

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

DR LAURA HORN*

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

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

I INTRODUCTION

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

* Dr Laura Horn, Senior Lecturer Western Sydney University.

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

If the rate and extent of climate change is limited, the risks of adverse impacts of climate change can be decreased and potential dangerous tipping points may be avoided.² Cooperative action by all states is required to ensure effective mitigation of greenhouse gases (GHGs) is achieved and the adverse impacts of climate change are adequately addressed.³ Collective action is demonstrated through the operation of the concept of the common concern of humankind (CCH) as all states have responsibilities to take action to prevent the adverse effects of climate change on behalf of the international community. This discussion about the duties of states to cooperate when taking action on climate change is timely, as states are in the process of negotiating a new international agreement on climate change in 2015 (and in force by 2020).⁴ There is evidence that state negotiations for the 2015 draft agreement⁵ are continuing to be influenced by the CCH concept. These negotiations have focussed on wording that climate change is a common challenge which requires collective action. It is likely the word ‘collective’ will be included in the final text.⁶ The term ‘collective action’ is also mentioned in the provisions on transparency and global stocktaking in the 2015 draft agreement.⁷ These provisions are likely to impact state governments and their reporting requirements on actions taken to meet their proposed commitments under the agreement consequently, increasing state reliance on international cooperation to deal with the threat of climate change. It is argued in this article that the CCH concept shapes the development of the 2015 draft agreement and operates as a guiding norm concerning the protection of the atmosphere.

The commencing statement of the preamble to *United Nations Framework Convention on Climate Change (UNFCCC)* focuses on the CCH, ‘acknowledging that change in the Earth’s climate and its adverse effects are a common concern of humankind...’.⁸ This article explores the legal implications flowing from the operation of the CCH in the *UNFCCC*. The implications of the concept of ‘common concern’ and its application to international environmental law were first debated at ‘The Meeting of the Group of Legal Experts to Examine the Concept of the Common Concern of [Hu]mankind in relation to Global Environmental Issues’ (Legal Experts Meeting) at the University of Malta in December 1990.⁹ This debate occurred two years prior to the United Nations Conference on

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

² Ibid.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

II LEGAL EXPERTS MEETING ON CCH

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

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

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

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

²⁰ *Ibid.*

²¹ *Ibid.*

²² *Ibid.*

²³ *Ibid.* 43.

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

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

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

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

²⁴ Ibid 30.

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

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

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

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

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

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

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

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

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

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

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

³¹ Birnie, Boyle and Redgwell, above n 12, 130.

³² *UNFCCC* art 3(3).

³³ *Conclusions of the Meeting*, above n 15, 29.

³⁴ *United Nations Convention on the Law of the Sea*, opened for signature 10 December 1982, 1833 UNTS 3 (entered into force 16 November 1994).

³⁵ *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*, opened for signature 27 January 1967, 610 UNTS 205 (entered into force 10 October 1967).

³⁶ *Conclusions of the Meeting*, above n 15, 30.

³⁷ Birnie, Boyle and Redgwell, above n 12, 198.

³⁸ Ibid 130-131, *Conclusions of the Meeting*, above n 15, 30-31.

³⁹ Birnie, Boyle and Redgwell, above n 12, 133.

⁴⁰ *Declaration of the United Nations Conference on the Human Environment (Stockholm)* UN Doc A/CONF/48/14/REV.1 principle 21.

⁴¹ Birnie, Boyle and Redgwell, above n 12, 131.

⁴² Dupuy and Vinuales, above n 18, 86.

⁴³ *2015 Draft Agreement*, above n 5, arts 3,9.

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

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

III CCH AND LEGAL IMPLICATIONS

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

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

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

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

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

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

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

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

⁴⁸ Bowman, above n 46, 503.

⁴⁹ *Ibid.*

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

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

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

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

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

⁵⁰ Brunnée, above n 47, 566.

⁵¹ Ibid.

⁵² Ibid.

⁵³ Ibid.

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶ Frank Biermann, *Saving the Atmosphere: International Law, Developing Countries and Air Pollution* (Peter Lang, 1995).

⁵⁷ Ibid 86-87.

⁵⁸ *Trail Smelter Arbitration* 33 AJIL (1939) 182; *Rio Declaration*, above n 10, principle 2; Birnie, Boyle and Redgwell, above n 12, 143.

⁵⁹ Birnie, Boyle and Redgwell, above n 12, 147-148.

⁶⁰ Ibid 149.

⁶¹ Shurojit Chatterji at al, 'Unilateral Measures and Enhanced Mitigation' in Nicholas Stern, Alex Bowen and John Whaley (eds), *The Global Development of Policy Regimes to Combat Climate Change* (World Scientific Publishing Co, Pte Ltd, 2014) 181, 182.

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

May countries thus lawfully oppose any standards of diligent conduct to which all other nations adhere - if 'common concerns of humankind' are at stake?

