P. M. Haas, R. O Keohane and M. A. Levy (eds.), Institutions for the Earth: Sources of Effective Environmental Protection (Cambridge: MIT Press, 1993); R. O. Keohane and M. A. Levy (eds.), Institutions for Environmental Aid: Pitfalls and Promise (Cambridge: MIT

had begun to analyse compliance with international law in this and other areas[14] and to discuss the notions of sovereignty on which the international legal system is based[15]. By about 2000, new challenges had brought about significant changes in international law[16]. There was a corresponding change in the literature of both international law and international relations and clear links emerged between those disciplines[17]. This literature

Press, 1996); K. T. Litfin (ed.), The Greening of Sovereignty in World Politics (Cambridge: MIT Press, 1998); E. L. Miles, A. Underdal, S. Andresen et al, Environmental Regime Effectiveness: Confronting Theory with Evidence (Cambridge: MIT Press, 2002); D. G. Victor, K. Raustiala and E. B. Skolnikoff (eds.), The Implementation and Effectiveness of International Environmental Commitments (Cambridge: MIT Press, 1998); E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998); O. R. Young (ed.), The Effectiveness of International Environmental Regimes: Causal Connections and Behavioral Mechanisms (Cambridge: MIT Press, 1999).

(14) See, for example, A. Chayes and A. H. Chayes, The New Sovereignty: Compliance with International Regulatory Agreements (Cambridge: Harvard University Press, 1995); G. W. Downs, 'Enforcement and the Evolution of Cooperation' (1998) 19 Michigan Journal of International Law 319; O. A. Hathaway, 'The Cost of Commitment' (2003) 55 Stanford Law Review 1821; E. B. Weiss (ed.), International Compliance with Non-Binding Norms (Washington DC: American Society of International Law, 1997).

(15) J. H. Jackson, 'Sovereignty-Modern: A New Approach to an Outdated Concept' (2003) 97 American Journal of International Law 782; S. D. Krasner, Sovereignty: Organized Hypocrisy (Princeton: Princeton University Press, 1999); H. Stacey, 'Relational Sovereignty' (2003) 55 Stanford Law Review 2029.

(16) See, for example, C. Ku, Global Governance and the Changing Face of International Law (2001) AUCNS Reports and Papers No. 2; P. Sands, 'Turtles and Torturers: The Transformation of International Law' (2001) 33 New York University Journal of International Law and Politics 527; E. B. Weiss, 'The Rise or the Fall of International Law?' (2000) 69 Fordham Law Review 345.

(17) See, for example, R. O. Keohane, 'International Relations and International Law: Two Optics' (1997) 38 Harvard International Law Journal 487; S. D. Krasner, 'International Law and International Relations: Together, Apart, Together?' (2000) 1 Chicago Journal of International Law 93; J. K. Setear, 'An Iterative Perspective on Treaties: A Synthesis of International Relations Theory and International Law' (1996) 37 Harvard International Law Journal 139; B. A. Simmons, 'International Law and International Relations: Scholarship at the Intersection of Principles and Politics' (2001) 95 American Society of International Law Proceedings

provides a particularly appropriate context for this thesis, since the international water debate straddles international law and international relations.

In the literature of natural resource management, there have been numerous studies of international water policy, but these are largely technical inventories, scientific studies of pollution, and analyses of regional or national forest policies. Consequently, it is important to define carefully the parameters of this research. The paper seeks to bridge international law and water policy in order to understand the latter in the context of the international debate. This is not a study of public policy or water management, although it does draw on research from these disciplines. Nor is it a study of water and international trade[18].

It is an analysis, grounded in international law, of the current state of national and international legal systems. In parts of this paper, the distinction between international law, international relations and natural resource management is blurred. In other parts, the distinction is clear. From this, it emerges that law is affected by the environment, since law has developed within specific geopolitical environments. The environment too is affected by law, since law regulates the relationship

271; A. M. Slaughter Burley, 'International Law and International Relations Theory: A Dual Agenda' (1993) 87 American Journal of International Law 205; A. M. Slaughter, A. S. Tulumello and S. Wood, 'International Law and International Relations Theory: A New Generation of Interdisciplinary Scholarship' (1998) 92 American Journal of International Law 376.

(18) During the course of this research, the relationship between forests and international trade became more significant than it was at the outset, and inconsistencies between the international regulation of forests and the international trade regime (i.e. GATT and WTO) became increasingly important. Consequently, while this thesis does not consider forests and international trade, it is likely that trade would be an important aspect of future research on the international forest regime.

between the environment, people and national and international governments. At times this relationship produces conflicting agendas. Notwithstanding this, it is a relationship of mutual enrichment.

CENTRAL ARGUMENT

This paper began as an attempt to understand the international water and food debate using the methodology of international environmental law. Specifically, this research aimed to contribute to international environmental law by evaluating the protection offered to water and food by international environmental law and identifying measures that may preserve water heritage and protect water resources. That process of research and analysis was formulated to address a central question – is there a need for a new GCC or global water treaty and what might such a treaty contain? To answer this question, this research began by reviewing the history and development of a global water regime, exploring the relationship between an international water instruments and other international environmental treaties and identifying principles which might have provided a framework for an effective international law of the water. This was based on the premise that international environmental law is central to the preservation of water heritage and the sustainable management of the world's watercourses.

As this research progressed, it became clear that the original question was no longer particularly relevant. In practical terms, the repeated failure of the UN processes to produce anything other than grandiose statements of intent followed by lowest common denominator agreements suggests that the issues are too complex for resolution to be possible, or that political will

is lacking, or both. Arguably, political will (and consequential funding) would be forthcoming if the conceptual justification for reform was to become clear. Consequently, it became necessary to redefine the central question. Instead of asking whether a treaty was the appropriate way forward, the central question was reformulated as "what is the best way forward?". This was a more complex proposition than the original question, particularly as the parameters of the international debate had been muddied by ten years of largely circular processes. In order to address the reformulated question, this thesis summarises the current position, explores a number of paths forward, discusses transparency, accountability, good governance and the rule of law, and relates those issues to water.

This leads to the conclusion that the lack of a GCC or international water treaty is no longer a compelling reason for creating such a treaty. There are two reasons for this. First, an international water treaty designed along the lines of the 1992 CBD would not necessarily have been any more effective in reducing water scarcity than the CBD has been in protecting biodiversity. Second, since 1992, the international political order, the notions of sovereignty on which that order is premised, and the international law and institutions which regulate that order, have changed beyond recognition.

The roles of the private sector and NGOs have increased, technology has reduced the importance of functions which were previously undertaken by international organisations and new roles for those organisations have not yet been clarified. The international situation fluctuates rapidly and alliances are created and destroyed with greater speed than ever before. While the role of international law has increased in some areas, such as

peace-keeping, it has decreased in others, such as environmental protection. Together, these reasons suggest that an international water treaty is now unlikely to offer an effective path forward. The challenge now is to find a mechanism by which existing developments can be transferred to other locations so that the benefits of small scale projects can be shared and successful initiatives emulated in new environments.

This does not negate the need for law, but it does suggest that national rather than international law is likely to be the more effective path forward. The effectiveness of international environmental law depends both on the content of that law and on external economic, political and social factors (such as lack of political will, weak institutional capacity and disregard for the rule of law). Effective implementation requires a supportive political, economic and social environment, but that environment can be influenced (although not determined) by the content, both procedural and substantive, of legislation. The paper identifies several broad principles of water governance which have emerged from the international forest debate. These offer valuable guidance on future legislation, although they may now be applicable at the level of national or sub-national legislation, rather than at the level of an international treaty.

Finally, this paper considers, albeit briefly, a number of broader issues which have emerged from this research. These include the legitimacy of the international system, the corresponding legitimacy of international law, the failure of the international system to engage with ideas which now inform international relations, the relationship between water, poverty, corruption and conflict, and the issues of access to justice which arise from conflict. Water is central to security, peace and justice,

since it provide livelihoods for millions of impoverished people in developing countries. Any diminution in water quality or volume may result in a reduction in basic livelihood resources. This paper concludes by suggesting that water scarcity itself may be a threat to the territorial integrity and political and economic independence of a state, since it dislocates communities, causes forced migration and consequential dependence on short term aid. It follows that the failure to avert water scarcity is in fact a threat to sovereignty since its consequences impact throughout the global system.

HISTORY

International environmental law is simply the application of international law to environmental issues(19). Indeed, Brownlie did not use the term "international environmental law" and argued that international law in the area of environment protection is not a distinct body of law with its own methods but is located within international law, from which it derives its general rules, principles and norms(20). Irrespective of terminology, it is clear that international law informed the development of national and international laws designed to protect the environment and provides the broader context in which that law is located(21). Birnie and Boyle argued that the resolution of international legal

(19) P. - M. Dupuy, 'Ou en est le droit international de l'environnement a la fin du siecle' (1997) Recueil general de droit international public 873, 899. Guruswamy agreed: "[j]urisprudentially and conceptually, [international environmental law] consists of international law dealing with the environment". See L. Guruswamy, 'International Environmental Law: Boundaries, Landmarks and Realities' (1995) 10 Natural Resources and Environment 43, 43.

(20) I. Brownlie, Principles of Public International Law (6th ed.) (Oxford: Oxford University Press, 2003), 273274-.

(21) For sources of international law in the context of environmental protection see, for example, P. W. Birnie and A. E. Boyle, International Law and the Environment (2nd ed.) (Oxford: Oxford University Press, 2002), 1028-; A. Kiss and D. Shelton, International Environmental Law (2nd ed.) (New York: Transnational Publishers, 2000), 3152-; P. Sands, Principles of International Environmental Law (2nd ed.) (Cambridge: Cambridge University Press, 2003), 123150-.

problems, howsoever categorized, requires the application of international law as a whole, in an integrated manner(22). This is particularly relevant to the water debate since that debate straddles several areas of international law.

For example, one of the most problematic issues in the international water debate is the (legal) principle of sovereignty over natural resources(23). Other aspects of international law which are relevant to the international forest debate include the concepts of common heritage(24) or common concern(25), the protection of human rights(26) and the role of indigenous peoples(27). Birnie and Boyle also identified significant overlap

(22) Birnie and Boyle, 2.

(23) For sovereignty over natural resources see, for example, Birnie and Boyle, 109112- and 137-139; F. X Perrez, Cooperative Sovereignty: From Independence to Inter-Dependence in the Structure of International Environmental Law (The Hague: Kluwer Law International, 2000); Sands, 235246-. Section two of this Chapter discusses sovereignty in the context of the key processes, organisations and treaties of the international forest regime.

(24) For the concept of common heritage see, for example, Birnie and Boyle, 143144-; Sands, 547 and 552. Section two of this Chapter refers to common heritage in the context of the key processes, organisations and treaties of the international forest regime.

(25) For the concept of common concern see, for example, T. Iwama, 'Emerging Principles and Rules for the Prevention and Mitigation of Environmental Harm' in E. B. Weiss (ed.), Environmental Change and International Law: New Challenges and Dimensions (Tokyo: United Nations University Press, 1992), 114116-; Sands, 285289-. Section two of this Chapter refers to common concern in the context of the key processes, organisations and treaties of the international forest regime.

(26) For human rights see, for example, Birnie and Boyle, 252267-; A. E. Boyle and M. R. Anderson (eds.), Human Rights Approaches to Environmental Protection (Oxford: Clarendon, 1996); R. S. Pathak, 'The Human Rights System as a Conceptual Framework for Environmental Law' in E. B. Weiss (ed.), Environmental Change and International Law: New Challenges and Dimensions (Tokyo: United Nations University Press, 1992); Sands, 291207-. Section two of this Chapter refers to human rights in the context of the key processes, organisations and treaties of the international forest regime.

(27) For indigenous people see, for example, Birnie and Boyle, 5 and 78-; A. Fabra, 'Indigenous People, Environmental Degradation and Human Rights' in A. E. Boyle and M. R. Anderson (eds.), Human Rights Approaches to Environmental Protection (Oxford: Clarendon, 1996); Sands, 299 and 306. Section two of this Chapter refers to indigenous people in the context of the key processes, organisations and treaties of the international forest regime. Chapter Four discusses Community Forest Management, many the projects of which provide forest-

between international environmental law and sustainable development in the areas of rules, principles, techniques and institutions but argued that the goals of each differ[28]. For them, sustainable development encompasses economic development and international environment law[29], whereas the primary focus of international environmental law is environmental protection. This too is important because the international forest debate developed within the context of international environmental law but has now outgrown its origins.

This may be because the international water debate encompasses a broad range of interests and objectives which extend beyond environmental protection to economic development and trade. Consequently, the international water debate is now located, somewhat uneasily, in the broader context of international law and sustainable development.

related roles for indigenous people.

(28) Birnie and Boyle, 23-.

(29) For the relationship between sustainable development and international law see, for example, A. E. Boyle and D. Freestone (eds.), International Law and Sustainable Development: Past Achievements and Future Challenges (Oxford: Oxford University Press, 1999); Brownlie, 276277-; W. Lang (ed.), Sustainable Development and International Law (London: Graham and Trotman, 1995); A. B. M. Marong, 'From Rio to Johannesburg: Reflections on the Role of International Legal Norms in Sustainable Development' (2003) 16 Georgetown International Environmental Law Review 21; R. Ramlogan, 'The Environment and International Law: Rethinking the Traditional Approach' (2001) 3 Res Communes: Vermont's Journal of the Environment 4; J. B. Ruhl, 'Sustainable Development: A Five Dimensional Algorithm for Environmental Law' (1999) 18 Stanford Environmental Law Journal 31; P. Sands, 'International Law in the Field of Sustainable Development' (1994) 65 British Yearbook of International Law 303; M. P. W. Silveria, 'International Legal Instruments and Sustainable Development: Principles, Requirements and Restructuring' (1995) 31 Willamette Law Review 239; B. Stark, 'Sustainable Development and Postmodern International Law: Greener Globalization?' (2002) 27 William and Mary Environmental Law and Policy Review 137. S. H. Bragdon, 'The Evolution and Future of the Law of Sustainable Development: Lessons from the Convention on Biological Diversity' (1996) 8 Georgetown International Environmental Law Review 423 is now outdated in its details but is of particular relevance to the international forest debate; Chapter Four of this thesis discusses the relationship between that debate and the Convention on Biological Diversity.

Before the 1960s, environmental protection was not a significant feature of national or international political agendas. Consequently, international law relating to the environment was not well developed(30). In the late nineteenth century, a few international environmental agreements were created(31). Generally, these were premised on unrestrained national sovereignty over natural resources and their focus was boundary waters, navigation and fishing rights. In the early 1900s, further agreements emerged.

These generally dealt with the management of a particular species for trade purposes(32) or specific river or coastal systems(33). In the 1930s and 1940s, treaties relating to natural resources were agreed(34) and by the 1950s, liability for nuclear damage and marine pollution by oil reached the international agenda(35). These agreements did not, however, create institutional arrangements for administering international commitments, ensuring implementation or monitoring compliance. Further, treaties were not premised on broader notions of environmental protection, since those notions had not yet been popularised.

(30) For the history of international environmental agreements see E. B. Weiss, 'Global Environmental Change and International Law: The Introductory Framework' in E. B. Weiss (ed.), Environmental Change and International Law: New Challenges and Dimensions (Tokyo: United Nations University Press, 1992).

(31) See E. B. Weiss, 'International Environmental Law: Contemporary Issues and the Emergence of a New World Order' (1993) 81 Georgetown Law Journal 675, 675684-.

(32) For example, 1902 Convention for the Protection of Birds Useful to Agriculture; 1911 Convention between the United States, Great Britain, Russia and Japan for the Preservation and Protection of Fur Seals.

(33) For example, 1900 Convention Between the Riverine States of the Rhine Respecting Regulations Governing the Transport of Corrosive and Poisonous Substances.

(34) For example, 1933 Convention Relative to the Preservation of Fauna and Flora in Their Natural State; 1940 Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere.

(35) For example, 1954 International Convention for the Prevention of Pollution of the Sea by Oil; 1960 Convention on Third Party Liability in the Field of Nuclear Energy.

In the late nineteenth and early twentieth centuries, two environmental disputes were submitted to international arbitration. These were the 1893 Behring Sea Fur Seal Fisheries Arbitration (GB v US)[36] and the 1941 Trail Smelter Arbitration (US v Canada)[37]. These are relevant because they subsequently became important sources of modern international law on environmental protection.

The 1893 Behring Sea Fur Seal Fisheries Arbitration resolved a dispute between the US and the UK over the right of states to adopt regulations to conserve fur seals in areas beyond national jurisdiction. The US argued that states had the right to assert jurisdiction over natural resources outside their jurisdiction to ensure their conservation and that it was acting as trustee "..for the benefit of mankind and should be permitted to discharge their trust without hindrance"[38].

That Tribunal rejected that argument, accepted the UK's argument that the US's position was "..shorn of all support of international law and of justification from the usage of nations"[39] and was "based solely on a claim of property"[40], and established Regulations for the protection and preservation of fur seals outside jurisdictional limits. Those Regulations were followed by treaties in 1911, 1942 and 1957[41]. Sands suggests that the Tribunal's award also shaped the form and content of subsequent international agreements relating to marine resources[42].

(36) 1 Moore's International Arbitration Awards 755.

(37) Trail Smelter Arbitration, (1939) 33 American Journal of International Law 182; (1941) 35 American Journal of International Law 684.

(38) (1893) 1 Moore's International Arbitration Awards 755, 813814-.

(39) Ibid 845.

(40) Ibid.

(41) 1911 Convention between the United States, Great Britain, Russia and Japan for the Preservation and Protection of Fur Seals; 1942 Provisional Fur Seals Treaty; 1957 Interim Convention on the Conservation of North Pacific Fur Seals.

(42) Sands, 565, cites the 1931 and 1937 Conventions for the Regulation of Whaling; 1923

More importantly, it provided an early insight into the role that international law could play in resolving environmental disputes and providing a framework for natural resource management.

The 1941 Trail Smelter Arbitration arose from a dispute between the US and Canada about the emission of sulphur fumes from a smelter located in Canada which caused damage in the US state of Washington(43). Relying on a more general principle of international law set out in the Corfu Channel case(44), the Tribunal held that "..under the principles of international law… no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or to the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence"(45).

According to Sands, the award of the Tribunal and the finding of the Tribunal on the state of international law on air pollution in the 1930s has come to represent "..a crystallising moment for international environmental law which has influenced subsequent developments in a manner which undoubtedly exceeds its true value as an authoritative legal determination"(46).

Canada-US Convention for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and the Behring Sea.

(43) See generally A. K. Kuhn, 'Comment, The Trail Smelter Arbitration – United States and Canada' (1938) 32 American Journal of International Law 785.

(44) The Corfu Channel Case (UK v Albania), 1949 International Court of Justice 4 at 22: "..certain general and well-recognized principles, namely…every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States".

(45) (1941) 35 American Journal of International Law 716.

(46) Sands, 30. For examples of this see A. P. Rubin, 'Pollution by Analogy: The Trail Smelter Arbitration' (1971) 50 Oregon Law Review 259, 259 states "[e]very discussion of the general international law relating to pollution starts, and must end, with a mention of the Trail Smelter Arbitration between the United States and Canada".; L. A. Malone, 'The Chernobyl Accident: A Case Study in International Law Regulating State Responsibility for Transboundary Nuclear Pollution' (1987) 12 Columbia Journal of Environmental Law 203, 208 states "[a]ny analysis

Notwithstanding this, these two international arbitrations, the early environmental treaties, and the establishment of the United Nations in 1945, provided the foundation for the development of law and international organisations relating to the environment in the second half of the twentieth century.

