

Republic of the Philippines Commission on Human Rights

**CHR-NI-2016-0001 In Re: National inquiry on the impact of climate change
on the human rights of the Filipino People**

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I am honoured to provide this statement, and to appear before the Philippine Commission on Human Rights as part of its 3rd public hearing (27-28th September 2018). The petitioners have invited me to serve as a resource person to the Commission, and to share my expertise on *economic, social and cultural rights and climate change, and on how climate change acts as a threat multiplier with respect to these rights*. A copy of my Curriculum Vitae is appended to this statement.

The first two parts of my statement will address the relationship between climate change and human rights in general terms, and will set out the responsibilities of States and corporate actors with respect to climate change-related human rights harms. I will then turn to an examination of climate change impacts on specific economic, social and cultural rights – namely, the rights to equality and non-discrimination, the right to self-determination and development, the right to an adequate standard of living (including the rights to food, water and sanitation, and adequate housing); the right to work and social security; the right to health; the right to education; and the right to culture. My statement draws on a range of international reports and declarations, as well as on the publication *Economic, Social and Cultural Rights and Climate Change: A Legal Reference Guide* (New Haven, Ct.: CISDL, GEM & ASAP, 2013), which I co-edited with Sébastien Jodoin, a law professor at McGill University.

I. The relationship between climate change and human rights

The Philippines is amongst the world's most vulnerable countries to climate change.¹ The country faces both rapid- and slow-onset climate change impacts, including increased intensity and frequency of typhoons, and modified typhoon patterns; more extreme and warmer conditions; increased variability, intensity and amount of rainfall; increased intensity of storm surges; floods; droughts; ocean acidification; and more frequent forest fires.² The Philippines is also particularly vulnerable to sea level rise.³ Many of these impacts are already being felt in the country. For example, climate change-induced variability in rainfall has already been observed, along with evidence showing changes in the intensity of extreme rainfall events in some places,

¹ Javier Bornstein Ortega & Christine Klauth, *Climate Landscape Analysis for Children in the Philippines* (Makati City: UNICEF Philippines, 2017), online: <<https://www.unicef.org/philippines/UNICEFPCLAC.pdf>> at 11 [UNICEF Philippines]. See also: Sönke Kreft, David Eckstein & Inga Melchior, *Global Climate Risk Index 2017* (Bonn: Germanwatch, 2017) at 4-5.

² UNICEF Philippines, *ibid* at 11.

³ *Ibid*. The report notes that in the Philippines, water levels are projected to rise between 7.6 and 10.2 centimetres every 10 years, compared to the global average of 3.1 centimetres.

while in other parts of the country, there has been a decrease in total rainfall.⁴ Other studies indicate an increase in the frequency and intensity of tropical cyclones originating in the Pacific over the last few decades, including the occurrence of three typhoons with the highest ever recorded maximum gustiness (Typhoons Durian, Babs, and Haiyan) over the last two decades alone.⁵

As numerous international experts and bodies have recognized, the effects of climate change have profound repercussions for the enjoyment of a wide range of human rights.⁶ As the climate changes, the impacts on ecosystems, the increased frequency and intensity of natural disasters and slow onset events, and the potential for increased conflict, will all affect a number of rights, including the right to life, the right to food, the rights to water and sanitation, the right to adequate housing, the right to health, the right to education, and the right to culture.⁷ The rights to equality and non-discrimination, to self determination, and to economic, social and cultural development are similarly implicated.⁸ In addition, the mitigation and adaptation measures taken by States in response to climate change have the potential to negatively affect the enjoyment of human rights.⁹

⁴ Rex Victor O Cruz *et al*, *2017 Philippine Climate Change Assessment: Working Group 2: Impacts, Vulnerabilities and Adaptation* (Ortigas Pasig City: Oscar M. Lopez Center & Climate Change Commission, 2017) at 2 [Cruz *et al*].

⁵ *Ibid*.