It is submitted that one of the implications of the notion of 'common concern' is a revised notion of the theory of the sources of international law; in the era of global climate change, this may prove to be necessary in the effort to adjust the international legal order from the independent nation States of the nineteenth century to the necessities of the progressively interdependent 'world society' of the twenty-first century'...

Those new rules will certainly infringe on the sovereignty of the persistently objecting States, which will be forced to comply with standards of diligent conduct regarding the environment to which they have not agreed...

The traditional doctrines are thus to be redefined, in order to allow a rule to enter into the *corpus* of general or customary law even if some States persistently object.⁶³

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

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

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

⁶² Biermann, above n 56, 87.

⁶³ Ibid 86-87.

⁶⁴ The *Statute of the International Court of Justice* art 38.

⁶⁵ Biermann, above n 56, 85.

⁶⁶ See Jutta Brunnée, 'COPing with Consent: Law-making under Multilateral Agreements' (2002) 15 *Leiden Journal of International Law* 1.

⁶⁷ Brunnée, above n 47, 566.

IV DUTY TO COOPERATE

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

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

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

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

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

⁶⁸ *Charter of the United Nations*, 26 June 1945, Can TS 1945 No 7 art 1(3).

⁶⁹ *Rio Declaration*, above n 10, principle 7.

⁷⁰ *Ibid* principle 27.

⁷¹ *Ibid* principles 5, 13, 24.

⁷² *CBD* preamble.

⁷³ *Ibid* art 5.

⁷⁴ *Ibid* arts 8(m), 12(c), 13(b), 16 (5), 28(1).

⁷⁵ *UNFCCC* preamble [6].

⁷⁶ *Ibid* art 3(5).

⁷⁷ *Ibid* art 5.

⁷⁸ *Ibid* art 4.

⁷⁹ *Ibid* art 4(1)(a)(b).

⁸⁰ *Ibid* art 4(1)(c)(d)(e)(g)(h)(i).

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

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

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

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

⁸¹ Ibid art 4(2)(a).

⁸² *Kyoto Protocol* art 2(1)(b).

⁸³ Ibid art 10(c).

⁸⁴ Ibid art 10(d).

⁸⁵ Ibid art 10(e).

⁸⁶ Sumudu Atapattu, ‘Climate Change, Differentiated Responsibilities and State Responsibility: Devising Novel Legal Strategies for Damage Caused by Climate Change’ in Benjamin Richardson et al (eds), *Climate Law and Developing Countries* (Edward Elgar Publishing Inc, 2009) 37, 41.

⁸⁷ Birnie, Boyle and Redgwell, above n 12, 25.

⁸⁸ *2015 Draft Agreement*, above n 5, art 2.

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

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

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

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

V INTRAGENERATIONAL EQUITY AND COMMON BUT DIFFERENTIATED RESPONSIBILITIES

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

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

⁸⁹ Ibid arts 3, 4, 6, 7, 8, 9.

⁹⁰ Birnie, Boyle and Redgwell, above n 12, 340.

⁹¹ Ibid.

⁹² Bowman, above n 46, 504.

⁹³ Diana Shelton ‘Equity’ in Daniel Bodansky, Jutta Brunnée and Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press, 2007) 639, 640.

⁹⁴ *UNFCCC* art 3(1).

⁹⁵ Ibid.

⁹⁶ *Rio Declaration*, above n 10, principle 7.

⁹⁷ *UNFCCC, Status of Ratification of the Kyoto Protocol* above n 16.

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

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

VI COMMON BUT DIFFERENTIATED RESPONSIBILITIES AND CCH

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

⁹⁸ Birnie, Boyle and Redgwell, above n 12, 132.

⁹⁹ Shelton, above n 93, 657.

¹⁰⁰ Philippe Cullet, ‘Common but Differentiated Responsibilities’ in Malgosia Fitzmaurice, David Ong and Panos Merkouris (eds), *Research Handbook on International Environmental Law* (Edward Elgar Publishing Ltd, 2010) 161, 178.

¹⁰¹ Brunnée, above n 47, 567.

¹⁰² Birnie, Boyle and Redgwell, above n 12, 27.

¹⁰³ Dupuy and Vinuales above n 18, 75.

¹⁰⁴ Colitt, Onur above n 6, 11.

¹⁰⁵ *UNFCCC* art 3(1).

¹⁰⁶ *UNFCCC* art 3(2).

¹⁰⁷ Philippe Sands, *Principles of International Environmental Law* (Cambridge University Press, 2nd ed, 2003) 286.

¹⁰⁸ Birnie, Boyle and Redgwell, above n 12, 133.

¹⁰⁹ See *UNFCCC* preamble. *Conclusions of the Meeting*, above n 15, 30.