From about 1960 onwards, there was a growth of public consciousness about the environment(47). Environmental issues gained legitimacy and political currency to the extent that sustainable development, the conservation of biological diversity and sustainable forest management became part of mainstream international relations. At about the same time, decolonisation spread rapidly and unprecedented economic development propelled many developing countries towards industrialisation and urbanisation. This led to the development of a body of law, national and international, related to the environment. Initially, those laws were designed to remedy environmental problems after damage had been caused. By the early 1970s, a preventative approach to environmental management had developed(48).

In 1972, the United Nations Conference on the Human Environment (UNCHE) was held in Stockholm. In the years that followed, international environmental agreements proliferated,

of foreign liability necessarily begins with the landmark Trail Smelter case".

(47) The publication of the book, R. Carson, Silent Spring (Boston: Houghton Mifflin, 1962) – which first appeared as a series of articles in the New Yorker – is widely regarded as one of the most important early steps in the development of the environmental movement. Other literature which informed or inspired early environmentalists included: B. Commoner, Closing Circle: Man, Nature and Technology (New York: Knopf, 1972); P. R. Ehrlich, The Population Bomb (New York: Ballentine Books, 1968); G. Hardin, 'The Tragedy of the Commons' (1968) 162 Science 1243; D. H. Meadows, D. L. Meadows et al, The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind (New York: Universe Books, 1972); E. F. Schumacher, Small is Beautiful: Economics as if People Mattered (New York: Harper and Rowe, 1973).

(48) For example, 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter; 1987 Montreal Protocol on Substances that Deplete the Ozone Layer.

environmental issues were added to the mandates of existing international organisations and new international organisations for the environment were established. In 1992, the United Nations Conference on Environment and Development (UNCED) met at Rio de Janeiro. It created further international environmental agreements(49) but failed to establish a global forest treaty. Ten years later, at the 2002 World Summit on Sustainable Development (WSSD) in Johannesburg, the emphasis had shifted to the implementation and effectiveness of existing international environmental agreements, although the creation of a global forest treaty remained on the agenda.

Sands summarised the development of international environmental law into four distinct periods(50), each of which reflected developments in scientific knowledge, the application of new technologies, changes in political consciousness and the changing structure of the international legal order and its institutions. The first period began with the bilateral fisheries treaties of the nineteenth century and ended with the establishment of the UN in 1945. During that period, early understandings of the process of industrialisation, its impact on natural resources and the need for some form of regulation developed. The second period, which extended from 1945 to the 1972 UNCHE, was characterised by the establishment of international organisations and the development of regional and global legal instruments to regulate particular sources of pollution and specific natural resources (e.g. oil pollution, nuclear testing, freshwater quality and the dumping of waste at sea). In the third period, which

(49) By 1992, there were at least 870 international legal instruments which either dealt directly with international environmental issues or which had at least one provision addressing these. See E. B. Weiss, 'Global Environmental Change and International Law: The Introductory Framework' in E. B. Weiss (ed.), Environmental Change and International Law: New Challenges and Dimensions (Tokyo: United Nations University Press, 1992), 9.

(50) Sands, 2526-.

ran from 1972 to the 1992 UNCED, the UN sought to establish systems for coordinated responses to environmental problems, further regional and global agreements were developed, and for the first time, the production, consumption and international trade in certain products was banned at global level. The fourth period, which began in 1992, may be characterised by the integration of environmental issues into all activities by means of law and policy. Compliance with international commitments has become increasingly important and a corresponding body of international jurisprudence is developing in this area.

This led Sands to identify four trends(51). First, the development of principles and rules in international environmental law has been a reactive process. Law has not generally anticipated environmental threats and established legal frameworks to manage those threats. Instead, legal developments have followed events, incidents or the dissemination of scientific evidence. This is not particularly surprising since law tends to be a reactive discipline but it suggests that legal measures alone will be insufficient to resolve even relatively simple environmental problems. Second, developments in science and technology have served as catalysts for the development of new law.

Without those developments, it is unlikely that law would have developed significantly in this area. Third, the principles and rules of international environmental law which have emerged have developed from a complex interplay between national governments, international organisations and non-state actors. The extent to which any environmental issue is subject to regulation will depend on the existence of international processes or institutions in which agreements can be developed, the influence of non-state actors and the political will and capacity of states to transform scientific evidence and political pressure

(51) Sands, 26.

into legal obligations. Fourth and only very recently, international environmental law has become a subject of international adjudication and international courts have begun to contribute to the definition and application of law in this area(52).

These trends are much broader than those identified ten years earlier by the Editors of the Harvard Law Review(53) and by Weiss(54). This may be because environmental protection is an emerging area of international law which has changed considerably over the last ten years. This is particularly important for the international forest debate since, as discussed above and in Chapter One, that debate has already outgrown its origins in international environmental law and currently straddles international law and sustainable development. The next sections discuss key processes, organisations and treaties in that process of development.

These include the United Nations Conference on the Human Environment, World Heritage Convention, International Tropical Timber Agreement, Tropical Forest Action Plan, United Nations Conference on Environment and Development, Agenda 21, Forest Principles, Convention on Biodiversity, Framework Convention on Climate Change, Intergovernmental Panel on Forests, Intergovernmental Forum on Forests, United Nations Forum on Forests and World Summit on Sustainable Development. This leads to the identification of several broader themes in international law which emerged in the late 1990s and which

(52) Sands expanded his fourth point in P. Sands, 'Turtles and Torturers: The Transformation of International Law' (2001) 33 New York University Journal of International Law and Politics 527. The second part of this Chapter discusses the legal issues raised in that article in the context of the international forest debate.

(53) See Editors of the Harvard Law Review, Trends in International Environmental Law (Washington DC: American Bar Association, 1992).

(54) See E. B. Weiss, 'International Environmental Law: Contemporary Issues and the Emergence of a New World Order' (1993) 81 Georgetown Law Journal 675.

have already had a significant impact on the international water debate. These themes are discussed later in this paper and are drawn together in the Conclusion.

UNITED NATIONS CONFERENCE ON THE HUMAN ENVIRONMENT

By the late 1960s, there was a growing body of national and international law relating to the environment and international organisations had begun to address environmental issues but no single international organisation was responsible for the coordination of environmental law and policy and there were very few international procedures for ensuring compliance with international environmental commitments. Consequently, progress was being made but there was no comprehensive international strategy for environmental protection.

In 1968 the UN General Assembly adopted a resolution by which it convened an international conference to address the problems of the environment(55). In June 1972, UNCHE was held in Stockholm(56). Present were representatives of 113 states, several international institutions and NGO observers.

(55) UN General Assembly Resolutions 2398 (XXIII)(1968) and 2581 (XXIV)(1969). The origins of UNCHE are found in the 1968 Intergovernmental Conference of Experts on the Scientific Basis for Rational Use and Conservation of the Resources of the Biosphere (1968 UNESCO Biosphere Conference). That Conference considered the impact of human activities on the biosphere, adopted 20 recommendations on issues which were subsequently discussed at the Stockholm Conference, and called for action at national and international level. In June 1968, ECOSOC had adopted a proposal by Sweden, which called for a conference on problems of the human environment: ECOSOC Resolution 1346 (XLV)(1968). The proposal was subsequently adopted by the General Assembly, as above. For background to the Conference see L. K. Caldwell, International Environmental Policy: From the Twentieth to the Twenty-First Century (3rd ed.) (Durham: Duke University Press, 1996), 4862-.

(56) See Report of the Conference on the Human Environment UN Document A/CONF.4814// Rev.1. That Report was adopted by UN General Assembly Resolution 2994 (XXVII)(1972).

The Conference resulted in four initiatives[57]: the adoption of the Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration); the adoption of an Action Plan for the Human Environment[58]; and the adoption of a resolution on institutional and financial arrangements[59], from which emerged a new UN organisation for the environment, the United Nations Environment Programme (UNEP).

The Stockholm Declaration[60] has been identified as the starting point of modern international environmental law[61]. Comprising 26 Principles, it reflected a compromise between (mainly developed) states whose primary concern was environmental protection and (mainly developing) states for whom social and economic development was foremost. Principles 8, 21, 22, 23 and 24 are relevant to the international forest debate. Principle 8 recognised that economic and social development is essential[62]; Principle 22 required states to cooperate in the development of international law on liability for environmental damage[63]; Principle

(57) For UNCHE see, for example, Birnie and Boyle, 3840-; Caldwell, 6378-; Sands, 3540-.

(58) The Action Plan comprised 109 recommendations. Section C of the Plan categorised those recommendations into three areas: environmental assessment (including evaluation, review, research, monitoring and information exchange); environmental management (including planning, in order to protect and enhance the human environment for present and future generations); and supporting measures (including education, training and public information, organisational arrangements, and financial and other forms of assistance).

(59) UN General Assembly Resolution 2997 (XXVII)(1972) established the Governing Council of UNEP, an Environmental Secretariat and an Environment Fund.

(60) For the Declaration see, for example, L. B. Sohn, 'The Stockholm Declaration on the Human Environment' (1973) 14 Harvard International Law Journal 423.

(61) See, for example, E. B. Weiss, 'Global Environmental Change and International Law: The Introductory Framework' in E. B. Weiss (ed.), Environmental Change and International Law: New Challenges and Dimensions (Tokyo: United Nations University Press, 1992), 7.

(62) Principle 8 of the Stockholm Declaration states: "Economic and social development is essential for ensuring a favourable living and working environment for man and for creating conditions on earth that are necessary for the improvement of the quality of life".

(63) Principle 22 of the Stockholm Declaration states: "States shall cooperate to develop further international law regarding liability and compensation for the victims of pollution and other

23 allowed for the adoption of different standards in developed and developing countries(64); and Principle 24 encouraged cooperation between states, through multilateral or bilateral arrangements, to prevent or minimise adverse environmental effects(65). Principle 21 sought to synthesise the competing objectives of the conservation of natural resources (Principles 2-7) and the promotion of economic and social development (Principles 8-10)(66). It stated:

States have, in accordance with the Charter of the United Nations and the Principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

By this Principle, national sovereignty over natural resources was limited by an obligation to ensure that the exploitation of those resources did not cause transboundary damage.

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environmental damage caused by activities within the jurisdiction or control of such States to areas beyond their jurisdiction".

(64) Principle 23 of the Stockholm Declaration states: "Without prejudice to such criteria as may be agreed upon by the international community, or to standards which will have to be determined nationally, it will be essential in all cases to consider the systems of values prevailing in each country, and the extent of the applicability of standards which are valid for the most advanced countries but which may be inappropriate and of unwarranted social cost for the developing countries".

(65) Principle 24 of the Stockholm Declaration states: "International matters concerning the protection and improvement of the environment should be handled in a cooperative spirit by all countries, big and small, on an equal footing. Cooperation through multilateral or bilateral arrangements or other appropriate means is essential to effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres, in such a way that due account is taken of the sovereignty and interests of all States".

(66) For Principle 21 see, for example, Birnie and Boyle, 104112-; Sands, 235241-.

Interestingly, exploitation of natural resources was to be pursuant to "environmental policies", not economic or development policies. Principle 21 was reiterated in the 1992 Rio Declaration on Environment and Development (Rio Declaration)(67), 1992 Forest Principles(68), 1992 Convention on Biological Diversity(69), 1992 United Nations Framework Convention on Climate Change(70), and is now regarded as a "basic norm of customary international law(71) and the "cornerstone of international environmental law"(72).

UNCHE identified and legitimised environmental policy as a global concern and gave public expression to the view of the earth as an ecosystem of living species and regenerative processes. According to Caldwell, UNCHE "..enlarged and facilitated means toward international action previously limited by inadequate perception of environmental issues and by restrictive concepts of national sovereignty and international interest"(73). Innovation was evident in the redefinition of international issues, the rationale for cooperation, the approach to international responsibility and the conceptualisation of international organisational relationships(74). The Stockholm Declaration articulated aspirations and principles

(67) Rio Declaration, Principle 2. The Rio Declaration added two words to the formula used in the 1972 Stockholm Declaration: "..states have the right to pursue their own environmental and developmental policies..".

(68) Forest Principles, Principle 1(a).

(69) CBD, Principle 3.

(70) UNFCC, Preamble.

(71) A. Kiss and D. Shelton, International Environmental Law (2nd ed.) (New York: Transnational Publishers, 2000), 62. The general obligation of states to ensure that activities within their jurisdiction or control do not cause damage to the territory of other states or to areas beyond their jurisdiction was subsequently confirmed by the 1996 Advisory Opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons: 1996 International Court of Justice 226 at 2412-.

(72) Sands, 236.

(73) Caldwell, 63.

(74) See Caldwell, 68.

which underpinned international environmental policy in the decades that followed. The obligation to prevent transboundary harm did not, however, reduce unsustainable logging practices, notwithstanding that those practices led to the depletion of biological diversity and so caused environmental damage beyond national boundaries. In fact, the rate of deforestation accelerated throughout the 1970s and early 1980s and by the mid 1980s, it was clear that urgent action was needed if water was to be preserved and managed on a sustainable basis.

UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT

Throughout the 1980s, environmental issues gained political currency. In 1982, the UN General Assembly adopted the World Charter for Nature(75) and in 1987, the World Commission on Environment and Development (WCED) published its Report, the Brundtland Report(76). That Report defined sustainable development as "..development that meets the needs of the present without compromising the ability of the future generations to meet their own needs"(77). The Report recommended that the UN transform its conclusions into a Program of Action on Sustainable Development, that a conference be held to review implementation of the programme and that follow up arrangements be established to "..set benchmarks and maintain human progress within the guidance of human needs and natural law"(78). The General Assembly accepted the Report(79), endorsed

(75) UN General Assembly Resolution 371982) 7/).

(76) World Commission on Environment and Development, Our Common Future (Oxford: Oxford University Press, 1987), 43.

(77) Ibid Appendix 1.

(78) Ibid.

(79) UN General Assembly Resolution 421987) 187/).

the proposal for a conference[80] and established a preparatory committee[81]. According to Birnie and Boyle, it was hoped that the Conference would conclude international agreements on climate change and biological diversity, consider the possibility of an international forest treaty and an instrument on land-based pollution, produce an Earth Charter setting out principles for environmental protection and sustainable development and adopt a program of action for the implementation of those principles[82].

In 1992, UNCED was held in Rio de Janeiro[83]. Representatives of 176 states attended, together with representatives of international organisations and NGOs. UNCED was designed to be a comprehensive response to the conflicting priorities of environmental and economic and social development. However, its preparatory committees, and later the Conference itself, were characterised by north/south dispute about sovereignty over natural resources, economic development, the role of multilateral institutions, the transfer of technology and the equitable sharing of the costs of conservation[84]. Several of these issues were

(80) UN General Assembly Resolution 431988) 196/).

(81) UN General Assembly Resolution 441989) 228/).

(82) See Birnie and Boyle, 41.

(83) For UNCED, see, for example, Birnie and Boyle, 4144-; Caldwell, 104120-; Humphreys, 1012-; P. S. Kibel, 'UNCED's Uncertain Legacy: An Introduction to the Issue' (2002) Golden Gate University Law Review 345; Kiss and Shelton, 6973-; Kolk, 153160-; M. Pallemaerts, 'International Environmental Law from Stockholm to Rio: Back to the Future?' (1992) 1 Review of European Community and International Environmental Law 254; R. K. L. Panjabi, The Earth Summit at Rio: Politics, Economics and the Environment Boston: North Eastern University Press, 1997; P. H. Sand, 'UNCED and the Development of International Environmental Law' (1993) 8 Journal of Natural Resources and Environmental Law 209; Sands 5253-.

(84) For the position taken by developing countries, see the Beijing Ministerial Declaration on Environment and Development, adopted at the Ministerial Conference of Developing Countries on Environment and Development on 19 June 1991: UN Document A/CONF.151/

directly related to forests and forest management proved to be one of UNCED's most controversial issues(85). In general terms, the north interpreted the environmental crises as a technical issue whereas developing states contextualised it as a consequence of development. Attempts by the north to restrict the use of natural resources, including forests, were interpreted by the south as a threat to sovereignty. Similarly, the south resented the north's attempts to share the costs of action on climate change and deforestation since from the south's point of view, climate change and deforestation had been caused by development in the north.

As a result of this disagreement, UNCED's capacity to reach agreement on major issues was limited. It adopted the Rio Declaration, Agenda 21, the CBD and the UNFCCC but despite lengthy negotiations, failed to reach agreement on an international forest treaty(86). Instead, it produced the non-binding Forest Principles (which are discussed below). Agreement on other difficult issues were also undermined by north/south dispute; the UNFCCC was weaker than early drafts, several crucial issues were removed from Agenda 21 and a proposal for a treaty on land-based pollution was unsuccessful.

Sustainable development(87) was an important feature of

PC/85 (1991).

(85) For disagreement on forest and other issues before and at UNCED see, for example, Kolk, 153160-; J. P. Lanly 'Forestry Issues at the United Nations Conference on Environment and Development' (1992) 171 Unasylva 61; G. Palmer, 'The Earth Summit: What Went Wrong at Rio?' (1992) 70 Washington University Law Quarterly 1005.

(86) Caldwell, 105, noted that the unofficial Global Forum of approximately 2,000 NGOs, which met coterminously with UNCED, produced 33 alternative draft forest treaties.

(87) For sustainable development in the context of UNCED see, for example, Birnie and Boyle, 4447-; M. Pallemaerts, 'International Environmental Law in the Age of Sustainable Development: A Critical Assessment of the UNCED Process' (1996) 15 Journal of Law and Commerce 623; M. Sanwal, 'Sustainable Development, the Rio Declaration and Multilateral

all theUNCED agreements. It appeared in the CBD(88) and UNFCCC(89) and underpinned several sections of Agenda 21(90). In the Rio Declaration(91), it is explicitly mentioned in 12 of the 27 Principles(92). That Declaration sought to balance environmental protection with sustainable development. Principle 1 of the Declaration stated "human beings are at the centre of concerns for sustainable development"(93) and that they are "entitled to healthy and productive life in harmony with nature"(94). This suggested a shift away from a primary agenda of environmental protection towards a balanced (or compromise) approach to environment and development. Principle 2 comprised a version of Principle 21 of the Stockholm Declaration. It differed from the original version in the Stockholm Declaration(95). Principle 21

Cooperation' (1993) 4 Colorado Journal of International Environmental Law and Policy 45. For the relationship between sustainable development and international law, see n 6.

(88) CBD Article 1 refers to "sustainable use". This is defined in CBD Article 2 as: "..the use of components of biological diversity in a way, and at a rate that does not lead to long term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations".

(89) UNFCC Article 3(4): "Parties have a right to, and should promote, sustainable development".

(90) Agenda 21 is discussed below.

(91) For the Rio Declaration see, for example, Birnie and Boyle 4447- and 8284-; Kiss and Shelton 7172-; J. D. Kovar, 'A Short Guide to the Rio Declaration' (1993) 4 Colorado Journal of International Environmental Law and Policy 119; R. K. L. Panjabi, 'From Stockholm to Rio: A Comparison of the Declaratory Principles of International Environmental Law' (1993) 21 Denver Journal of International Law and Policy 215; I. Porras, 'The Rio Declaration: A New Basis for International Co-operation' (1992) 1 Review of European Community and International Environmental Law 245; Sands 5457-; D. A. Wirth, 'The Rio Declaration on Environment and Development: Two Steps Forward and One Step Back, or Vice Versa' (1995) 29 Georgetown Law Review 599.