⁶ Sébastien Duyck, Sébastien Jodoin & Alyssa Johl, “Integrating Human Rights in Global Climate Governance” in Sébastien Duyck, Sébastien Jodoin & Alyssa Johl, eds., *Routledge Handbook of Human Rights and Climate Governance* (Abingdon, UK: Routledge, 2018) at 3. See, eg: Human Rights Council (HRC) Res 7/23, *Human Rights and Climate Change*, UN Doc A/HRC/RES/7/23 (28 March 2008); HRC Res 10/4, *Human Rights and Climate Change*, UN Doc A/HRC/RES/10/4 (25 March 2009); UN Office of the High Commissioner for Human Rights (OHCHR), *Report of the OHCHR on the Relationship between Climate Change and Human Rights*, UN Doc A/HRC/10/61 (15 January 2009) [A/HRC/10/61]; HRC Res 18/22, *Human Rights and Climate Change*, UN Doc A/HRC/RES/18/22 (30 September 2011); United Nations Framework Convention on Climate Change (UNFCCC), *The Cancun Agreements: Outcome of the Work of the Ad Hoc Working Group on Long-Term Cooperative Action Under the Convention*, UN Doc FCCC/CP/2010/7Add.1 (December 2010); OHCHR, *Report of the Independent Expert on the Issue of Human Rights Obligations relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment - Mapping Report*, UN Doc A/HRC/25/53 (30 December 2014) [A/HRC/25/53]; OHCHR, *Mapping Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment: Focus Report on Human Rights and Climate Change* (June 2014); HRC Res 26/27, *Human Rights and Climate Change*, UN Doc A/HRC/26/27 (27 June 2014); OHCHR, *A New Climate Change Agreement Must Include Human Rights Protections for All*, An Open Letter From Special Procedures Mandate-Holders of the Human Rights Council to the State Parties to the UN Framework Convention on Climate Change on the Occasion of the Meeting of the Ad Hoc Working Group on the Durban Platform for Enhanced Action in Bonn (20-25 October 2014) (17 October 2014); HRC Res, *Human Rights and Climate Change*, UN Doc A/HRC/29/15 (2 July 2015); Inter-American Commission on Human Rights, *IACHR Expresses Concern Regarding Effects of Climate Change on Human Rights* (2 December 2015); UNFCCC, *Adoption of the Paris Agreement*, UN Doc FCCC/CP/2015/L.9/Rev.1 (12 December 2015) [Paris Agreement]; OHCHR, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, UN Doc A/HRC/31/52 (1 February 2016) [A/HRC/31/52]; OHCHR, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, UN Doc A/HRC/37/59 (24 January 2018); OHCHR, *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment*, UN Doc A/HRC/37/58 (24 January 2018); HRC Res, *Human Rights and Climate Change*, UN Doc A/HRC/38/L.5 (2 July 2018).

⁷ See, eg: Stephen Humphreys, *Human Rights and Climate Change* (Cambridge University Press, 2010); Jon Barnett & W Neil Adger, “Climate Change, Human Security and Violent Conflict” (2007) 26:6 *Polit Geogr* 639; Jonathan A Patz *et al*, “Impact of Regional Climate Change on Human Health” (2005) 438:7066 *Nature* 310; Anthony J McMichael, Rosalie E Woodruff & Simon Hales, “Climate Change and Human Health: Present and Future Risks” (2006) 367:9513 *The Lancet* 859.

⁸ Andrea Schapper & Markus Lederer, “Introduction: Human Rights and Climate Change: Mapping Institutional Inter-Linkages” (2014) 27:4 *Camb Rev Int Aff* 666 at 669.

⁹ See, eg, Sébastien Jodoin, *Forest Preservation in a Changing Climate: REDD+ and Indigenous and Community Rights in Indonesia and Tanzania* (Cambridge, UK: Cambridge University Press, 2017).