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

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

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

1 *UNFCCC and Common but Differentiated Responsibilities*

Developed states, parties to the *UNFCCC* should contribute financial assistance,¹¹⁴ provide technological transfer¹¹⁵ and agree to take the lead by substantially reducing GHG emissions and promoting GHG sinks and reservoirs.¹¹⁶ The carrying out of these responsibilities by developed parties is important for two reasons, first, developed states should provide financial assistance and transfer of technology as agreed in *UNFCCC* otherwise, developing countries, may lack the capacity to mitigate emissions of GHGs, leading to a failure of the parties to the *UNFCCC* to achieve stabilisation of GHG emissions.¹¹⁷ Secondly, if high GHG emitting developed countries fail to take the lead and reduce their GHG emissions, it is likely that the objective of the *UNFCCC* will not be achieved.¹¹⁸

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

¹¹⁰ Brunnée, above n 47, 567.

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

¹¹² Cullet, above n 100, 169.

¹¹³ *UNFCCC* art 4(5)

¹¹⁴ *Ibid* art 4(3).

¹¹⁵ *Ibid* art 4(5).

¹¹⁶ *Ibid* art 4(2).

¹¹⁷ *Ibid* art 4(7).

¹¹⁸ *Ibid* art 2.

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

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

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

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

2 The Technology Mechanism

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

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

3 The Green Climate Fund

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

¹²¹ Atapattu, above n 86, 42.

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

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

¹²⁴ Ibid [8].

¹²⁵ Ibid.

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

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

¹²⁸ Ibid [100].

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

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

4 The Warsaw International Mechanism for Loss and Damage

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

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

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

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

¹³⁰ Ibid [35]-[36].

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

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

¹³³ Ibid.

¹³⁴ Ibid.

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

VII CLIMATE CHANGE DAMAGE

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

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

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

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

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

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

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

¹³⁸ Ibid [35].

¹³⁹ Ibid [24].

¹⁴⁰ Ibid [28].

¹⁴¹ Ibid [42].

¹⁴² Ibid [79].

¹⁴³ Ibid [78].

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

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

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

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

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

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

¹⁴⁶ Cullet, above n 100, 178.

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

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

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

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

¹⁵¹ Ibid.

¹⁵² Atapattu, above n 86, 51.

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

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

VIII CHH AND COMPLIANCE

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

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

¹⁵³ Ibid 52.

¹⁵⁴ Ibid 54.

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

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

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

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

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

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

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

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

¹⁵⁹ Ibid art XV [5].

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

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

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

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

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

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

¹⁶⁶ Ibid art 11 option I.

¹⁶⁷ Ibid.

¹⁶⁸ Ibid.

¹⁶⁹ Ibid art 11 option II.

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

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

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

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

¹⁷⁰ Ibid art 11 option III.

¹⁷¹ Walsh and Whalley, above n 163, 242.

¹⁷² Chatterji at al, above n 61, 182.

¹⁷³ James Massola, Philip Wen, Lisa Cox, 'Game Changer', *Sydney Morning Herald* (Sydney) 13 November 2014, 1. 'Mr Obama announced a target to cut US emissions by 26-28 per cent below 2005 levels by 2025... Mr Xi pledged to cap China's growing carbon emissions by 2030 or sooner if possible. China also gave itself the challenging goal of increasing the share of zero-emission non-fossil fuel to 20 per cent of the country's energy mix by the same year...'.
¹⁷⁴ Peter Hannan, 'US, China Cuts to Carbon Emissions Won't Be Deep Enough', CSIRO says' *Sydney Morning Herald* (Sydney) 13 November 2014, 5 'The United States-China pact to curb greenhouse gas emissions is 'unprecedented' but won't be enough to prevent dangerous climate change, CSIRO Global Carbon Project head Pep Canadell says'.

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

¹⁷⁶ Ibid 388.

¹⁷⁷ Ibid.

¹⁷⁸ Ibid 386.

¹⁷⁹ Ibid 387.

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

Sean Walsh and John Whalley discuss three proposals to improve climate change compliance including trade penalties, enforcing an international treaty through an escrow account and the application of agency rankings.¹⁸⁰ If trade penalties are imposed, the World Trade Organisation may become involved, however, this organisation has not been established to deal with climate change trade restrictions¹⁸¹ so, presumably, amendments to the operation of this institution would be required. An escrow account could be set up so that all countries would be required to pay funds into the account. An international institution could manage the escrow account and would determine whether countries have complied with their obligations.¹⁸² If a country is not in compliance, the portion of the funds that they contributed will be forfeited and redistributed to other members of the fund who are in compliance.¹⁸³ The question is how would the surplus funds be allocated? Perhaps, it is more appropriate to provide these escrow funds as financial assistance to those developing countries likely to be severely impacted by climate change.

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

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

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

¹⁸⁰ Walsh and Whalley, above n 163, 230-231.