(92) Rio Declaration, Principles 1, 4, 5, 7, 8, 9, 12, 21, 22, 24 and 27.

(93) Rio Declaration, Principle 1.

(94) Ibid.

(95) The original version of Principle 21 of the Stockholm Declaration was incorporated in two of the other UNCED agreements: CBD, Article 3; and Forest Principles, Principle 2(a).

of the Stockholm Declaration permitted exploitation of natural resources "pursuant to…environmental policies" whereas Principle 2 of the Rio Declaration permitted exploitation "pursuant to…environmental and developmental policies". Clearly, this allowed for economic development by the south. Principles 3 and 4 exemplify the compromises between conflicting agendas which characterised UNCED. Principle 3 affirmed the "right to development", which developing countries asserted was crucial to their capacity to facilitate social and economic development. That Principle stated: "[t]he right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations". This is tempered by Principle 4 which sought to move environmental protection from the periphery to the core of social and economic development. It stated: "[i]n order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it".

Birnie and Boyle identified two unusual features of UNCED(96). First, the event was sponsored both by governments and by companies (e.g. ICI) and foundations (the MacArthur and Rockefeller Foundations) and second, the GCC played a significant role in the preparatory committees. Caldwell too commented on the role played by the GCC.. For him, UNCED confirmed that environmental policy making must take account of "..cultural receptivity, ethical perception, and social impact outside of official government"(97). Significant here is the fact that at UNCED, the north/south dispute, articulated both by government representatives and by the GCC informed

(96) Birnie and Boyle, 42.

(97) Caldwell, 108.

negotiations to the extent that agreement on an international water treaty was impossible. This, for water, was the most important legacy of UNCED since it established the context for the decade of international water negotiations which followed.

AGENDA 21

Agenda 21[98] was a non-binding program of action for global partnership for sustainable development[99], implementation of which was a matter for national governments. Comprising 40 chapters, it incorporated issues ranging from poverty alleviation to the protection of the atmosphere, oceans, mountains and areas vulnerable to desertification. It recognised the linkages between economics, poverty, development and the environment and includes financial provisions under the terms of which developed nations reaffirmed their commitment to reach UN targets for the provision of development assistance to developing nations[100].

Chapter 38 of Agenda 21 was entitled "International Institutional Arrangements". It established the institutional framework within which subsequent international negotiations on water took place. First, the chapter mandated that intergovernmental action arising from UNCED was to be within the framework of the UN system, with the General Assembly as the supreme policy making forum[101]. Second, a Commission on Sustainable Development (CSD) was to be established under the auspices of ECOSOC[102],

(98) UN Document A/CONF.15126//Rev.1 (vol.1) (1993).

(99) For Agenda 21, see Birnie and Boyle 43; Caldwell 110112-; Kiss and Shelton 7273-; Sands 5759-.

(100) Agenda 21, Chapter 33.13.

(101) Agenda 21, Chapter 38.1 and 38.9.

(102) The CSD was subsequently established by General Assembly Resolution 471992) 191/), as a functional commission of ECOSOC, "..to ensure effective follow-up to the Conference, as well as to enhance international cooperation and rationalize the intergovernmental decision-making capacity for the integration of environment and development issues" (Resolution

to monitor the implementation of Agenda 21 (including the implementation of Chapter 11, "Combating Deforestation") and to provide recommendations to the General Assembly through ECOSOC(103). Third, an inter-agency coordination mechanism was to be established to ensure effective monitoring, coordination and supervision between UN agencies of the UNCED commitments(104). Fourth, the roles of UNEP and UNDP were to be strengthened(105) and UNEP was to give priority to the further development of international environmental law(106). Fifth, regional and sub-regional cooperation was to be promoted through mechanisms such as regional economic commissions and regional development banks and closer cooperation between UNEP and UNDP(107). This paved the way for increasing involvement by the GCC in international processes throughout the 1990s.

WORLD SUMMIT ON SUSTAINABLE DEVELOPMENT

In June 2002, ten years after UNCED, the World Summit on Sustainable Development (WSSD)(108) met in Johannesburg(109).

471992) 191/), Paragraph 2).

(103) Agenda 21, Chapter 38.1138.13-.

(104) Agenda 21, Chapter 38.1638.17-.

(105) Agenda 21, Chapter 38.2138.25-.

(106) Agenda 21, Chapter 38.22(h).

(107) Agenda 21, Chapter 38.2938.35-.

(108) For WSSD see, for example, IISD, 'Summary of the World Summit on Sustainable Development' 22:51 Earth Negotiations Bulletin 1; G. Pring, 'The 2002 Johannesburg World Summit on Sustainable Development: International Environmental Law Collides with Reality, Turning Jo'burg Into "Jokeburg"' (2002) 30 Denver Journal of International Law and Policy 410; M. Steiner, 'The Journey from Rio to Johannesburg: Ten Years of Forest Negotiations, Ten Years of Success and Failures' (2002) 32 Golden Gate University Law Review 629.

(109) The report of WSSD is UN Document A/CONF.1992002) 20/).

Present were representatives of 191 countries, together with international organisations and NGOs. The Summit was designed to be a a ten year review of UNCED and to reinvigorate global commitment to sustainable development(110). In 1997, five years after UNCED, the 19th Special Session of the UN General Assembly for the Overall Review and Appraisal of Agenda 21 reviewed implementation of Agenda 21 in the period 1992-97.

It concluded that progress was limited so it adopted the Program for Further Implementation of Agenda 21(111) and established a program of work for the CSD for the period 1997-2002. In 2001, the tenth session of the CSD, acting as the Preparatory Committee for the WSSD, began preparation for WSSD. In March 2002, the UNFF sent a Ministerial Declaration and Message to the Preparatory Committee, reminding WSSD of the importance of water and inviting it to take nine specific measures to further sustainable management at national and international level(112).

Those measures stated that sustainable water management was "..a critical means to eradicate poverty, reduce land and resource degradation, improve food security as well as access to safe drinking water and affordable energy"(113), emphasised the relationship between water and other sectors(114), and called for immediate action against illegal trade(115). They also covered development assistance(116) and the transfer of financial resources

(110) UN General Assembly Resolution 552000) 199/). Other General Assembly Resolutions on the implementation and follow-up of the UNCED commitments include 53,(1998) 188/ 1999) 218/54) and 552000) 2/).

(111) UN General Assembly Resolution S-191997) 2/).

(112) UN Document A/CONF.199/PC/8 (2002).

(113) UN Document A/CONF.199/PC/8, Paragraph 15(a).

(114) UN Document A/CONF.199/PC/8, Paragraph 15(b).

(115) UN Document A/CONF.199/PC/8, Paragraph 15(d).

(116) UN Document A/CONF.199/PC/8, Paragraph 15(c).

and environmentally sound technology[117].

The focus of WSSD was the implementation of existing agreements, not the creation of new agreements. The Summit negotiated two main documents: the Johannesburg Declaration on Sustainable Development[118] and the Plan of Implementation[119]. The Johannesburg Declaration outlined progress in the period between UNCED (1992) and WSSD (2002), identified current challenges, expressed a commitment to sustainable development and emphasised the importance of multilateralism and implementation.

It did not mention water. The Plan of Implementation is a framework for action by which the commitments originally agreed at UNCED are to be implemented. This, of course, is an acknowledgement that after ten years, the commitments of UNCED had still not been implemented, either fully or at all.

The Plan has 11 chapters and 30 targets. It begins with an introduction and then addresses: poverty eradication; consumption and production; the natural resource base; health; small island developing states; Africa; other regional initiatives; means of implementation; and institutional framework. WSSD identified the root causes of global environmental degradation as poverty and inequitable distribution of wealth.

Consequently, it is clear that by 2002, water was an important issue on the international agenda and sustainable management received recognition as a means by which the more general objectives of poverty eradication and sustainable development[120]

(117) UN Document A/CONF.199/PC/8, Paragraph 15(h).

(118) UN Document A/CONF.1992002) 20/), Chapter 1, Resolution 1.

(119) UN Document A/CONF.1992002) 20/), Chapter 1, Resolution 2.

(120)The goals of poverty reduction and sustainable development could further sustainable forest management, or threaten it, or both. A recent study, J. Hudson, 'International Policy Processes and Initiatives Including Development Assistance' Contribution to Millenium

could be furthered(121).

CURRENT CHALLENGE

Events of the period since 1992 confirm that by 2002, the international water debate had lost momentum. This was caused by several factors including north/south dispute, lack of political will and the complexity of water related issues. There were also a number of systemic defects in, and challenges to, the international legal system.

This next section introduces some of those defects and introduces broader themes in international law which emerged in the late 1990s and which altered many of the premises on which the international forest debate was based. These themes underpin the remainder of this Paper and are drawn together in the Conclusion. These are important because they have altered the international legal system in ways which extend far beyond water and which have thus rendered irrelevant the original question which this Paper sought to address.

Ecosystem Development Response Options (DFID, 2003, unpublished), identified five overlapping phases of development assistance for forestry over the last 40 years. These are: industrial forestry; social forestry; environmental forestry; sustainable natural resource management; and poverty reduction. It is significant that the word "forestry" is absent from the last two phases. Since 1992, there has been a reduction in development assistance for forest sector development. Poverty reduction, a concept which includes empowerment of marginalised groups, development of economic opportunities, and reduction in livelihood and institutional vulnerability, is now the international development assistance norm. This provides opportunities for engagement with forestry. For example, poverty reduction strategies can provide a platform for dialogue with NFPs on a macro level, and for the development of cross-sectoral issues central to SFM. The UN Millennium Development Goals also provide an opportunity to improve coherence in the international forest regime, although again, forestry is marginalised. Forests appear only as an indicator (change in land area covered by forest) for Goal 7 (ensure environmental sustainability).

(121) There may be a corresponding shift in scholarship in international environmental law. See, for example, M. A. Drumbl, 'Poverty, Wealth and Obligation in International Environmental Law' (2002) 76 Tulane Law Review 843

DEVELOPMENT OF INTERNATIONAL ENVIRONMENTAL LAW

International environmental agreements emerged from the 1900s onwards(122). Before 1900, there were a few agreements. These were based on unrestrained sovereignty over natural resources, they focussed on boundary issues such as boundary waters and fishing rights in shared waterways and they did not address ecosystem management. In the early 1900s, some treaties were developed to manage lucrative trade in valuable species, such as fur seals.

By the 1930s and 1940s, international agreements began to recognise conservation objectives and in the late 1950s Rachel Carson offered the first account of humanity's impact on life on earth(123). Within eight years, human beings saw the first pictures from space of the earth. Issues such as species depletion had been considered before that time.

Earlier treaties on whaling, fur seals and migratory birds confirm this. However, the combination of Carson's book, pictures of the earth and the political climate of the 1960s brought environmental issues onto the mainstream political agenda as legitimate objects of public policy.

During the late 1980s and 1990s, international environmental agreements proliferated. At about the same time, international environmental law emerged as a legal discipline, separate from, although related to, environmental law in a national context.

(122) For history of international environmental agreements see, for example, A. Kiss and D. Shelton, International Environmental Law (2nd ed.) (Dobbs Ferry: Transnational Publishers, 2000); E. B. Weiss, 'International Environmental Law: Contemporary Issues and the Emergence of a New World Order' (1993) 81 Georgetown Law Journal 675.

(123) R. Carson, Silent Spring (Boston: Houghton Mifflin, 1962), which first appeared as series of articles in the New Yorker.

Central to the international water debate are the tensions between sovereignty over national resources and the common concerns of mankind, and between environmental protection and sustainable development, which are inherent in much of international environmental law.

The international legal system is premised on national sovereignty i.e. states control resources (including forests) within their sovereign territory. As discussed earlier in this Chapter, the principle of sovereignty was affirmed in the Stockholm and Rio Declarations, the Forest Principles and the CBD. The CBD, however, also states that the conservation of forests is "a common concern of mankind"(124). The principle of common concern is one of several aspects of international environmental law, the precise status of which is unclear(125). The term "common concern" suggests a universal character and the need for common action by all states.

Arguably, this suggests some element of international supervision of domestic law. This, in turn, suggests a legal status very different from that embodied in the concepts of permanent sovereignty, common property, shared resources and common heritage, all of are terms which generally define the legal status of natural resources. Interestingly, "common concern" was not a term used before the 1990s in international law. It appears to have emerged at UNCED negotiations as a compromise term, applied to biodiversity and climate change, to indicate that both were located between national sovereignty and common heritage. Birnie and Boyle suggest that the term gives the international community a legitimate interest in resources of global significance and a common responsibility to assist in their

(124) CBD, Preamble.

(125) For the principles of international environmental law see, for example, Birnie and Boyle, 84152-; Sands, 231290-.

sustainable development[126]. From this, it appears that states retain sovereignty over their forests but are required to exercise that sovereignty in accordance with the principles set out in the Stockholm and Rio Declarations and other international agreements.

The relationship between environmental protection and sustainable development is equally complex. As discussed earlier in this Chapter, both are mentioned in the Stockholm and Rio Declarations, Agenda 21, and the CBD. The Preamble to the Forest Principles related forests to both. It stated that forests are "..related to the entire range of environmental and developmental issues and opportunities, including the right to socio-economic development on a sustainable basis". This was a particularly uneasy compromise. This is extensive literature on the relationship between environmental protection and sustainable development[127] but little of this relates specifically to forests. It is, however, clear that the relationship is disputed along the broader lines of the north/south dispute over access to resources and that the concept of sustainable development, particularly in the context of forests, may embody aspirations which are inconsistent with other aspects of international environmental law.

In 1993, Weiss analysed the development of international environmental law[128] and concluded that international environmental law was "..setting the pace for cooperation in the international community in the development of international law"[129]. Ten years later, it is clear that the pace has slowed as

(126) Birnie and Boyle, 99.

(127) See Chapter One, n 73.

(128) E. B. Weiss, 'International Environmental Law: Contemporary Issues and the Emergence of a New World Order' (1993) 81 Georgetown Law Journal 675.

(129) Ibid 675.

other issues in international law (e.g. humanitarian intervention, peace-keeping, terrorism) have risen to prominence. It is valuable though to review briefly the issues Weiss identified at that time and compare them to the current situation. Weiss argued that by 1993, the international community had become very skilled at negotiating international agreements. As evidence of this, she cited UNCLOS and the CBD and noted that the CBD had been concluded in less than two years.

Later, other scholars noted that UNCLOS consolidated the existing law of the sea and that the speed at which the CBD was negotiated was one of the reasons for its poor design. Weiss also argued that international agreements had become detailed and operational and that scientific uncertainty is inherent in all international environmental law so inclusion of the precautionary principle in agreements is important. She noted the emergence of the ecosystem approach, emphasised the importance of considering the impact of an instrument on non-parties to that instrument, and stated that NGOs are the "primary link between the public and national governments"(130) and that they have assumed "an important role in the negotiation, ratification, implementation and enforcement of international environmental agreements"(131).

Weiss recognised the importance of ensuring that agreements operate effectively but noted that little data existed on successful implementation and overall effectiveness of binding and non-binding agreements(132). In response to the problem of treaty congestion and the need for greater coordination between treaties, Weiss referred to Palmer's proposal for the establishment of a common institutional home for international environmental

(130) Ibid 693.

(131) Ibid.

(132) Weiss and Jacobson's later research filled this gap.

agreements(133) and recognised that the success of a centralised arrangement would depend on the efficiency of the structure and operations of that arrangement. Weiss also noted that earlier environmental agreements were premised on the sovereign right to exploit natural resources within one's jurisdiction.

This, according to Weiss, was changing as notions of equity changed. The 1972 Stockholm Declaration states: "..it will be essential in all cases to consider the systems of values prevailing in each country, and the extent of the applicability of standards which are valid for the most advanced countries but which may be inappropriate and of unwarranted social cost for the developing countries"(134). This condoned the development of an environmental double standard, with higher standards of environmental protection for developed countries and lower standards for developing countries.

The 1992 Rio Declaration reflected a more developed notion of equity. It requires all states to "..cooperate in the essential task of eradicating poverty as an indispensable requirement for sustainable development, in order to decrease the disparities in standards of living and better meet the needs of the majority of the people of the world"(135) and to give priority to "..the special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable"(136), and it recognises that "..in view of the different contributions to global environmental degradation, States have common but differentiated responsibilities"(137).

(133) See G. Palmer, 'New Ways to Make International Environmental Law' (1992) 86 American Journal of International Law 259.

(134) 1972 Declaration of the United Nations Conference on the Human Environment, Principle 23.

(135) 1992 Rio Declaration on Environment and Development, Principle 5.

(136) Ibid Principle 6.

(137) Ibid Principle 7.

For Weiss, three issues were particularly important. First, the global environment has no political boundaries so there is an incentive for all countries to reach consensus on an equitable and effective basis for allocating responsibility for maintaining the planet. Second, the control exercised by developing countries' resources which are important to the industrial world gives those developing countries bargaining power in negotiations.

Third, developing countries are likely to suffer most from environmental degradation because poverty is a primary source of environmental degradation and because when global environmental change occurs, developing countries have a lower capacity to adapt than have developed countries. The period 1992-2002 demonstrated the limitations of Weiss' 1993 arguments. It is now clear, for example, that poverty per se does not necessarily cause environmental degradation.

In fact, in the Asia Pacific region, environmental degradation is more likely to be caused by the unsustainable logging practices of multinationals than by the activities of impoverished local communities. Control of resources does enhance bargaining power in treaty negotiations, but the effectiveness of a treaty is determined by a range of factors, the majority of which are external to the treaty. Consequently, the precise wording of a treaty may be relatively insignificant.

Consensus remains the goal of many international negotiations but individual states, or small groups of states, can act unilaterally despite widespread consensus among other states, and even when consensus exists on a broad issue (e.g. the need for environmental protection), implementation of measures needed to achieve that goal requires further consensus on related economic and political issues.

Weiss concluded by predicting that the relationship between environmental protection and economic development will become increasingly important, that a regulatory approach which provides incentives for the use of environmentally sound processes will replace the tort-based system which focuses on liability for damage, that non-binding instruments will be formulated more frequently than binding instruments because for non-binding instruments, agreement is easier to achieve, transaction costs are less, detailed strategies can be set out later, and the capacity to respond to change is greater. Public participation and public access to information will become increasingly important and the influence of NGOs will expand. Much of this has occurred, but what has also occurred, and what was not predicted by Weiss, is a fundamental change in the international legal system. This change renders Weiss' conclusions significant, but less so than they might otherwise had been, had the relatively stable international system on which Weiss' work was premised remained intact. The remainder of this section reviews defects in and challenges to the international legal system in the context of the international forest debate.

DUPLICATION IN TREATIES AND ORGANISATIONS

One of the biggest challenges of the international water debate is the existence of several international treaties and organisations, all of which have an interest, often overlapping, in water. In 1992, Palmer observed that while the number of international environmental agreements appears to be impressive, the delay in ratification and entry into force, the limited extent of compliance, and the deteriorating state of the global environment is less encouraging(138). Clearly, this applies to the international water debate. In 1999, Hicks discussed the need for greater

(138) See G. Palmer, 'New Ways to Make International Environmental Law' (1992) 86 American Journal of International Law 259, 263.

international coordination in the area of "treaty congestion"(139). She defined treaty congestion to mean both substantive conflict between treaties (for which the Vienna Convention provides) but also "broader notions of treaty obligation and objectives conflicts as well as procedural conflicts of time, compliance energy, and compliance requirements"(140). Hicks argued that treaty congestion is a significant problem in international law because it contributes to inefficiency and non-compliance between existing treaties.

It may also deter parties from negotiating new agreements, since it may not be clear what issues are and are not already covered by other treaties and parties may wish to avoid contributing to further complexity by negotiating a treaty which would add to this complexity. Parties may also be overwhelmed by treaty obligations particularly if, for example, annual reports are required by the secretariat to each treaty. This will place a particularly heavy burden on countries with limited resources. This is precisely what has happened in several GCC countries, in which the burden of producing annual reports for (distant) Secretariats far exceeds national capacity. Consequently, many parties have simply defaulted on treaty obligations in this area. Arguably, resources used for annual reporting requirements would be better used on local projects. However, in some regions, it is doubtful whether those resources would be used for the purposes for which they were intended.

Throughout the 1990s, several writers argued that problems arising from duplication and overlap in international agreements would be resolved by the creation of a global environmental organisation and by the comprehensive reform of international

(139) B. L Hicks, 'Treaty Congestion in International Environmental Law: The Need for Greater International Coordination' (1999) 21 University of Richmond Law Review 1643.

(140) Ibid 1644.

environmental treaties within that single and unified system[141]. This, it was argued, would minimise inconsistencies between treaties and would thus lead to efficient implementation of existing treaties.

Those arguments were premised on the assumption that parties generally comply with their treaty obligations[142] and that failures to comply must therefore arise from inconsistencies between treaties. It is now clear, from recent studies on compliance[143], that adherence to treaty obligations depends on a range of factors, almost all of which are external to the treaty. Consequently, it does not follow that the rewriting of existing treaties to ensure internal consistency would lead to increased compliance with those treaties. It is equally unlikely that the creation of a global environmental organisation would reduce water scarcity since several environmental organisations are already active in this issue and none has achieved significant

(141)See, for example, A. Bernabe-Riefkohl, 'To Dream the Impossible Dream: Globalization and Harmonization of Environmental Laws' (1995) 20 North Carolina Journal of International Law and Commercial Regulation 205; Bertrand, M. 'The Historical Development of Efforts to Reform the UN' in A. Roberts and B. Kingsbury (eds.), United Nations, Divided World: the UN's Roles in International Relations (2nd ed.) (Oxford: Clarendon, 1993); D. M. Driesen, 'Thirty Years of International Environmental Law: A Retrospective and Plea for Reinvigoration' (2003) 30 Syracuse Journal of Law and Commerce 353; J. L. Dunoff, 'From Green to Global: Toward the Transformation of International Environmental Law' (1995) 19 Harvard Environmental Law Review 241; M. J. Kelly, 'Overcoming Obstacles to the Effective Implementation of International Environmental Agreements' (1997) 9 Georgetown International Environmental Law Review 447; G. Palmer, 'New Ways to Make International Environmental Law' (1992) 86 American Journal of International Law 259.

(142) See L. Henkin, How Nations Behave: Law and Foreign Policy (2nd ed.) (New York: Columbia University Press, 1979), 47. This is discussed in the Conclusion.

(143) Compliance with international environmental agreements is discussed in Chapters Four and Five. See generally A. Chayes and A. H. Chayes, The New Sovereignty: Compliance with International Regulatory Agreements (Cambridge: Harvard University Press, 1995); E. B. Weiss, 'Understanding Compliance with International Environmental Agreements: The Baker's Dozen Myths' (1999) 32 University of Richmond Law Review 1555; E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998).

success. It follows that issues related to overlapping treaties may have contributed to the ineffectiveness of the international water regime, but it is unlikely that they are the primary cause of its ineffectiveness. At least as important were the north/south dispute about sovereignty, lack of political will, the complexity of water related issues, and more recently, the pervasive influence of corruption in some of the key water regions of the world.

LOWEST COMMON DENOMINATOR AGREEMENTS

Closely related to the duplication in agreements and organisations discussed above, and a recurring theme of international environmental negotiations, is the tendency for parties to agree to texts which are lowest common denominator agreements(144). This occurs most frequently in situations in which agreement on complex issues or demanding targets is impossible so parties must choose not to reach any agreement, or to agree to conditions which they know, from the outset, will be breached (either by themselves or by other parties), or to agree to a text which is little more than hortatory or aspirational or which sets targets which are so low that they are meaningless since the meeting of those targets will not alter the problem which the agreement was designed to address.

The Forest Principles, for example, were not binding, did not set targets, and were little more than an aspirational statement reflecting an uneasy compromise between the two main groups

(144) Chapter Three discusses the process by which treaties are negotiated and the compromises which are often made by treaty negotiators. See generally S. Barrett, Environment and Statecraft: The Strategy of Environmental Treaty-Making (Oxford: Oxford University Press, 2003).

at UNCED. Arguably, this gave parties flexibility to interpret and implement the Principles in the most appropriate way in their own countries.

In reality, many parties ignored the Principles or relied only on individual Principles which corresponded with national priorities in other areas. Since the Principles did not create mechanisms for monitoring or enforcing compliance, it was impossible to determine which parties were adhering to any or all of the Principles and which were disregarding them.

Even in circumstances in which persuasive evidence of non-compliance existed, there were no sanctions, nor would it necessarily have been appropriate to apply sanctions to all Parties since it is likely that reasons for non-compliance varied. Some countries may, for example, have wished to comply but may have lacked the resources to do so, whereas others may have agreed to the Principles knowing that they would not implement them, notwithstanding that those parties may have had adequate resources to effect implementation(145).

However, as with duplication between treaties and organisations, it is unlikely that lowest common denominator agreements are the reason why the international forest debate has failed to reduce deforestation and forest degradation.

As introduced above and discussed later in this thesis, other reasons, external to international agreements and organisations, were at least as important.

(145) See n 281.

SOFT LAW

In classical international law, the term "soft" law referred to non-binding international agreements(146), such as the Forest Principles. These were characterised by their aspirational or hortatory nature and by the fact that they were unenforceable. Consequently, they were generally regarded as weaker than binding agreements, such as the CBD, and not binding on states which have conflicting obligations under other multilateral agreements(147).

In fact, recent studies on compliance have demonstrated that adherence to international agreements depends on a range of factors, only one of which is the status (i.e. binding or non-binding) of the agreement(148). A number of recent challenges to international law have also demonstrated that binding or "hard" law is not as binding as was previously accepted. Boyle described soft law as "a multi-faceted concept, whose

(146) See, for example, R. R. Baxter, 'International Law in "Her Infinite Variety"' (1980) 29 International and Comparative Law Quarterly 549; A. E. Boyle, 'Some Reflections on the Relationship of Treaties and Soft Law' (1999) 48 International and Comparative Law Quarterly 901; C. M. Chinkin, 'The Challenge of Soft Law: Development and Change in International Law' (1989) 38 International and Comparative Law Quarterly 850; P.-M. Dupuy, 'Soft Law and the International Law of the Environment' (1991) 12 Michigan Journal of International Law 420.

(147) This interpretation of soft law has significant implications for forests. For example, adherence to the (binding) UNFCC and Kyoto Protocol could result in the development of large areas of monoculture carbon offsets with little consideration being given to mixed forests, which have better environmental and social benefits. This is because the environmental and social benefits of forestry appear only in the (non-binding) Forest Principles but not in the (binding) UNFCC and Kyoto Protocol, which deals with forests only to the extent that they relate to climate change. On the other hand, the flexible nature of soft law allows for different interpretations of the same provision so it provides for a diverse range of local circumstances.

(148) E. B. Weiss, 'Conclusions: Understanding Compliance with Soft Law' in D. Shelton (ed.), Commitment and Compliance: The Role of Non-Binding Norms in the International Legal System (Oxford: Oxford University Press, 2000). See also n 219.

relationship to treaties is both subtle and diverse"[149]. He suggested that soft law has several meaning, of which three are relevant to the relationship between soft law and treaties. Those are: that soft law is not binding; that soft law consists of general norms or principles, not rules; and that soft law is law that is not readily enforceable through binding dispute resolution. These meanings are closely related to the preference that some states demonstrate for non-binding, instead of binding, agreements.

Boyle argued that there are three reasons why soft law may represent an attractive alternative to binding treaties. First, it may be easier for negotiators to reach agreement when the form of the text is non-binding. Second, it may be easier for some states to adhere to non-binding instruments because this enables them to avoid domestic ratification processes which might challenge international commitments or impose additional accountability mechanisms at domestic level.

Third, soft law instruments are often easier to amend or replace than treaties since amendment or replacement may require only the adoption of a new resolution. Consequently, negotiations for soft law instruments may be less expensive than those for binding agreements since they may be considerably shorter. This may be particularly attractive to developing countries with limited resources. Non-binding agreements may also be regarded as a step towards a binding agreement and so may offer parties an opportunity to test an agreement in their national environments and then to negotiate a binding agreement at a later date.

(149) A. Boyle, 'Some Reflections on the Relationship of Treaties and Soft Law' (1999) 48 International and Comparative Law Quarterly 901.

ROLE OF NON-STATE ACTORS

The UN Charter begins "We the peoples.." but the intergovernmental arrangements are top-down processes, managed by governments or international organisations, with limited input from "the peoples"(150). In 1972 at WCHE, interaction was primarily between the representatives of the 113 governments who participated in that conference. Twenty years later, in 1992 at UNCED, NGOs participated in preparatory committees and were present at the Conference as observers. By 2002 at WSSD, NGOs outnumbered the representatives of national governments and were involved in almost every aspect of the conference, although they did not have voting rights since they did not represent countries(151). Clearly, since 1972, the role of NGOs has expanded.

It appears, for example, that larger international NGOs now have capacity to exert significant political pressure on governments, notwithstanding that those NGOs may not represent a defined constituency(152).

Several legal scholars have reviewed the role of NGOs in international law and governance(153). In 1992, Tarlock explored

(150) See R. Faulk and A. Strauss, 'On the Creation of a Global Peoples Assembly: Legitimacy and the Power of Popular Sovereignty' (2000) 36 Stanford Journal of International Law 191 which argues that, given the lack of global democratic institutions, democratic procedures and institutions be extended to the global level by means of the creation of a global peoples assembly.

(151) In fact, some countries include representatives of NGOs as members of their national delegations, although those representatives tend to be from national, not international, NGOs.

(152) The role of NGOs (including NGOs which purport to represent indigenous peoples) in the international forest debate is discussed in Chapters Three and Four.

(153) See, for example, S. Charnovitz, 'Two Centuries of Participation: NGOs and International Governance' (1997) 18 Michigan Journal of International Law 183; J. K. Gamble and C. Ku, 'International Law – New Actors and New Technologies: Center Stage for NGOs?' (2000) 31 Law and Policy in International Business 221; C. Giorgetti, 'From Rio to Kyoto: A Study of the Involvement of Non-Government Organizatons in the Negotiations on Climate Change' (1999)

the role of NGOs in the establishment and enforcement of global environmental priorities(154). He identified deficiencies in classical international law and argued that NGOs assist in overcoming these by setting priorities and enforcing international norms. However, it is possible that Tarlock overemphasised the effectiveness of NGOs. This is because later in the 1990s, Weiss and Jacobson assessed compliance with five international environmental agreements and analysed several related issues(155).

They argued that while NGOs often raise awareness of environmental issues, few NGOs have the capacity to undertake a comprehensive monitoring role and none have authority to apply anything more than political pressure. Political pressure can be effective, but is not necessarily so.

In 2003, Pagnani reviewed the role of environmental NGOs(156). She analysed the extent to which environmental NGOs transcend national borders and thus reduce the importance of the role of the state.

7 New York University Environmental Law Journal 201; K. Nowrot, 'Legal Consequences of Globalization: The Status of Non-Government Organizations under International Law' (1999) 6 Indiana Journal of Global Legal Studies 579; K. Raustiala, 'The "Participatory Revolution" in International Environmental Law' (1997) 21 Harvard Environmental Law Review 537.

(154) A. D. Tarlock, 'The Role of Non-Governmental Organizations in the Development of International Environmental Law' (1992) 68 Chicago-Kent Law Review 61.

(155) The results of Weiss and Jacobson's study are discussed in the Conclusion. See generally E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998); E. B. Weiss and H. K. Jacobson, 'Why Do States Comply with International Environmental Agreements: A Tale of Five Agreements and Nine Countries' (1996) 1 Human Dimensions Quarterly 1; E. B. Weiss, 'The Five International Treaties: A Living History' in E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998); H. K. Jacobson and E. B. Weiss, 'Compliance with International Environmental Accords: Achievements and Strategies' in M. Rolen, H. Sjoberg and U. Svedin (eds.), International Governance on Environmental Issues (London: Kluwer Law International, 1997).

(156) M. A. Pagnani, 'Environmental NGOs and the Fate of the Traditional Nation-State' (2003) 15 Georgetown International Environmental Review 791.

This, according to Pagnani, raises questions about whether the state is necessary to effect political change. She argued that environmental NGOs have reconfigured communities across traditional borders and so have contributed to unity on international issues, although this may also have led to an erosion of commitment to states.

This emphasis on international environmental issues can both strengthen and weaken the state since (according to Pagnani) NGOs encourage civic participation and rely on states to implement ideas and objectives. Pagani argued that four primary issues have contributed to inaction by states. First, governments lack accountability on international environmental issues because those issues are international and so do not belong to any state.

Second, states are reluctant to resolve transboundary problems since they assume that another state will do so. Third, popular support tends to focus on national rather than international issues so governments focus on national issues since this ensures that they receive support. Fourth, the Westphalian model of sovereignty(157), on which the international system is based, is premised on action between nations, not between nations and NGOs, multilaterals, individuals or other non-state entities. The inability, or reluctance, of nations to address international environmental issues creates a vacuum which international NGOs fill. This weakens state control over national activities and enables non-state entities, such as NGOs, to co-exist with states in international environmental issues.

(157) The Peace of Westphalia, a 1648 settlement which ended the Thirty Years War, is recognised by many lawyers and political scientists as the origin of the nation state and of the modern system of international law. This, and the impact of recent challenges to that system, is discussed in the Conclusion.

As has occurred in other sectors, the role of NGOs and the private sector in water is increasing. NGOs have been invited to several rounds of negotiations as observers, papers have been submitted to "intersessionals" and implementation partnerships have been developed. Bass suggested that this provides improved equity, greater innovation, "reality checks" and greater credibility of the outcomes of negotiations(158). Similarly, Pagnani concluded that NGOs have become essential purveyors of information, while states, as the sovereign authority, are the implementing agencies.

This, however, assumes both that NGOs convey accurate, complete and impartial information and that states are central to the process of implementing change. In fact, when input from NGOs (who purport to represent "the peoples") is permitted in UN processes, those NGOs may not be any more representative of forest users than are national governments since NGOs are not necessarily democratically elected organisations and may be self-selecting. In fact, NGOs, particularly in forestry, have diverse agendas and tactics, some of which are particularly confrontational, which do not assimilate well into the negotiation-based models of international processes. There are global NGOs, but there are few global private sector organisations and those which do exist represent the larger and politically more powerful corporations rather than smaller, and perhaps more progressive or disadvantaged producers. NGOs have been widely criticised as being non-representative, non-accountable, and non-transparent(159). However, non-state action can have benefits and may offer a path forward instead of, or as well as, national and international initiatives.

(158) S. M. J. Bass, 'International commitments, implementation and cooperation' XII World Forestry Congress 2003 Proceedings C257.

(159) Criticisms of NGOs are discussed in the Conclusion.

GOOD GOVERNANCE

Throughout this paper, the importance of good governance is emphasised. This is important because the effective management of water requires a stable system of governance and an effective rule of law. In June 1998, the UN Economic Commission for Europe (UNECE) adopted the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice ("Aarhus Convention").

This Convention is significant because it integrates transparency and accountability with environmental protection. Acknowledging the Stockholm and Rio Declarations and the World Charter for Nature(160), the Convention requires each party to "..guarantee the rights of access to information, public participation in decision-making, and access to justice in environmental matters"(161). The Convention provides for transparency and access to information(162), requires public participation in decision making, planning and preparation of legislation(163), sets out procedures for review and appeal under the broad heading of "Access to Justice"(164) and establishes dispute resolution mechanisms(165). All of this corresponds particularly closely with Principle 10 of the Rio Declaration(166).

(160) Preamble to the 1998 Aarhus Convention.

(161) Article 1, 1998 Aarhus Convention.

(162) Articles 4 and 5, 1998 Aarhus Convention.

(163) Articles 6, 7 and 8, 1998 Aarhus Convention.

(164) Article 9, 1998 Aarhus Convention.

(165) Article 16 of the Aarhus Convention provides that at any time, a party may declare that in the event of dispute, it accepts submission of the dispute to the International Court of Justice, or aribitration in accordance with the procedure set out in Annex 3 to the Convention, or both.

(166) Principle 10 of the Rio Declaration states: 'Environmental issues are best handled with the participation of all concerned citizens, at the relevant level. At national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall

The Convention entered into force on 30 October 2001 and to date, has been ratified by 27 European Countries. Described by the UN Secretary General, Kofi Annan, as "..the most ambitious venture in the area of environmental democracy so far undertaken under the auspices of the United Nations [whose] adoption was a remarkable step forward in the development of international law", the Convention applies only to Europe. Since none of the world's key forested countries are located in Europe, the Convention may establish or clarify important principles but is unlikely to have a direct effect on deforestation in the most vulnerable regions. Further, since the Convention has been in force for less than three years, it is too early to evaluate its effectiveness but it is at least possible that its effectiveness will be hampered by factors which limit the effectiveness of other regional and international agreements. Consequently, even if the Aarhus Convention were to be linked directly to water issues and adopted on a global basis, it is unlikely that it would rectify many of the current difficulties in water law and governance, although it could help to prevent further difficulties from arising in the future.

CHALLENGES TO INTERNATIONAL LAW

Traditionally, international law focused on recognising and preserving each state's sovereignty. It was premised on the freedom of control over activities within each state's jurisdiction. Since the early 1990s, however, there have been several significant challenges to international law and to the system of international relations which is premised on that law. The classical nation state, which emerged from Westphalia more than three hundred years ago, is no longer the sole actor in international relations.

facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.'

Multinationals, NGOs, individuals and regional groups have all influenced international relations and some developing countries now wield considerable political and economic power. In 1979, Henkin predicted:

> In the final quarter of the twentieth century the character and significance of international law will…be importantly influenced by the Third World. The aspirations, the ideas and the rhetoric of the new majority – "self-determination", "the elimination of all forms of racial discrimination," "the common heritage of mankind" (in the seabed), "the new economic order" – have become political currency and are shaping and reshaping the effective law.(167)

Twenty five years later, the common heritage of mankind, which Henkin attributed to the seabed, has been extended by international law to all natural resources. Racial discrimination is almost (although not completely) universally unlawful and self-determination is recognised as the legitimate goal of the few remaining territories which are not yet independent. Clearly, there have been significant changes to the classical international legal order but further change may be necessary if forest loss and degradation is to be averted.