¹⁸¹ Ibid 229.

¹⁸² Ibid 231.

¹⁸³ Ibid.

¹⁸⁴ Ibid.

¹⁸⁵ Scott Barrett, 'Negotiating to Avoid 'Dangerous' Climate Change' in Nicholas Stern, Alex Bowen and John Whalley (eds), *The Global Development of Policy Regimes to Combat Climate Change* (World Scientific Publishing Co, Pte Ltd, 2014) 159, 177.

¹⁸⁶ Ibid 176.

¹⁸⁷ Ibid.

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

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

IX CCH, HUMAN RIGHTS AND DISPLACED PEOPLE

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

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

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

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

¹⁸⁸ Walsh and Whalley, above n 163, 226.

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

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

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

¹⁹² *UNFCCC*, art 4.

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

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

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

¹⁹⁶ *Ibid* 7.

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

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

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

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

6) The right to self-determination will be impacted because climate change will lead to sea level rise which threatens the future viability of small island states²⁰² and low-lying areas where communities are displaced due to inundation of sea water. There will also continue to be adverse impacts on the livelihoods of indigenous groups in the Arctic and Russia. Some indigenous peoples may no longer be able to engage in their traditional way of life and may have to leave their homelands.

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

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

¹⁹⁹ Ibid 14.

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

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

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

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

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

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

²⁰³ 2015 Draft Agreement, above n 5, preamble.

²⁰⁴ Ibid arts 2, 4.

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

²⁰⁶ Ibid.

²⁰⁷ Ibid.

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

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

²¹⁰ McAdam, above n 190, 28.

²¹¹ Ibid 29-30.

²¹² Ibid 92.

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

²¹⁴ Horn and Freeland, above n 45, 124.

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

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

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

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

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

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

²¹⁷ Ibid.

²¹⁸ McAdam, above n 190, 43-48.

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

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

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

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

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

²²⁴ McAdam, above n 190, 232.

²²⁵ Ibid.

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

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

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

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

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

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

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

²²⁸ Warner, above n 222, 14.

²²⁹ Ibid 15.

²³⁰ McAdam, above n 190, 233.

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

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

²³³ McAdam, above n 190, 236.

X TRUST FOR FUTURE GENERATIONS

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

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

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

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

²³⁵ Ibid art 3(1).

²³⁶ World Commission on Environment and Development, *Our Common Future* (Australian edition, Oxford University Press, 1987) 43 ('Sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future. Far from requiring the cessation of economic growth, it recognizes that the problems of poverty and underdevelopment cannot be solved unless we have a new era of growth in which developing countries play a large role and reap large benefits.[Sustainable development] contains within it two key concepts:

- The concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and
- The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs').

²³⁷ Trindade and Attard, above n 111, 21.

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

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

²⁴⁰ Ibid 492.

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

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

²⁴³ Ibid.

regulate the protection of the atmosphere²⁴⁴ as a trust for present and future generations. So, arguably, the CCH concept operates to motivate states to change existing institutions and develop new institutions that will provide more effective protection of the Earth's climate.²⁴⁵

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

XI REPRESENTATION FOR FUTURE GENERATIONS

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

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

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

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

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

²⁴⁸ *Ibid* 336.

²⁴⁹ *Ibid*.

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

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

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

²⁵³ *Ibid* 102.

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

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

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

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

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

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

²⁵⁵ Ibid [63].

²⁵⁶ Ibid [65].

²⁵⁷ Ibid.

²⁵⁸ Ibid [66].

²⁵⁹ Ibid [67].

²⁶⁰ Ibid [57].

²⁶¹ Brown Weiss, above n 252,112.

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

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

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

XII CONCLUSION

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

²⁶² Ibid.

²⁶³ Ibid 109.

²⁶⁴ Birnie, Boyle and Redgwell, above n 12, 121.

²⁶⁵ *Re Minors Oposa v Secretary of the Department of Environment and Natural Resources* (1994) 33 ILM 174.

²⁶⁶ Ibid 187-188.

²⁶⁷ Ibid 185.

²⁶⁸ *Statute of the International Court of Justice* art 34.

²⁶⁹ *2015 Draft Agreement*, above n 5, art 11.

²⁷⁰ See Dupuy and Vinuales above n 18, 53.

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

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

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

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

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

²⁷¹ McAdam, above n 190, 95.

²⁷² Ibid 269.

²⁷³ *Introduction to the Proceedings of the Meeting*, above n 26, 18.

²⁷⁴ Christopher Stone, 'Defending the Global Commons' in Philippe Sands (ed), *Greening International Law* (Earthscan Publications Ltd, 1993) 34, 40.

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

POSTSCRIPT

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

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

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

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

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

²⁷⁷ Ibid preamble [11].

²⁷⁸ Ibid art 14.

²⁷⁹ Ibid art 2.