As early as 1992, before the CBD had been agreed, Bragdon suggested that effective conservation of biodiversity will require modification of traditional principles of sovereignty(168). She argued that the traditional legal order "must evolve or be suspended"(169) but suggested that states could maintain the vital aspects of

(167) L. Henkin, How Nations Behave: Law and Foreign Policy (2nd ed.) (New York: Columbia University Press, 1979), xiii.

(168) See S. H. Bragdon, 'National Sovereignty and Global Environmental Responsibility: Can the Tension be Reconciled for the Conservation of Biological Diversity' (1992) 33 Harvard International Law Journal 381.

(169) Ibid 391.

sovereignty and would be able to exercise "..all those rights to which they are entitled as subjects of international law, limited only by a new obligation provided by a broader interpretation of state responsibility that encompasses not only environmental harm but also health"[170]. In fact, such an obligation would constrain the exercise of many of the rights which derive from sovereignty since the experience of the CBD[171] in the period 1992-2000 demonstrates that prevention of environmental harm and safeguarding of environmental health affects many aspects of national political, economic and social life.

Over the last few years, several scholars have identified fundamental changes in the international legal order[172]. In 2000, Weiss identified a growing consensus on human rights, but disagreement over the roles of the WTO, the World Bank and the IMF and the impact of their promotion of globalisation and economic growth on social and environmental issues[173]. Weiss argued that the growing number of international agreements and the continuing primacy of the state in international relations provided evidence that traditional international law remained valid. However, states are no longer the sole focus of international law so international law must be redefined to accommodate non-state actors and non-binding instruments. This, according to Weiss, raises three important issues[174]: the need for new actors to be accountable and for new norms to be legitimate; the need

(170) Ibid 392.

(171) The CBD is discussed in Chapter Four.

(172) See, for example, C. Ku, Global Governance and the Changing Face of International Law (2001) ACUNS Reports and Papers No. 2; P. Sands, 'Turtles and Torturers: The Transformation of International Law' (2001) 33 New York University Journal of International Law and Politics 527; E. B. Weiss, 'The Rise or the Fall of International Law?' (2000) 69 Fordham Law Review 345.

(173) E. B. Weiss, 'The Rise or the Fall of International Law?' (2000) 69 Fordham Law Review 345.

(174) Ibid 346.

for consensus about the level or location of authority (i.e. local, national or international) at which norms should be negotiated; and the need for international law to reflect "commonly held values"(175) in order that a unified system be maintained. Weiss' reviewed several issues (e.g. globalisation, the role of NGOs), all of which are discussed in this thesis. This led her to identify three emerging characteristics of international law: the increasing legalisation of international relations; the blurring of public and private international law; and the integration of international and domestic law. These too are discussed in this thesis. For Weiss, two challenges emerge from this.

First, there is a need to develop mechanisms to monitor the accountability of states, the private sector and NGOs and a corresponding need to build processes for legitimating the norms which have been developed by transnational actors. Second, there is a need to establish a process to determine the level of authority appropriate to each issue.

Weiss concluded that while there is a growing consensus about certain common values (e.g. the importance of environmental protection, transparency and accountability), consensus has not emerged on many important issues, and issues important to some states have been ignored. For states to have and maintain political will to implement international agreements, binding or non-binding, those agreement must be perceived as equitable. International law has permeated society to a greater extent than ever before, but agreements which disregard or compromise the interests of states are likely to be ignored by those states. Chapter Three of this thesis suggests that every international agreement is likely to require some form of compromise so the challenge now for international law is to find a means of crafting

(175) Ibid.

agreements that are perceived to be equitable and relevant by all the parties, that include mechanisms to facilitate transparency and accountability, and that resolve the problems which they are designed to address.

In 2001, Sands identified similar themes emerging in international law(176). He argued that traditionally, international law regulated relations between states but it now serves a broader range of societal interests and encompasses non-state parties. This, according to Sands, challenges some of the basic assumptions which have informed the international system at least for the last century.

Citing US and English cases from the late nineteenth century, Sands demonstrated how historically, international law governed a world order in which states were the only actors and where the need to protect sovereignty was paramount. This, according to Sands, promoted a legal order which was controlled by the establishment of a limited number of ground rules and respect for the equal sovereignty of all states. Any attempt by a tribunal or other external institution to restrict sovereignty beyond the essentials necessary for the civilised conduct of international discourse would destabilise that order because nations would not tolerate interference in their affairs. This order has been challenged by at least two areas of international law – environment and human rights – which developed in the late twentieth century. Inherent in those developments was a developing public awareness of international law, the availability of mechanisms to facilitate transparency and accountability and the emergence of international civil society.

(176) P. Sands, 'Turtles and Torturers: The Transformation of International Law' (2001) 33 New York University Journal of International Law and Politics 527.

Sands used two cases, Pinochet's extradition to Spain which was considered by the House of Lords, and the prohibition by the US of imports of shrimp from four Asian countries, which was considered by the Appellate Body of the WTO, to demonstrate how international law is changing. First, both cases reflect a recognition that what one state does within its territory can be of legitimate interest to another state(177). This is because local acts have been internationalised and the legal understanding of national boundaries is changing.

Second, both cases originated with acts which were not taken by the executive part of government and which government had been unable to stop through political actions or applications before national courts(178). Third, a significant role was played by national and international courts, notwithstanding that the law on both cases was vague or ambiguous(179). Traditionally, courts would have sought a clear rule and applied that rule to the facts of the case, limiting sovereignty only to the extent that it was essential to do so. In the absence of such a rule, courts would have assumed that the international community did not intend to fetter sovereignty.

In both cases, courts intervened notwithstanding the absence of express rules. For Sands, both decisions are not turning points in international law but are part of a continuum of development which can be traced back to the establishment of the UN and beyond. Four factors, according to Sands, influenced this development in the 1980s and 1990s. Those factors are: globalisation; technological innovation; democratisation; and privatisation. These correspond closely with the factors identified by Weiss. Sands argued that three developments in

(177) Ibid 535.

(178) Ibid.

(179) Ibid 536.

particular challenge some of the most basic assumptions about international law; the increased role of non-state actors; the implications of the increase in the body of rules of international law; and the proliferation of international courts and tribunals. In the Shrimp case, the amicus briefs prepared by NGOs became part of the written record on the basis of which the Appellate Body reached its decision. This was the first WTO/GATT case in which this occurred.

This is significant because the WTO (and its predecessor, the GATT) is an intergovernmental institution which envisaged no role for non-state actors so the inclusion of non state material suggests a growing recognition that state-only international process is no longer appropriate when issues are relevant to broader sections of civil society. Judge Rosalyn Higgins of the International Court of Justice has questioned whether greater participation represents the democratisation of international law or its degradation(180). It is too early to answer that question, but it is clear that the nature of international law is changing rapidly.

Sands argued that the proliferation of international law and international tribunals has resulted in duplication and inconsistencies between different laws. The decentralised international system encourages the adoption of bilateral, regional and global instruments without reference to an overall structure. This leads to generalities, ambiguity and compromise. For Sands, the key question is: what is to be done when norms in two or more areas appear to conflict with each other ? International law was traditionally presented as a series of separate subjects – the law of the sea, air law, human rights, environment, economic development. Clearly, this is no longer

(180) R. Higgins, 'The Reformation of International Law' in R. Rawlings (ed.), Law, Society and Economy: Centenary Essays for the London School of Economics 18951995- (London: Oxford University Press, 1997), 207, 215.

accurate. In the Shrimp case, the WTO Appellate Body had to choose between the competing objectives of free trade and environmental protection. In Pinochet, it was a choice between the long standing sovereign immunity of heads of states and the requirement to give full effect to international commitments on human rights. Objections to both, on the grounds of interference in sovereignty, were overruled not on the basis of an international instrument or a long standing presumption of customary international law which limited sovereignty in the respective areas of activity, but on the basis of "an interpretative approach which sought to ascertain and then apply the presumed values of the international community"(181).

This leads Sands to identify a common thread running through much of the changing law – the willingness of the judiciary, national and international, to fill in what they perceive as gaps in international law. Sands argues that the international judiciary has demonstrated that it is unwilling to defer to traditional notions of sovereignty and state power and that its decisions are now informed by a set of international values, capable of being enforced at national level. This "judicializes" international relations and has a double effect. First, national courts consider the possibility of international appeals.

Second, international decisions are removed from the political control of states and jurisdiction is exercised by a new international judiciary. States thus lose some control of international law making since, as with every court, the line between interpreting law and making new law is not clear. This, according to Sands, has pitfalls because an international judiciary has been created, it is not directly accountable to any identifiable body, and it lacks long term planning or strategy.

(181) Sands, 552.

For Sands, environmental law and human rights have been the catalyst for many of these developments in international law. Both areas have linked local communities to international law in a way that was never before anticipated. Traditionally the community of international lawyers was small, was located largely within academia and government, was informed by sovereignty, and those notions to separate issues in international law, such as the law of the sea or air law. This has changed beyond recognition. The international law of the forest now encompasses trade, intellectual property, sustainable development and human rights. It extends from local communities to UN fora, upwards and downwards, and is regulated, largely ineffectively by a piecemeal collection of international instruments interpreted by local, national and international courts. Sovereignty remains central to the international system, but notions of sovereignty are changing rapidly and the path forward is not yet clear, particularly not in controversial areas such as international water law.

In 2001, Ku discussed the changing nature of international law(182) and reached conclusions that are directly relevant to the international forest debate. She argued that the purpose of international law is to manage by systemic change and adaptation the conflict generated by power and politics. Treaties are a tool used for this purpose and are also an expression of the solution reached by the international process. When that process fails, treaties are not agreed or agreements which are reached are unenforceable from the outset. Ku argued that the effective operation of law (national and international) required that three elements be aligned: first, a legal concept that is sufficiently developed for it to be communicated clearly; second, a structure or framework that can support the operation of law; and third,

(182) C. Ku, Global Governance and the Changing Face of International Law (2001) ACUNS Reports and Papers No. 2.

political consensus and will of the system's members to use the law.

In fact, as early as 1979, Henkin recognised the earlier concepts of sovereignty were no longer appropriate to some aspects of international relations and observed "..sovereignty has also grown a mythology of state grandeur and aggrandizement that misconceives the concept and clouds what is authentic and worth in it, a mythology that is often empty and sometimes destructive of human values"(183). Thirty years later, both Sands(184) and Weiss(185) argued that international law was changing to accommodate non-state interests and to reflect non-state values. Sands described those as "universal values". Weiss is more reticent. This may be appropriate since those values appear to change according to the issue at stake. What is, however, clear is that international law has changed considerably in the last thirty years, and particularly so in the last ten. Ku argued that while NGOs have been involved in negotiations, they do not wield power. Consequently, power remains with the state.

This has two important implications. First, state power must be recognised since under the existing systems of international law and international relations, it is states who participate in international processes on behalf of their citizens. For Ku, this means that NGOs must not push law beyond the limits to which important powers will go. As evidence to support this, Ku cited the actions of the Peace Leagues of the 1930s which demanded actions from Britain which ultimately undermined their own goals. Second, long term commitments by key states are required for effective institution building and the development of

(183) Henkin, 21.

(184) See P. Sands, 'Turtles and Torturers: The Transformation of International Law' (2001) 33 New York University Journal of International Law and Politics 527.

(185) See E. B. Weiss, 'The Rise or the Fall of International Law?' (2000) 69 Fordham Law Review 345.

law. In the water context, it is important to note that key states are not necessarily global powers. Key water states include states which are relatively politically insignificant at global level but for issues such as water conservation, those states may be as significant as leading economic powers. At the same, time, according to Ku, leading powers must realise that power alone is not sufficient to operate effectively and that their interests require the structured frameworks that international cooperation can provide.

Ku argued that the extent to which international law will succeed in resolving particular problems depends on whether the regimes it establishes meet the above three-fold test of legal effectiveness. When one or more of those three factors is misaligned, power and law may be too far apart to support the successful establishment of a new regime. The international water debate reflects this misalignment. Power (in terms of sovereignty over forest resources) lies with some of the poorest nations of the world.

Another form of power, the financial resources and technology needed by those nations to exploit their natural resources, lies with the wealthiest nations. Some of the poorest nations would comply with international commitments if they had the resources to do so. Others would not. In the north, most countries are willing to comply with conservation commitments, but only if those commitments do not affect their industries. The result is an international legal system in which treaties and organisations have proliferated, but are so separate from the roots of power that little has been achieved.

Ku concluded that the effectiveness of international law depends on an accurate assessment of the power bases and political contexts in which legal standards and obligations must

operate. This assessment will vary according to the political issue at stake. For forest related issues, the assessment has proved to be too complex for the existing international system. Consequently, some initiatives have emerged at local level(186) but at international level, little progress has been made. At that level, law has provided a framework for political discourse. When major states accept that framework as legitimate, collective progress towards common solutions for regional and global issues is possible. This leads to the expansion of the international agenda from its origins in the elimination of war to a broad range of economic, political and social issues. However, many states have challenged the legitimacy of the international framework to address forest issues. At the same time, that framework has not demonstrated its willingness to grapple with the most complex issues. The result, for water, is a stalemate.

In response to this stalement, in 2001 Kunich(187) analysed the legal protection afforded to hotspots(188) (i.e. ecosystems which contain "exceptional concentrations of species with exceptional levels of endemism"(189) and which "face exceptional degrees of threat"(190)). Since many species have not yet been identified, hotspots are characterised by uncertainty so Kunich discussed the significance of 10 international environmental agreements(191)to 28 hotspots(192) in the light of that uncertainty,

(186) Chapter Four discusses one local initiative, Community Forest Management (CFM).

(187) J. C. Kunich, 'Fiddling Around While the Hotspots Burn Out' (2001) 14 Georgetown International Environmental Law Review 179.

(188) The term "hotspot" was coined by Meyers in 1988. See N. Meyers, (1988) 8 Environment 187.

(189) Ibid 187.

(190) Ibid.

(191) The international environmental agreements are: CBD; CITES; WHC; Apia, Berne, Bonn, Ramsar and Western Hemisphere Conventions; ASEAN Agreement; and the African Nature Convention.

(192) The hotspots are: Madagascar; Atlantic Coast Brazil/Atlantic Forest Region; Western Ecuador/Choco-Darien-Western Ecuador; Colombia; Western Amazonia Uplands/Tropical

and identified from that analysis problems inherent in the international law approach. Kunich identified several difficulties – imprecise or discretionary treaty obligations or both, lowest common denominator agreements, overlapping and inconsistent treaties, ineffective compliance and enforcement mechanisms – all of which are discussed in this thesis.

Kunich also criticised the "wiggle room"(193) in some international agreements which allows parties to expand and develop their economies at the expense of natural resources. Kunich, however, went much further than earlier writers. In addition to suggesting the usual range of sanctions, he argued that given the intensity of the threat and the disregard of poachers and loggers for the rule of law, military intervention, either by a UN or a US force, would be the most effective, if not the only, means by which corruption could be addressed and conservation obligations in large, remote and dangerous hotspots could be enforced(194). Such intervention, according to Kunich, would be justifiable under international law on the grounds on which humanitarian intervention is currently undertaken(195). Kunich added: "..the

Andes; Eastern Himalayas/Mountains of South-Central China; Peninsular Malaysia/ Northern Borneo/Sundaland; Philippines; New Caledonia; Southwestern Ivory Coast/ Guinean Forests of Western Africa; Eastern Arc Mountains and Coastal Forests of Tanzania/ Kenya; Western Ghats of India and Sri Lanka; Cape Floristic Province of South Africa; Southwestern Australia; California Floristic Province; Central Chile; Hawaii/Polynesia/ Micronesia; Mesoamerica; Caribbean; Brazilian Cerrado; Mediterranean Basin; Caucasus; New Zealand; Succulent Karoo of South Africa; Wallacia; Papua New Guinea; Congo River Basin/Democratic Republic of Congo; and Indo-Burma. Some writers do not consider Papua New Guinea and the Congo to be hotspots because the threat to biodiversity in both is lower than it is in other sensitive regions.

(193) Kunich, 261.

(194) Kunich, 260.

(195) For humanitarian intervention and international law see, for example, S. Chesterman, Just War or Just Peace? Humanitarian Intervention and International Law (Oxford: Oxford University Press, 2001); J. L. Holzgrefe and R. O. Keohane (eds.), Humanitarian Intervention: Ethical, Legal and Political Dilemmas (Cambridge: Cambridge University Press, 2003); J. M.

nation in need would have to be receptive, but under some circumstances it is the only way to accomplish an important objective"[196].

Kunich's proposal is more extreme than those of other scholars, but it reflects a growing international recognition that the combination of UN water processes and international environmental agreements has failed to avert water scarcity and have also failed to fully engage with the complex political and economic circumstances which exist in many of the world's key water countries. In fact, Kunich concluded by acknowledging that "the piecemeal method of international persuasive methods"[197] is unlikely to achieve success on a global basis. In 1992 at UNCED, there was insufficient agreement about sovereignty over natural resources and the right to development for there to be any serious agreement on issues as complex and as economically critical to many countries as the conservation and development of forests.

Dr Mathahir Mohamed, Prime Minister of Malaysia, summarised this in these terms: "The poor countries have been told to preserve their water and genetic resources on the off-chance that at some future date something is discovered which might prove useful to humanity. This is the same as telling those poor countries that they must continue to be poor because their water and other resources are more precious than themselves"[198].

Mathahir's subsequent comment on the economic reality of some of the ideas mooted at UNCED is similar: "When

Walsh (ed.), Humanitarian Intervention and International Relations (Oxford: Oxford University Press, 2004).

(196) Kunich, 260.

(197) Kunich, 262.

(198) UN Document A/CONF.15126//Rev.1, Vol. III, 233.

the rich chopped down their own forests, built their poison-belching factories and scoured the world for cheap resources, the poor said nothing…Now the rich claim a right to regulate the development of the poor countries. And yet any suggestion that the rich compensate the poor adequately is regarded as outrageous"[199]. It is in proposals such as Kunich's that the extent of the north/south divide is most evident. Writing earlier this year about the legitimacy under international law of international intervention on humanitarian grounds, Kennedy argued "..our culture has lost access to the sort of transcendental external standpoint which could sustain a sincere humanitarian practice of judgment"[200]. Kunich's proposal suggests that this external standpoint is missing too from the international water debate.

RELIGION AND INTERNATIONAL LAW

There is a small but growing stream of literature which analyses the failure of the international system to engage with religion and suggests that this failure has contributed to recent failures of the international system[201]. Westphalia separated religion from statecraft so this disengagement is hardly surprising, but four

(199) Ibid.

(200) D. Kennedy, The Dark Sides of Virtue: Reassessing International Humanitarianism (Princeton: Princeton University Press, 2004), 310.

(201) See, for example, S. Appleby, The Ambivalence of the Sacred: Religion, Violence and Reconciliation (Lanham: Rowman and Littlefield, 2000); P. L. Berger (ed.), The Desecularization of the World: Resurgent Religion and World Politics (Washington DC: Ethics and Public Policy Center, 1999); J. D. Carlson and E. C. Owens (eds.), The Sacred and the Sovereign: Religion and International Politics (Washington DC: Georgetown University Press, 2003); F. Petito and P. Hatzopolous (eds.), Religion in International Relations: The Return from Exile (New York: Palgrave Macmillan, 2003); D. Philpott, 'The Religious Roots of Modern International Relations' (2000) 52 World Politics 206; S. M. Thomas, 'Taking Religious and Cultural Pluralism Seriously' (2000) 29 Millennium: Journal of International Studies 815; S. M. Thomas, 'The Global Resurgence of Religion, International Law and International Society' in M. W. Janis and C. Evans (eds.), Religion and International Law (London: Kluwer Law International, 1999).

hundred years later, it became clear that international law had ignored, to its peril, the potent influence of religion in many regions of the world. This may be directly relevant to the international forest debate since some of those regions are among the world's key forested areas. In the early 1990s, Huntington analysed world politics after the fall of communism and argued that seven or eight major "civilizations"(202), only one of which is in the west, have replaced nations and ideologies as the driving force in global politics(203). He argued that modernisation is not necessarily westernisation, that economic progress has been accompanied by a revival of religion, that post Cold War politics emphasizes religious and ethnic nationalism over ideology, that the lack of leading core states hampers the growth of Latin American and the Islamic world, and that Muslim states are involved in more violent conflict than other states. For Huntington, future conflict will take place at the fault lines between cultures and civilisations. Huntington's analysis remains controversial but his central points – that the influence of the west is waning because of growing resistance to its values and that there is an increasing threat of violence from renewed conflicts between countries and cultures that base their traditions on religious faith – are relevant to the international forest process. This is because the failure of international environmental law to engage with religion has led to a failure to fully understand values which influence many local communities, a failure to appreciate the principles which underpin non-western legal systems, and perhaps most importantly, a failure to harness the strengths of various religious traditions to resolve difficulties which other processes have failed

(202) Huntington's "civilizations" are Western, Eastern Orthodox, Latin American, Islamic, Chinese, Japanese, Hindu and African.

(203) S. P. Huntington, 'The Clash of Civilizations' (1993) 72(3) Foreign Affairs 22. Huntington subsequently developed his article into a book: S. P. Huntington, The Clash of Civilizations and the Remaking of World Order (New York: Simon and Schuster, 1996).

to resolve. There are four reasons why religious institutions could be influential in resolving complex water related issues[204]. First, those institutions are often well established and have a pervasive influence in the community. Second, those institutions may serve as an apolitical force for change based on a respected set of values. Third, those institutions may have unique leverage for reconciling conflicting parties, including an ability to rehumanise relationships. Fourth, those institutions may have the capacity to mobilise local, national and international support and to operate effectively at each of those levels.

Building on Huntington's work, in 1994 Johnston suggested that following the end of the Cold War, new conflicts would derive from "..clashes of communal identity, whether on the basis of race, ethnicity, nationality or religion"[205] and would tend to occur at "fault lines between rival nationalities or in situations where societies are suffering from the strains of economic competition and rising expectations"[206]. These, according to Johnston, are the most intractable sources of conflict and are the sources to which conventional diplomacy is least suited. This corresponds closely with the challenges facing global water management. Many of the world's key water areas – the GCC, Indonesia, Philippines, Papua New Guinea, Central and West Africa and the Amazon – are located on geopolitical fault lines and are undergoing rapid economic development at a pace which far exceeds that which government is capable of regulating. In addition, widespread ethnic conflict has led to the destruction of natural resources and consequential dislocation

(204) See D. Johnston and B. Cox, 'Faith-Based Diplomacy and Preventative Engagement' in D. Johnston (ed.), Faith-Based Diplomacy: Trumping Realpolitik (Oxford: Oxford University Press, 2003), 14.

(205) D. Johnston, 'Introduction: Beyond Power Politics' in D. Johnston and C. Sampson (eds.), Religion, The Missing Dimension of Statecraft (Oxford: Oxford University Press, 1994), 3.

(206) Ibid.

of local communities, political instability has limited the capacity of government to intervene, and widespread corruption has limited the effectiveness of any intervention which is attempted. For Johnston, the solution requires "..an understanding of the emotional stakes of the parties, which are often deeply rooted in history, and their respective interpretations of first principles such as self-determination, justice, and freedom."(207). This, Johnston argues, necessitates a move towards a new paradigm of international relations, which extends beyond the Westphalian state-centric focus and accommodates NGO interactions at sub-national and individual levels(208). This has clear parallels with the international forest debate. The existing system of international relations, that of real politik, has failed to offer an appropriate path forward, economic competition has resulted in massive deforestation and ethnic conflict has displaced local communities and separated them from their traditional livelihoods. At sub-national level, CFM has resulted in some benefits but there is not yet a process by which small scale initiatives can be scaled up and integrated into international structures(209).

Approximately ten years later, in 2003, Johnston developed his argument further by demonstrating how in certain specific situations, religious institutions have mediated conflict and prevented violence(210) using the tenets of the major world religions of the regions in which those conflicts were located. This process, which is known as faith-based diplomacy, is a form of Track II (i.e. unofficial) diplomacy which integrates the dynamics of religious faith with the conduct of international relations(211). This

(207) Ibid.

(208) D. Johnston, 'Looking Ahead: Towards a New Paradigm' in Johnston and Sampson, 333.

(209) CFM is discussed in Chapter Four.

(210) D. Johnston (ed.), Faith-Based Diplomacy: Trumping Realpolitik (Oxford: Oxford University Press, 2003).

(211) For Track II and faith-based diplomacy, see D. Johnston, 'Introduction: Realpolitik

is important to the international forest process because by 2002, it was clear that some of the principles on which the international legal system is based had become outdated but the vacuum which this created had not yet been filled. At about that time, Jenkins predicted that the twenty first century will be the century in which "..religion replaced ideology as the prime animating and destructive force in human affairs, guiding attitudes to political liberty and obligation, concepts of nationhood and of course, conflicts and wars"(212). As Johnston recognised, the faith-based diplomacy which he proposed is not a comprehensive solution to the problems facing the international system, but it may complement existing processes and mechanisms and offer a path forward in certain limited situations in which other processes and mechanisms have failed(213). In particular, it may offer a means by which the knowledge and skills developed from certain small scale water projects in specific locations can be transferred to different countries without challenging the principles of sovereignty on which those states are founded or developing yet another international water process to facilitate that transfer.

This emphasis on small scale projects is consistent with Duffield's recent analysis of the relationship between development and conflict(214). Duffield examined the nature of current conflicts, together with the systems of global governance that have emerged in response to those conflicts. This is important because the UN emerged in response to World War II and subsequently extended its mandate to govern a broad range of international issues, including first environmental protection and later specifically

Expanded' in Johnston, 15.

(212) P. Jenkins, 'The New Christianity' Atlantic Monthly October 2002, 54.

(213) D. Johnston, 'Introduction: Realpolitik Expanded' in Johnston, 10.

(214) M. Duffield, Global Governance and New Wars: The Merging of Development and Society (London: Zed Books, 2001).

forests. Duffield argued that widespread commitment of donor governments, aid agencies and multilaterals indicates that war is now part of the development discourse and that notions of development have been transformed in that process. Conflict is now understood to arise from development malaise, so underdevelopment is seen as a source of instability. The transformation of social systems of developing countries is beyond the capacity, and more importantly, beyond the legitimate role, of individual governments of the north. Consequently, individual governments, security forces, aid agencies, multinationals and UN agencies have become part of an emerging system of global governance. The outcome is that the north does not relate to the south "as if the latter were a science laboratory"(215). Instead, the south reflects "policy decisions and aid fashions"(216) that have been formulated elsewhere. This is an accurate description of the international forest process. As priorities changed, "forestry" was removed from aid programs and was replaced by "poverty reduction", which in turn is now being replaced by "conflict resolution". North/south issues appear to be expanding rather than diminishing, as policy makers in the north discover new layers of complexity.

The issues which have emerged from the recent history of the international water debate – duplication in international treaties, the role of NGOs, the role of hard and soft law, sovereignty – inform and underpin the remainder of this paper. As the paper progresses, these issues ebb and flow, sometimes individually, sometimes in combination, and in the final section, they reappear as the keys to the future of international law. First, it considers the relationship between themes which have emerged and the context for law as an instrument for reform and development.

(215) Ibid 264.

(216) Ibid.

First, international environmental regimes can make an important difference(217) but the CBD has achieved little of any real significance. It follows that the problem lies in the CBD, not in the generic nature of international environmental regimes. Miles et al found significant improvement in more than half of the regimes they analysed, together with some success in dealing with malign problems(218). They also found that regimes which engage in activities beyond standard-setting i.e. regimes which are involved in functions such as planning and implementation, tend to be more effective than those which do not(219). This supports the analysis above that the CBD's framework arrangement is one of the reasons for its limited success, since that framework left planning and implementation to each party.

Second, instant success, with any regime, is not possible and the more complex the regime, the longer it will take to design and implement. Rapid design is likely to be flawed and defects are likely to cause problems with implementation from the outset. Before a new regime is established, preparatory work must be undertaken to clarify issues which overlap with existing treaties. This is an enormous task if the proposed regime is complex (as it is for the CBD and would be for water). In fact, it may require comprehensive rewriting of several international environmental treaties. This is unlikely to happen, since it would require political will, significant resources and long term commitment by all parties. If it does not happen, a new regime is likely to be imposed on top of existing treaties. This may lead to duplication and inconsistency between regimes, both of which provide excuses for inactivity. Implementation is a long term task, requiring long term commitment of resources and a

(217) For example, UNCLOS is widely recognised as the basis of a successful international regime, that of the law of the sea.

(218) Miles, Underdal et al, 467.

(219) Ibid.

relatively stable political scene. Consequently, many regimes will be fundamentally unsuitable for turbulent regions.

Third, most regimes fail to achieve optimal solutions. In fact, most fail to solve the problems they were designed to solve, but only a few are counter productive. It is difficult, and perhaps impossible, to calculate the cost of regime formation and operation. Clearly, however, there is a point at which the cost of a new regime outweighs its benefits. This corresponds with Barrett's point that treaty negotiators often sacrifice depth (i.e. content of regime) in order to gain breadth (i.e. the number of parties to the regime)[220]. Given the difficulties in calculating the cost of establishing a new treaty, it is even more difficult to identify the point at which that cost outweighs the benefits of the new regime. It is not therefore clear why any international organisation would create a new regime, since that the regime will fail to achieve an optimal solution, and may fail to solve the problem it is designed to address. This is particularly true if other regimes already duplicate, even in part, the issues to be addressed by the new regime (as was the case for biodiversity and as it is for water).

Fourth, it may be possible to overcome uncertainty and lack of political will if they exist as individual issues. It is unlikely that any regime will overcome both, particularly if they exist together, and even more so if this requires a transfer of resources which is detrimental to any party. For the loss of biodiversity, there exists both uncertainty about its seriousness and a lack of political will to rectify the problem. This is aggravated by CBD's requirements for the transfer of resources, genetic material and technology. This parallels the global forest situation in that there is uncertainty about the seriousness of deforestation, a lack of political will to rectify the problem, and, at UNCED in 1992, there

(220) See pages 35-.

was substantial north/south disagreement on proposals for the transfer of resources.

Fifth, if it is impossible to make significant progress in dealing with the substantive problem, the primary focus should be on building national capacity in skills relevant to conservation of water. This is because only when capacity has been developed will countries have the agencies, instruments and skilled personnel necessary to implement international commitments. Capacity building on a large scale requires long term commitment of resources (together with a relatively stable political regime). Long term investment characterised post-WW2 reconstruction, but has been rare since the early 1970s. International relations are now characterised by rapidly changing political and economic conditions which require rapid responses. Even parties which have, or can negotiate access to, substantial resources are reluctant to make long term commitments of those resources to other parties, since political conditions may change rapidly, and new geopolitical alignments, with a corresponding commitment of resources, may become necessary.

Sixth, there is no simple formula for international environmental treaties which works for all environmental issues and which could be used for forests. The solution must correspond with the problem but the international water problem has not been defined sufficiently clearly for regime design to be possible. As argued above, framework agreements tend to be ineffective. Consequently, it may be impossible to design a treaty which would address all water issues, which would be capable of effective implementation. Ineffective implementation fails to solve the problem which the regime is designed to address and is usually costly. It follows that an international water agreement may not be possible, or even desirable.

Seventh, institutional capacity is central to effective implementation of any regime. Consequently countries which lack institutional capacity are unlikely to be able to implement treaty regimes, even if they have the resources or political will to do so. As discussed above, development of institutional capacity requires long term commitment. Until such capacity is developed in countries with limited capacity, it may be better for those countries to limit their involvement in international agreements since they may be unable to implement the obligations to which they have agreed. This may result in the imposition of sanctions or other penalties or, more realistically, may reduce the credibility of those countries in future international negotiations. However, countries with limited institutional capacity are also the countries which may benefit most from international agreements since international agreements may enable them to access resources which they could not otherwise access.

Eighth, in the 1990s, other treaty regimes began to find that in a highly decentralised international system, entrepreneurial leadership is a critical supplement to, and sometimes a substitute for, government capacity. Forest certification, which is discussed in the next section, is an example of this trend. This suggests that certainly in countries with weak institutional capacity, and possibly more broadly, initiatives designed to foster and develop entrepreneurial activity may be at least as important as national and international initiatives.

Ninth, a particular result is rarely the product of one single factor. There are instances in which a single factor has tipped the balance but it does not follow that this factor is the most important element of that regime. It is simply the issue or event that triggered a change which may be tiny, but which is sufficient to alter the overall effectiveness of a regime. It follows that there

is no quick fix that can alter the fortunes of a disappointing regime. Change is gradual, it involves complex interactions of different factors, many of which are external to and beyond the control of the regime, and it may not be linear. Consequently, even good treaty design and well-planned implementation will not necessarily result in an effective regime.

Tenth, when problems arise, power is the ultimate tool. The issues in the CBD which have caused most difficulty are the transfers of financial and genetic resources, intellectual property rights and technology. These are the issues which are of the greatest interest to the parties which hold power i.e. generally US, to a lesser extent EU, and multinationals (which are outside treaty regimes but are influential). The actions of a single powerful party, or a bloc, can render regimes ineffective. This, combined with the less than optimal outcome of even the best designed regime, casts doubt on the value of many regimes.

This in turn leads to the depressing but accurate conclusion that water may be best served by permitting powerful parties to dominate international forums, while simultaneously developing some other means by which small scale capacity can be fostered in places that need that most. The question this raises about the legitimacy of international organisations is beyond the scope of this paper but is worthy of further research.

DO WE NEED A NEW INTERNATIONAL WATER TREATY ?

This section discusses emerging themes, considers the relevance of these to debate about whether an international water treaty would be a fruitful way forward.

First, according to the World Bank, good governance and the rule of law are central to development[221]. Both are also prerequisites to the effective implementation of sustainable forest management, at all levels. Well-drafted treaties with widespread support can further good governance by establishing stable regimes within which political and economic security may develop. UNCLOS, for example, provides a comprehensive regime for the high seas which commands respect and popular support. The law of the sea, however, is an old and well established regime with a large body of customary international law. UNCLOS codified older customary law into a comprehensive format. It did not generally alter customary norms. In contrast, there is little customary international law relating to water. This means that any attempt, at an international level, to regulate water may be perceived as a challenge to sovereignty.

Second, the World Bank has identified corruption as the single greatest obstacle to economic and social development[222]. According to the Bank, corruption undermines development by distorting the rule of law and weakening the institutional foundation on which economic growth depends[223]. Corruption has a particularly strong effect on the poor, who are hardest hit by economic decline, are most reliant on the provision of public services, and are least capable of paying the extra costs associated with bribery, fraud, and the misappropriation of

(221) See, for example, World Bank, The World Development Report 2002: Building Institutions for Markets (Washington DC: World Bank, 2002); World Bank, Legal and Judicial Reform: Strategic Directions (Washington DC: World Bank, 2003).

(222) In 1996, the World Bank President, James D. Wolfensohn, placed the issue on the development agenda for the first time for a multilateral institution, in his speech at the World Bank Annual General Meeting.

(223) See, for example, World Bank, Anti-Corruption in Transition: A Contribution to the Policy Debate (Washington DC: World Bank, 2000); World Bank, The World Development Report 2004: Making Services Work for the Poor (Washington DC: World Bank, 2004).

economic privileges[224]. Since corruption undermines economic development and reduces donor assistance available to end users[225], eliminating corruption is critical to the achievement of sustainable forest management. This is because corruption limits the effectiveness of government action in almost every area of political life and reduces the resources available for development. Consequently, governments are unlikely to be able to implement even the most basic treaty if the regime is disabled by corruption on a large scale. In 2003, the UN Convention on Corruption was adopted by the UN General Assembly. There are also a number of regional anti-corruption instruments[226], each of which exists independent of other treaties, and each of which has varying degrees of effectiveness and success. To date, no single formula has been identified. It is unlikely that the existence of an international forest treaty would have made a significant difference to the level of corruption in many developing countries, since the CBD did not do so, and entirely separate instruments, directly addressed to corruption, exist independent of other treaties.

Third, closely related to the issues of good governance and corruption are transparency and accountability. Transparency demands that the system or process be open to public scrutiny,

(224) The disproportionate impact of corruption on the poor was highlighted by Kofi Annan, UN Secretary General, in his statement on the adoption by the General Assembly of the UN Convention against Corruption, 31 October 2003.

(225) The interaction of corruption and economic performance is discussed in R. Stapenhurst and S. Kpundeh (eds.), Curbing Corruption: Towards a Model for Building National Integrity (Washington DC: World Bank, 1999).

(226) These include 1996 Organization of American States Inter-American Convention against Corruption; 1999 Council of Europe Criminal Law Convention on Corruption; 1999 Council of Europe Civil Law Convention on Corruption; 1990 Council of Europe Convention on Laundering, Search, Seizure and Confiscation of the Proceeds of Crime; 1997 OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.

either directly or via an institution or process to which there is public access. Accountability requires that reasons be given for government decisions and that mechanisms exist by which those decisions may be reviewed. As accountability increases, the cost to public officials of making decisions that benefit their private interests at the expense of the broader public interest also increases. This provides a disincentive for them to continue with corrupt practices.

The level of accountability depends largely on the effectiveness of sanctions and the capacity of accountability institutions to monitor the actions, decisions and private interests of public officials. One NGO, Transparency International (TI)(227), works at national and international level to curb corruption(228). According to TI, one of the most powerful tools for combating corruption is access to information, or transparency(229). International commitments implemented by national governments are usually subject to transparency and accountability, via the mechanisms of administrative law(230), to whatever extent those mechanisms

(227) TI was founded in 1993 by a small group experienced in business and international development. It now has an international secretariat and more than 90 national chapters. At the international level, TI raises awareness about the damaging effects of corruption, advocates policy reform, works towards the implementation of international conventions and subsequently monitors compliance by governments, corporations and banks. At the national level, chapters work to increase levels of accountability and transparency by monitoring the performance of key institutions and pressing for necessary reforms in a non-party political manner.

(228) TI produces an annual global corruption report, together with regional reports. These reports identify standards and practices throughout the world and suggest areas in which concealment is most likely to occur.

(229) Transparency may offer a solution to such disparate problems as environmental degradation, money laundering, financial volatility and corruption. However, it requires power to induce disclosure or to restructure incentives. Revelation of information shifts power from the former holders of secrets to the newly informed. These relationships of power, and the problems they create, are discussed in A. M. Florini, Does the Invisible Hand Need a Transparent Glove ?: The Politics of Transparency Annual World Bank Conference on Development Economics, Washington DC, April 1999.

(230) For example, freedom of information legislation, appeal and judicial review.

apply in each country. Neither certification nor CFM are subject to those processes since they are non-government initiatives. Consequently, it may be difficult to detect financial or other irregularities in water processes. However, in reality, it may be equally difficult to detect irregularities in government processes in certain countries since not every country has comprehensive administrative law and even where such law exists, it may not be implemented uniformly or at all. It follows that the mere existence of a new water instrument would not necessarily have increased transparency and accountability in the national processes established by that instrument.

Fourth, central to the political agendas of developing countries and international organisations is the reduction of poverty. Over the last ten years, "environment" has been largely replaced by "poverty reduction" in development policies. Sustainable water management may be part of poverty reduction strategy, but it is no longer a goal in itself. Consequently, water-specific issues may have been removed from political agendas and relocated within a broader policy context, enabling governments to fund, or not fund, those issues depending on broader policy goals. Alternatively, it may be because water scarcity is unlikely to be reduced until basic preconditions (the rule of law, basic education) are in place throughout the world. .

In summary, the success of an international agreement is gauged not by the fact that it exists but by the extent to which its implementation contributes to the resolution of the problem for which the agreement is designed i.e. instruments are the beginning of a process, not an end in themselves. It follows that the mere existence of an international water instrument would not represent success, notwithstanding that its existence may signify the limited achievement of a tortuous diplomatic process.

Its existence may indicate confidence (however misguided) in the normative impact of international law but its absence does not necessarily indicate the reverse. Absence may indicate that there are other (and perhaps even better) means by which the same outcomes may be achieved. An international water instrument may appear to be an impressive goal but even if an international instrument were to be agreed and implemented, that instrument would not necessarily be any more effective than a collection of other tools.

CONCLUSION

This paper began as an attempt to understand the international water debate in terms of national and international environmental law. From this outset, it was clear that this would be a complex task. Records of the 1992 UNCED debates confirmed that the issues were poorly defined, the parties polarised, and the way forward uncertain and deeply problematic. More than twenty years later, little real progress has been made. Nations have agreed in principle that protection of the environment is a worthy ideal and numerous strategies have emerged in response to environmental problems.

These include new treaties, technologies, taxes, incentives and tradable allowances. Legal scholars have written about the design, ratification and implementation of international environmental treaties and the validity of international law itself. Political scientists have analysed the international process in terms of regime theory, realist perspectives of international relations and notions of sovereignty. Meanwhile, many environmentalists have conceded defeat as the conjunction of political and economic forces works in favour of continuing water loss and degradation.

Much of the complexity of the international water debate arises from issues of sovereignty. But sovereignty itself has a troubled history. The Peace of Westphalia, a 1648 settlement(231) which ended the Thirty Years War, is recognised by many lawyers and political scientists as the origin of the nation state and of the modern system of international relations(232). Described as representing "the majestic portal which leads from the old into the new world"(233), the Treaty of Westphalia established a system of sovereign states which, while not without ambiguities, served Europe and, following the granting of independence to Europe's colonies, the world, for at least three hundred years(234). However, over the last thirty or so years, the world order has changed beyond recognition.

The UN has sanctioned intervention in sovereign states including Iraq, Somalia, Haiti, Rwanda, Bosnia, Cambodia and Liberia, European countries have surrendered their sovereignty to a pan-European entity, the EU, and international treaties have asserted that resources located within sovereign states are the common heritage of mankind.

(231) The settlement included the Treaty of Westphalia of 24 October 1648 between Ferdinand III, the Holy Roman Emperor, and Louis XIV of France and their respective allies; and the Treaty of Osnabruck, also of 24 October 1648, between the Holy Roman Emperor and Sweden.

(232) See, for example, L. Gross, 'The Peace of Westphalia, 164842 (1948) '1948- American Journal of International Law 20.

(233) Ibid 28.

(234) For recent discussion of the significance of Westphalia to the global system of international relations see, for example, R. Jackson, 'Sovereignty in World Politics: A Glance at the Conceptual and Historical Landscape' (1999) 47 Political Studies 431; C. Ku, 'Catholicism, the Peace of Westphalia and the Origins of Modern International Law' (1996) 1 The European Legacy 734; A. Osiander, The States System of Europe, 16401990- (Oxford: Clarendon, 1994); D. Philpott, 'Westphalia, Authority and International Society' (1999) 47 Political Studies 566; D. Philpott, 'Sovereignty: An Introduction and Brief History' (1995) 48 Journal of International Affairs 353; D. Philpott, 'Ideas and the Evolution of Sovereignty' in S. H. Hashmi (ed.), State Sovereignty: Change and Persistence in International Relations (University Park: Pennsylvania State University Press, 1997).

Arguably, revolutions in sovereignty result from prior revolutions in ideas about justice and political authority(235). New ideas challenge the legitimacy of the existing international order and gain popular support. This leads to protest, to political upheaval and eventually to the birth of a new political order. In early modern Europe, for example, the Protestant Reformation led to a century of war, which culminated in the Peace of Westphalia. In the twentieth century, a new understanding of nationalism triggered protest and revolt which by the early 1960s had led to widespread decolonisation. For both revolutions, agreement on sovereignty was the term on which the crisis was settled. Such agreement has not yet been reached for forest related issues and it is clear that the complex issues which underpin the international forest debate are beyond the current capacity of the system of international relations which was established by the UN Charter in 1945.

Consequently, this addresses (albeit briefly) a number of broader issues which have emerged from this research. These include the legitimacy of the international system, the corresponding legitimacy of international law, the failure of the international system to engage with ideas which now inform international relations, the relationship between forests, poverty, corruption, conflict and forced migration, and the issues of access to justice which arise from conflict.

Principles of Water Law and Governance

First, it is important to avoid legislation that overreaches. In environmental law, overreaching tends to occur in three areas: provisions may exceed capacity for implementation (i.e. there may be an imbalance between the activities, procedures

(235) This is the central claim of D. Philpott, Revolutions in Sovereignty: How Ideas Shaped Modern International Relations (Princeton: Princeton University Press, 2001).

and institutional arrangements prescribed by legislation and the human and financial resources available to implement that legislation nationally, locally, or both)[236]; provisions may exceed what is necessary to achieve reasonable and legitimate objectives (i.e. legislation may prohibit activities which are unrelated to the goal of the legislation)[237]; and provisions may exceed what is socially acceptable (i.e. legislation may prohibit local practices and norms and may require immediate social and institutional change for insufficient reason or without providing incentives to facilitate that change)[238]. The balance of

(236) For example, many of the new forestry laws which emerged from Central and Eastern Europe and the former USSR in the early 1990s prescribed complex planning and approval requirements for all forests, regardless of the economic or environmental significance of each forest. Implementation of these requirements was beyond the capacity of smallholders on whom the requirements were imposed and enforcement was beyond the capacity of forest departments which were responsible for monitoring compliance with the new legislation. As a result, it appears that most parties simply ignored the legislation. See, for example, M. T. Cirelli, Trends in Forestry Legislation: Central and Eastern Europe FAO Legal Papers Online Number 2, February 1999; Development Law Service, Forestry Legislation in Central and Eastern Europe: A Comparative Outlook FAO Legal Papers Online Number 23, October 2001. In contrast, the forestry legislation of Western Europe tends to be more sophisticated and better able to adapt to the changing requirements of sustainable forest management. See, for example, M. T. Cirelli and F. Schmithusen, Trends in Forestry Legislation: Western Europe FAO Legal Papers Online Number 10, June 2000.

(237) For example, recent forestry legislation in several Pacific island jurisdictions requires that all timber be processed locally before export. This legislation is designed to strengthen national timber processing and value-adding industries and to create employment. However, several countries in which such legislation has been enacted lack sufficient processing capacity so compliance is impossible. As a result, parties resort to unlawful practices. This weakens the rule of law. For a review of Pacific islands forestry legislation see, for example, J. Fingleton, Regional Study on Pacific Islands Forestry Legislation FAO Legal Papers Online Number 30, June 2002.

(238) For example, in many parts of the world, particularly in parts of East Africa, legislation has restricted activities which may be undertaken in forests but has not defined “forest” or has defined the term so broadly that the definition bears little resemblance to what exists on the ground. In some jurisdictions “forest” includes all land that is not privately occupied, marginal land, or both, and the categorisation of land as “forest” may be a matter of administrative convenience, or a political tool for national or local bureaucracies. This may limit the land-use options of local people, undermine local traditions and practices and threaten already

these three elements will be different in each location in which legislation is implemented. Consequently, legislation which is to be implemented in a variety of locations, each with different characteristics, must be designed in a manner which allows for regional variation. It should, for example, be drafted by lawyers who have at least some knowledge of the political, economic and social conditions of each location and who are familiar with the resources which will be available in each location to support implementation. This principle is broadly similar to one of the principles which emerged from the analysis of the CBD: there is no single formula which works in every situation. Legislation which overreaches is not inherently flawed, since it has an aspirational value, but the experience of the CBD confirms that aspirational legislation is almost impossible to implement. Since ineffective implementation is likely to squander scarce resources and may also cast doubt on the legitimacy of the legislation, it is better to draft more restricted legislation which can be implemented rather than broader legislation which may be ignored.

Second, unnecessary, superfluous or cumbersome licensing and approval requirements are to be avoided. Common law developed on the basis that unless explicitly prohibited, all actions are lawful. Much water legislation in the GCC is premised on the reverse assumption i.e. approval is required for very ordinary activities, notwithstanding that the policy rationale for imposing this requirement is dubious. This increases bureaucracy and provides opportunities for corruption, particularly in countries in which government lacks capacity to implement the procedures stipulated in forestry legislation. Consequently, even those

fragile livelihoods. It may also require that limited government resources be divided between many areas, in consequence of which none of which will receive the resources it requires for adequate land management. For a review of African forestry legislation see, for example, FAO, Trends in Forestry Law in Europe and Africa FAO Legislative Study Number 72 (FAO: Rome, 2001).

inclined to comply with procedural requirements may find numerous obstacles to prevent them from doing so. The burden of enforcing unnecessary legislation may also reduce the capacity of government to enforce more important legislation. Forestry legislation which imposes licensing and approval procedures is not inherently flawed, but may serve no discernible policy objectives and may add an unnecessary layer of bureaucracy. From this may develop an entire professional sub-specialty, the sole purpose of which is the design, development and enforcement of unnecessary legislation. This is likely to lead to another layer of administrative activity, the sole purpose of which is the review or appeal of decisions made (or not made) under that legislation. Consequently, at each stage of the policy development process, it is important to question whether policy objectives can be better achieved by establishing broad parameters for private action (e.g. through the identification of criteria and indicators) rather than by mandating approval and licensing requirements and corresponding penalties for breaches of those requirements.

Third, provisions that enhance the transparency and accountability of water decision making processes are essential at all levels. Often water legislation does not include administrative processes designed to ensure transparency. This may be because such legislation is supported by broader administrative laws which mandate transparency across all decision making processes, or it may be because transparency and accountability are not yet recognised as essential elements of governmental processes in some jurisdictions. This exacerbates the tendency in some parts of the world for the granting of water concessions to be a secretive matter, conducted at a high political level on an ad hoc basis. Typically countries in which governments operate in that manner lack tendering or bidding processes, published

criteria and identifiable timeframes for decision making(239).

At national level, legislation is likely to be necessary. That legislation should provide criteria and timeframes for decision making, a process for public review and independent oversight bodies (e.g. an ombudsman). The effectiveness of such legislation will depend on a number of factors including public knowledge of the legislation and access to enforcement mechanisms. This may require long-term societal change but without such legislation, this change is unlikely to begin.

Fourth, enforcement mechanisms must be effective, otherwise even the most basic laws will be unenforceable. This requires the absence of corruption since corruption can undermine the integrity of enforcement mechanisms. This, in turn, can lead to the collapse of the rule of law.

A strong and independent legal system is one of the pillars of a market economy so the collapse of the legal system may even foreshadow more general economic collapse.

Consequently for any form of development to be sustainable, a strong and independent legal system must already be in place.

This is particularly important in situations in which ownership or use of water resources may be in dispute since access to an independent decision maker, such as a court or an arbitrator, may be the first step in securing community access to water. It follows that a corrupt legal system can undermine even the smallestproject.

(239) Often older legislation empowers a government official to grant a permit authorising a specified activity within a government forest but does not identify the basis on which that power is to be exercised. It may, for example, be a discretionary power but the legislation may not stipulate the basis on which discretion is to be exercised and it may not be exercised in a manner which is compatible with sustainable forest management or with the overall management plan for a forest.

It can also reduce foreign investment in large projects since foreign investors are unlikely to invest in countries in which enforcement of contracts or more general regulation is unpredictable or impossible. Two issues are important here. First, the procedures by which law is enforced must be appropriate for the conditions in which that law operates. If, for example, law enforcement officials are required to apprehend suspects for the use of one species but not another, those officials must be trained in the identification of species.

They must also have sufficient power to prosecute alleged offenders, must receive a salary sufficient to ensure they are not susceptible to bribes, and their personal safety (and that of their families) must be not threatened. Properly trained and adequately remunerated defence counsel must be available to ensure that suspects receive a fair trial and the judiciary must not be susceptible to political (or other) influence. Second, the penalties for water related offences must be proportionate to the offence.

An insignificant penalty will imply that an offence is insignificant, a large penalty will imply that an offence is significant. If penalties are not sufficiently large they may not deter potential offenders but if they are unnecessarily severe, courts may be reluctant to enforce them. Mechanisms for alternative dispute resolution or restorative justice programs may alleviate the burden on courts but may also suggest that water related offences are not sufficiently grave to be considered by the court.

The Relationship between National and International Governance

Effective law enforcement is premised on the existence of stable legal and political institutions and on the rule of law.

Legislation alone will not prevent deforestation but if properly used, law is an important tool in the fight. A comprehensive solution will require technological innovation, improved surveillance techniques, financial resources, societal change and above all, political will at national and international levels. If law, either national or international, is to provide a realistic foundation for its own implementation, it must provide for consultative or participatory approaches, it must facilitate transparency and accountability and it must establish processes and requirements that are feasible and achievable.

The Westphalian legal order, which was based on independent, sovereign and territorially defined states, allowed each state to pursue its own interests within its sovereign territory and gave each state equality within the global system. International law emerged as "the body of rules and principles of action which are binding upon civilised states in their relations with one another"(240). That classical view of international law distinguished clearly between international and domestic law and between public and private international law. Public international law, the domain of sovereign states, provided a body of customary law and series of binding instruments, the purpose of which was to govern relationships between states. The framework was "stylized, hierarchical and static"(241), it assumed that states agree to international treaties when those treaties correspond with state interests, and that having agreed to a treaty, states comply with that treaty by implementing it within their sovereign territory. If or when a state fails to comply, mechanisms for the resolution of international disputes are available and sanctions

(240) J. L. Brierly, The Law of Nations: An Introduction to the International Law of Peace (6th edition by H. Waldock) (Oxford: Clarendon Press, 1963), 1.

(241) E. B. Weiss, 'Understanding Compliance with International Environmental Agreements: The Baker's Dozen Myths' (1999) 32 University of Richmond Law Review 1555, 1558.

will deter and punish offenders[242].

By the 1990s, the international world order had changed. States continued to be the primary actors but other parties had begun to contribute to the development, interpretation and implementation of international law. The distinction between public and private international law had blurred and voluntary or non binding international instruments, such as the 1992 Forest Principles, emerged. At about the same time, the private sector developed initiatives such as forest certification schemes. Patterns of compliance with international treaties also changed[243]. States agreed to treaties to be seen to be exercising leadership, because other states are doing so, because states with leverage are encouraging them to do so, or because failure to do so would result in political or economic isolation. Some states agreed to treaties knowing that they lacked the capacity to comply with those treaties, while others had capacity but did not intend to comply.

The hierarchical model of implementation, by which national governments negotiated international agreements and then implemented those agreements in their sovereign territory through national legislation, was no longer the sole vehicle for compliance since it did not accommodate non state participants such as industry groups, multinational companies and NGOs. From this changing pattern, there emerged a growing recognition that the international legal environment is dynamic not static, that compliance may adhere to a horizontal not vertical model, and that parties interact in complex ways over time, resulting in the rapid formation and destruction of state and non state

(242) H. K. Jacobson and E. B. Weiss, 'Strengthening Compliance with International Environmental Accords: Preliminary Observations from a Collaborative Project' (1995) 1 Global Governance 119, 122.

(243) See, for example, E. B. Weiss, 'International Environmental Law: Contemporary Issues and the Emergence of a New World Order' (1993) 81 Georgetown Law Journal 675.

based alliances. This challenged earlier assumptions about the implementation of, and compliance with, international environmental agreements.

In the light of these changing patterns, in the mid 1990s Weiss and Jacobson analysed the extent to which eight countries and the EU comply with five international environmental agreements(244) and identified factors which tend to strengthen compliance with international environmental agreements(245). They concluded that in general richer countries and those with democratic governments had a high level of compliance. According to that study, the strength and health of national political and economic systems and a deep public commitment are the most important factors in determining compliance. This led Weiss and Jacobson to conclude that long term strategies must focus on these issues(246). In fact, these conclusions are broadly similar to the issues discussed above in the context of national forest governance. Weiss subsequently challenged the proposition that "almost all nations observe almost all the principles of

(244) The countries are Brazil, Cameroon, China, Hungary, India, Japan, USSR/Russian Federation and US, together with EU. The agreements are the World Heritage Convention, CITES, ITTA, the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter ("London Convention") and the Montreal Protocol on Substances that Deplete the Ozone Layer.

(245) See E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998); E. B. Weiss and H. K. Jacobson, 'Why Do States Comply with International Environmental Agreements: A Tale of Five Agreements and Nine Countries' (1996) 1 Human Dimensions Quarterly 1; E. B. Weiss, 'The Five International Treaties: A Living History' in E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998); H. K. Jacobson and E. B. Weiss, 'Compliance with International Environmental Accords: Achievements and Strategies' in M. Rolen, H. Sjoberg and U. Svedin (eds.), International Governance on Environmental Issues (London: Kluwer Law International, 1997).

(246) E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998), 542.

international law and almost all of their obligations almost all of the time"[247]. She argued that in international environmental law, non-compliance tends to occur because political capital is gained from negotiating and signing new agreements, but not from subsequently implementing those agreements[248]. In addition, it is often hard to measure compliance and the effectiveness of an agreement does not necessarily correlate with compliance with that agreement since parties which wish to further the objectives of an agreement may do so by complying with the terms of the agreement or may find some other means by which the same objectives can be achieved within their own countries.

Assuming the continuance of the international system on which this Conclusion is premised, Weiss' conclusions are relevant here because irrespective of whether an international forest treaty is designed or whether some other mechanism emerges, if that treaty or mechanism does not achieve a reasonable level of compliance at international level, it will be of no more value than existing treaties and mechanisms.

Compliance with International Environmental Agreements

First, no country complies fully with all of its international legal obligations[249]. At best, countries comply substantially with

(247) L. Henkin, How Nations Behave: Law and Foreign Policy (2nd ed.) (New York: Columbia University Press, 1979), 47.

(248) E. B. Weiss, 'Understanding Compliance with International Environmental Agreements: The Baker's Dozen Myths' (1999) 32 University of Richmond Law Review 1555.

(249) E. B. Weiss, 'Understanding Compliance with International Environmental Agreements: The Baker's Dozen Myths' (1999) 32 University of Richmond Law Review 1555, 1560. Also see generally A. Chayes and A. H. Chayes, The New Sovereignty: Compliance with International Regulatory Agreements (Cambridge: Harvard University Press, 1995) and H. K. Jacobson and E. B. Weiss, 'Assessing the Record and Designing Strategies to Engage Countries' in E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with

their international commitments. For example, many countries comply with the monitoring and reporting requirements of the CBD but do not comply with the requirements relating to the use and transfer of genetic resources. Alternatively, a state may comply fully with one treaty relating to a particular resource but may disregard other treaties relating to the same resource, particularly if inconsistencies exist between treaties. There are also parts of the world, primarily in central Africa, in which the political situation is so unstable that governments may not even know to which treaties they are a party. More stable developing countries may have political will to comply but may lack the resources to do so(250).

The CBD recognises that compliance by developing countries will be conditional on the transfer of resources to those countries by developed countries(251). It follows that if developed countries fail to comply with the CBD by failing to transfer resources to developing countries, developing countries will also fail to comply with the CBD, through no fault of their own, since they will not have the resources they need to effect compliance. Weiss and Jacobson's study of compliance found that each of the eight countries and the EU which they reviewed had taken some steps towards compliance with each of the five agreements but the extent of compliance varied significantly between countries and within the same country, between agreements(252). There

International Environmental Accords (Cambridge: MIT Press, 1998), 511.

(250) See, for example, I. F. I. Shihata, 'Implementation, Enforcement and Compliance with International Environmental Agreements – Practical Suggestions in the Light of the World Bank's Experience' (1996) 9 Georgetown International Environmental Law Review 37.

(251) Article 20(4) of the CBD states: "The extent to which developing country Parties will effectively implement their commitments under this Convention will depend on the effective implementation by developed country Parties of their commitments under this Convention related to financial resources and the transfer of technology..".

(252) H. K. Jacobson and E. B. Weiss, 'Assessing the Record and Designing Strategies to Engage Countries' in E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998), 511.

was no single factor which determined the extent of compliance although generally, the longer an agreement is in effect, the greater the trend is towards compliance.

This suggests that even if an international forest instrument were to be drafted in a manner that accommodated the conflicting issues which have been evident throughout the period 1992-2002, the extent of compliance is likely to vary significantly between states and no single factor would increase compliance on a global basis.

Second, implementation, compliance and enforcement are not interchangeable terms and none of those terms denotes effectiveness(253). Implementation refers to actions which are taken to give effect to the national obligations of an international agreement(254). Often such actions will include the enactment of national legislation and the development of corresponding policy.

Compliance includes implementation but also measures the extent to which implementation takes place. Compliance tends to refer to actions which take place on a voluntary basis, not to those which are forcibly effected by enforcement mechanisms as a sanction for non-compliance. Compliance may be divided

(253) For the relationship between implementation, compliance and effectiveness see H. K. Jacobson and E. B. Weiss, 'Compliance with International Accords: Achievements and Strategies' in M. Rolen, H. Sjoberg and U. Svedin (eds.), International Governance on Environmental Issues (London: Kluwer Law International, 1997), 8284-; H. K. Jacobson and E. B. Weiss, 'A Framework for Analysis' in E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998), 46-.

(254) For implementation see D. G. Victor, K. Raustiala and E. B. Skolnikoff (eds.), The Implementation and Effectiveness of International Environmental Commitments: Theory and Practice (Cambridge: MIT Press, 1998) which uses fourteen case studies to demonstrate that implementation is the key to effectiveness. This, it is argued, is because agreements aim to constrain not only sovereign states but also a variety of non-state parties who behaviour does not necessarily change simply because states have made international commitments.

into two, or possibly three, categories(255). Procedural compliance refers to the extent to which states comply with procedural requirements such as the filing of reports by particular dates. Substantive compliance refers to the extent to which states comply with substantive obligations such as effecting reductions in pollution or conserving particular sites. Arguably, there is a third element of compliance, that is compliance with the spirit of the agreement.

This is controversial because it refers to compliance with an intangible intention, not compliance with an obligation set out in a treaty, so it is impossible to measure. The management of compliance includes three tasks(256). First, it requires review and assessment of the performance of the parties in order to identify problems with the regime itself and to distinguish internal violations from other types of non compliance. Second, it requires that appropriate responses to non-compliance produce and maintain a level of compliance acceptable to the parties to the regime.

Third, it may require adjustment of rules in order to improve regime performance. Enforcement refers to actions taken to effect compliance after non-compliance has been detected. It may rely on penalties, sanctions, other coercive measures or formal dispute resolution processes.

Finally, effectiveness refers to the extent to which the agreement resolves the problem which it is designed to address. There tends to be a direct relationship between compliance and effectiveness but this is not always correct. If, for example, an agreement is poorly designed, compliance will not necessarily

(255) Jacobson and Weiss in Rolen et al, 83.

(256) See A. Chayes, A. H. Chayes and R. B. Mitchell, 'Managing Compliance: A Comparative Perspective' in E. B. Weiss and H. K. Jacobson (eds.), Engaging Countries: Strengthening Compliance with International Environmental Accords (Cambridge: MIT Press, 1998), 49.

lead to effectiveness since the provisions of the agreement may not be sufficient to resolve the original problem. Alternatively, the problem which the agreement was designed to resolve may have changed over time so the agreement may not address aspects of the problem which emerged after the negotiation of the agreement. Consequently if a new international forest instrument, the aim of which is to reduce deforestation, is negotiated and agreed, effectiveness (not implementation, compliance or enforcement) must be the primary measure of its success.

Studies which focus on the extent to which corresponding domestic legislation is in place, the extent to which that legislation conforms to the language of the international instrument and the extent to which national governments fulfill monitoring or reporting requirements are all important, but none of those measurements would confirm the extent to which the treaty reduces deforestation.

This is precisely the mistake which was made by the COP of the CBD in 2002[257]. At that time, the COP adopted a Strategic Plan[258], one part of which narrated the CBD's achievements. Those achievements included the raising of awareness about biodiversity, the initiation of national action plans in over 100 countries and the development of the Cartagena Protocol i.e. achievement was measured in terms of procedural compliance not effectiveness. The COP did not measure the effectiveness of the CBD (i.e. the extent to which the CBD had achieved its aim of conserving biodiversity).

Third, a binding agreement is not necessarily preferable to a non-binding agreement. This is because compliance varies

(257) See Chapter Four.

(258) CBD COP Decision VI/26 (2002).

so widely between countries and between agreements that the binding or non-binding nature of an agreement may not be the most relevant factor in determining the effectiveness of that agreement.

Fourth, secretariats for international agreements vary in size, budget, functions, power and influence and may be responsible for investigating and dealing with allegations of non compliance. Consequently, a secretariat may be more important than the wording of an international instrument or the binding or non-binding nature of that instrument. This is particularly important in the international forest context because one of the current problems is the existence of several international organisations and secretariats, including UNFF, FAO, UNEP, ITTO and the Secretariat to CBD, all of which have water-related roles.

Fifth, precise obligations do not necessarily lead to precise implementation. It is easier to monitor compliance with precise, rather than imprecise, obligations but ultimately, the effectiveness of an instrument is more important than compliance with the specific obligations of an instrument. This is because compliance does not necessarily lead to effectiveness. States which are committed to the outcomes of instruments to which they agree may prefer precise obligations because such obligations enable them to state their own position with clarity, to compare their position with that of other states, and provide a set of obligations which can be incorporated into national legislation.

Sixth, if an international instrument requires regular national reporting, the purpose of reporting must be clear. In the 1990s, it was customary to include reporting requirements in new international environmental treaties. This, it was believed, led to increased compliance(259). In fact, the experience of several

(259) As early as 1991, the effectiveness of national reporting was challenged on the grounds that

international environmental treaties confirms that some states were reluctant to report their own failures, some reports were inconsistent, incomplete, inaccurate or late, different countries used different formats so comparison was difficult, and particularly in countries with few professional staff, the production of regular reports occupied staff who might otherwise have been engaged in tasks more closely related to environmental protection(260).

For treaty secretariats, the processing of national reports is time consuming and requires resources which might also be better used for other purposes. National reporting enables governments and secretariats to identify national and international trends over extended periods of time. This, however, requires consistent and verifiable reports in a standard format. This may be beyond the capacity of many developing countries, particularly countries which are politically unstable and have frequent changes of government.

Seventh, decentralising, or devolving responsibility for, implementation of an international environmental agreement to local level may improve compliance with that agreement but it does not necessarily do so(261). National governments may agree to international commitments but may lack effective

it involved self-assessment. See K. Sachariew, 'Promoting Compliance with International Environmental Standards: Reflections on Monitoring and Reporting Mechanisms' (1991) 2 Yearbook of International Environmental Law 31. Sachariew also noted that ongoing reporting requirements are part of a trend towards institutionalism. This trend focuses on compliance with procedural requirements, not on the extent to which international environmental instruments solve the problems which they are designed to address.

(260) E. B. Weiss, 'Understanding Compliance with International Environmental Agreements: The Baker's Dozen Myths' (1999) 32 University of Richmond Law Review 1555, 1574.

(261) Decentralisation and devolution have different meanings. In this context, decentralisation is the relocation of administrative functions from central to local locations. Devolution is the relocation of power, and corresponding responsibility, from central to local locations. See R. J. Fisher, 'Devolution and Decentralization of Forest Management in the Asia Pacific' (1999) 50(4) Unasylva 3.

authority in parts of their own countries. Decentralisation or devolution may appear to be practical but the process may be confounded by corruption, by lack of funds, or by the inability of local communities to understand complex and pre-existing international commitments into which they have had no input. Those commitments may also be meaningless in the local context.

Eighth, democracy can promote compliance with international environmental agreements but it does not necessarily do so. Stable democracies may foster respect for the rule of law, encourage public participation in national and international affairs, have an independent legal system with effective enforcement mechanisms, and be characterised by transparency and accountability at all levels of government. But not all democracies are stable, not all stable democracies have the financial resources necessary to implement their international agreements, and in stable democracies in which those resources do exist, public opinion may not support international environmental commitments. Consequently, national commitment to the implementation of international environmental agreements, together with capacity to implement that commitment, is more important than the form of government.

Ninth, the influence or involvement of NGOs can increase compliance with international environmental agreements but it does not necessarily do so(262). Greenpeace promotes compliance with the London Convention, WWF promotes compliance with

(262) For the impact of NGOs on international and international environmental law see, for example, S. Charnovitz, 'Two Centuries of Participation: NGOs and International Governance' (1997) 18 Michigan Journal of International Law 183; K. Raustiala, 'The "Participatory Revolution" in International Environmental Law' (1997) 21 Harvard Environmental Law Review 537; D. Tarlock, 'The Role of Non-Governmental Organizations in the Development of International Environmental Law' (1992) 68 Chicago-Kent Law Review 61.

CITES and ITTA, and IUCN has monitored World Heritage sites.

But the objectives of NGOs are not necessarily synonymous with the objectives of a treaty. Smaller NGOs may develop to address a single issue and may dissolve when that issue is resolved.

A local NGO may, for example, focus on the implementation of the CBD's in situ conservation requirements in its own area and may have little or no interest in other aspects of the CBD, such as the operation of the CBD's international funding mechanism.

It may also lack capacity to understand the relationship between that mechanism and the local implementation. Larger NGOs may have broad political and social aims which extend far beyond the conservation objectives of an international environmental treaty. For an NGO, an international environmental treaty may be one means by which its broader objective of widespread land reform is furthered

Tenth, the incorporation of formal dispute mechanisms into international treaties is not essential because in the event of disputes, those mechanisms are often not invoked. Some recent international environmental treaties incorporate formal dispute mechanisms(263) but parties often seek to resolve disputes through formal or informal meetings of the parties or by developing procedures to address non compliance within the framework of the agreement. For example, parties to the Montreal Protocol established an implementation committee and developed non compliance procedures. Initially those procedures dealt only with procedural non compliance such as failure to comply with

(263) Those treaties include the 1985 Convention for the Protection of the Ozone Layer, 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Movements of Hazardous Wastes and Their Disposal and 1991 Protocol on Environmental Protection to the Antarctic Treaty.

annual reporting requirements, but later they dealt with non compliance with substantive commitments to reduce and phase out ozone depleting chemicals(264).

Parties may also simply disregard obligations with which they disagree, or lack the capacity to implement obligations, and other parties may ignore this since they too are likely to have disregarded some international obligations. In fact, failure to implement part of an international treaty will rarely incur the wrath of other parties unless that failure affects other parties significantly. If other parties are significantly affected, those parties may rely on coercive measures such as withholding goods or services from the offending party, rather than invoking a dispute resolution process, since direct action may be a more effective means of inducing compliance than a lengthy and uncertain legal procedure. This suggests that incorporation of dispute resolution mechanisms may be helpful in encouraging compliance, but that an international forest instrument which does not incorporate such a mechanism will not necessarily be defective.

Eleventh, coercive measures to secure compliance with an international environmental agreement may not be effective since parties may find some other way of continuing their non-complying conduct. Traditionally international law enforces compliance by using coercive measures such as penalties, sanctions (military or economic) or suspension or expulsion from an international group. Such measures tend to be used in the event of breaches of obligations in trade agreements or the inappropriate use of force. They are rarely, if ever, used to enforce environmental obligations. In international environmental law, there are three

(264) Report of the Fourth Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer, Paragraph 28, UNEP/OzL.Pro.41992) 15/).

main kinds of coercive measures: trade sanctions(265); the withdrawal of certain privileges of membership(266); and the publication of offences in public forums(267). The potential strength of these measures will vary according to the situation in which they are applied, so it is difficult to comment on the potential effectiveness of these measures in enforcing an international forest instrument in the future. Barrett argued that if penalties are perceived as being unduly severe, parties will not agree to the instrument from the outset. Consequently, all international instruments are sub-optimal from the outset. Weiss observed that no state complies with all of its international obligations all of the time so even with sub-optimal obligations, compliance will not necessarily be forthcoming. It follows that an enforcement mechanism is likely to be necessary. This may be a formal dispute resolution process or it may be the application by other parties (either individually, in informal groups, or collectively as the parties to the agreement) of coercive measures in whatever form is calculated by those parties as being most likely to induce compliance at that time.

Twelfth, no single compliance strategy works in every situation and a finely nuanced combination of strategies, including coercive measures and incentives, is usually necessary. That combination will vary according to the nature of the agreement,

(265) For example, Article VIII of CITES states:

The Parties shall take appropriate measures to enforce the provisions of the present Convention and to prohibit trade in specimens in violation thereof. These shall include measures:

to penalize trade in, or possession of, such specimens, or both; and

to provide for the confiscation or return to the State of export of such specimens.

(266) For example, Article 5(6) of the Montreal Protocol on Substances that Deplete the Ozone Layer sets out the procedure by which parties may take action against developing country parties (which, by Article 5, are eligible for certain concessions) which have reported to the Secretariat that having taken all practicable steps, they are unable to meet certain of their obligations under that Protocol.

(267) In 1991, parties to CITES circulated a list of countries which had failed to meet annual reporting requirements.

the parties, the nature and cause of the breach and the external social, political and economic circumstances.

It may also vary over time because compliance itself varies over time. Compliance strategies, such as financial incentives, which may be effective in a rapidly developing middle-income country may cease to be effective if that country's income reaches a higher level. Similarly, strategies which work in a poor but reasonably stable developing country may become irrelevant if that country regresses into civil war or suffers a large natural disaster. Even a change of government in a stable and developed country can alter compliance.

Barrett argued that no single design of treaty fits all environmental problems. The experience of the CBD confirms that no single process of implementation works in every country. For both, flexibility is required. Treaties must be designed to fit the problem which they are intended to solve and treaty obligations must be implemented in a manner appropriate to the conditions of the country in which implementation is to take place.

For an international environmental instrument to be effective, countries must engage fully with that instrument. Engagement requires long term commitment from the whole country, not just from government, from industry, from local communities or from NGOs. Each of those groups has an important role to play, but the effectiveness of an instrument requires that all are involved.

Long term commitment will develop only when parties can see that their interests are being served. For clearly identifiable issues (e.g. the protection of water), this is challenging. It follows that the creation of a new international water instrument is not now, and may never have been, an effective path forward

FINAL THOUGHTS

Throughout the last decade, international law has been challenged repeatedly. In 1948, the three hundredth anniversary of the Peace of Westphalia, Gross wrote of the Westphalian system of international law:

> Such an international law, rugged individualism of territorial and heterogeneous states, balance of power, equality of states, and toleration – these are among the legacies of the settlement of Westphalia. That rugged individualism of states ill accommodates itself to an international rule of law reinforced by necessary institutions.(268)

In the same article, Gross predicted the need to find a way "..of harmonizing the will of major states to self-control with the exigencies of international society which, by and large, yearns for order under law".(269) Writing in 1948, Gross was referring to the collapse of the League of Nations, the establishment of the United Nations, the jurisdiction of the Nuremberg and Tokyo Tribunals which tried those charged with offences against Allied prisoners of war, and the reconstruction of post war Europe. More than fifty years later, the tension between the will of major states and the need for order under law remains unresolved. By the beginning of the twenty-first century, globalisation had forced the "rugged individualism" of states into an uneasy compromise within the UN system, but events of the period 1992-2002 demonstrate that the UN system is poorly equipped to deal with complex water related issues, particularly as some of those issues challenge the principles of sovereignty on which

(268) Gross, 40.

(269) Gross, 41.

international law is premised.

In fact, extensive protection for water already exists in international law, albeit in an uncoordinated collection of legal instruments. There are gaps in that protection but events of the period 1992-2002 confirm that the biggest challenges are the development of the rule of law in turbulent regions of the world and the identification of a means by which existing law, national and international, can be implemented effectively on a global scale, not the creation of further international environmental agreements.

Earlier in this thesis, it was argued that water is central to security, peace and justice, since it provides livelihoods for millions of impoverished people in developing countries(270). Any diminution in water may result in a reduction in basic livelihood resources. This, in turn causes migration into already hard pressed urban areas or across borders into the sovereign territory of equally impoverished neighbouring states. Forced migration separates communities from their livelihoods, their support systems and their roots, and may lead to the spread of disease, pressure on already fragile ecosystems and conflict over scarce resources. All too often, the result is civil war, and the inevitable dependence on the short term assistance of aid agencies that follows. Consequently water scarcity itself may be a threat to the territorial integrity and political and economic

(270) For the relationship between natural resources and conflict see, for example, P. Le Billon, 'The Political Ecology of War: Natural Resources and Armed Conflicts' (2001) 20 Political Geography 561; J. Fairhead, 'The Conflict Over Natural and Environmental Resources' in E. W. Nafziger, R. Vayrynen and F. Stewart (eds.), War, Hunger and Displacement: The Origins of Humanitarian Emergencies Vol. 1 (Oxford: Oxford University Press, 2000); M. T. Klare, Resource Wars: The New Landscape of Global Conflict (New York: Metropolitan Books, 2001); S. M. Murshed, 'Conflict, Civil War and Underdevelopment: An Introduction' (2002) 39 Journal of Peace Research 387; M. L. Ross, 'How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases' (2004) 58 International Organization 35.

independence of a state, since it may dislocate communities, cause forced migration and consequential dependence on short term aid. It follows that the failure to avert water scarcity is in fact a threat to sovereignty, that is, to "political independence and territorial integrity"[271], just as important as more visible threats and of much longer term significance, since its consequences impact throughout the global system, in this generation and for generations to come.

(271) UN Charter Article 2(4).

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