Climate change also acts as a “threat multiplier” with respect to its impact on human rights, exacerbating existing vulnerabilities and reinforcing social inequalities. The consequences of climate change will disproportionately affect those individuals and communities who already face disparate access to healthcare, education, water, food, housing, and transportation, including women, children, older persons, Indigenous peoples, minorities, migrants, rural workers, persons with disabilities, the poor, and those living in at risk areas.¹⁰ Climate change impacts will also make it more difficult for governments to meet their existing human rights obligations, adding additional stress to infrastructure and the provision of government services, and requiring tremendous financial and human resources to address.¹¹

II. Human rights obligations of States and corporate actors

All States have an obligation to address the human rights implications of environmental harms, including the human rights implications of climate change.¹² States’ obligations in this regard entail three types of duty:

- The duty to *respect* human rights – a negative obligation requiring states to refrain from taking actions that would interfere with or curtail the enjoyment of human rights.
- The duty to *protect* human rights against violations by third parties (including corporate actors).
- The duty to *fulfil* human rights, a positive obligation, which requires states to undertake measures to ensure the realization of rights for all members of society.¹³

These duties apply equally to all categories of human rights, including economic, social and cultural rights; while there may be some scope within international human rights law for differences in the implementation or prioritization of certain human rights standards, these differences have no bearing on the legal question of whether States must comply with their human rights obligations. Under the *International Covenant on Economic, Social and Cultural Rights* (ICESCR), States have immediate obligations to take steps towards the full realization of rights (also known as “progressive realization”)¹⁴; to ensure a minimum adherence to each right¹⁵; and to guarantee the exercise of rights without any kind of discrimination.¹⁶ States also

¹⁰ OHCHR, *Discussion Paper: The Rights of Those Disproportionately Impacted by Climate Change* (30 September 2016), online: <<https://www.ohchr.org/Documents/Issues/ClimateChange/EM2016/DisproportionateImpacts.pdf>> at 1 [OHCHR Discussion Paper].

¹¹ *Report of the OHCHR on the Relationship between Climate Change and Human Rights*, *supra* note 6 at 75. See also: Human Rights Watch (HRW), “*There Is No Time Left*”: *Climate Change, Environmental Threats, and Human Rights in Turkana County, Kenya* (HRW, 2015) at 42.

¹² A/HRC/31/52, *supra* note 6 at para 65; A/HRC/25/53, *supra* note 6 at paras 44-57. For example, the Paris Agreement acknowledges that, whenever States take action to address climate change, they should “respect, protect and consider their respective obligations on human rights” (Paris Agreement, *supra* note 6 at Preamble).

¹³ UNEP, *Climate Change and Human Rights* (Nairobi: UNEP, 2015) at 15 [UNEP].

¹⁴ Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No 3*, UN Doc E/1991/23 (14 December 1990) at para 2.

¹⁵ *Ibid*, at para 10.

¹⁶ *International Covenant on Economic, Social and Cultural Rights* (ICESCR), 16 December 1966, 993 UNTS 3 at Art 2(2) [ICESCR].

have a responsibility to respect, protect, and consider their human rights obligations when taking action to address climate change.¹⁷

Included amongst States' substantive human rights obligations is the duty to protect individuals' rights from abuse by private actors and other third parties, including corporations.¹⁸ To this end, States also have "substantive obligations to adopt legal and institutional frameworks that protect against environmental harm that interferes with the enjoyment of human rights, including harm caused by private actors".¹⁹

In addition to the duty to ensure the enjoyment of human rights within their national jurisdictions, States also have human rights obligations beyond their borders. The Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights set out States' human rights obligations in this respect, affirming, *inter alia*, that "[a]ll States have obligations to respect, protect and fulfil human rights, including civil, cultural, economic, political and social rights, both within their territories and extraterritorially."²⁰ The Maastricht Principles also provide, at Principle 25(a)(d), that:

States must adopt and enforce measures to protect economic, social and cultural rights through legal and other means, including diplomatic means, in each of the following circumstances: (a) the harm or threat of harm originates or occurs on its territory [...] (d) there is a reasonable link between the State concerned and the conduct it seeks to regulate.²¹

Corporations also have a responsibility to respect human rights.²² The UN Guiding Principles on Business and Human Rights, endorsed by the UN Human Rights Council in June 2011, enshrine standards for non-state actors in meeting their human rights responsibilities.²³ In particular, these standards affirm that: "[b]usiness enterprises should respect human rights. This means that they should avoid infringing on the human rights of others and should address adverse human rights impacts with which they are involved."²⁴ This responsibility exists independently of whether States themselves fulfil their human rights obligations.²⁵

¹⁷ Paris Agreement, *supra* note 6 at Preamble.

¹⁸ United Nations Human Rights Committee, *General Comment No. 31 [80]*, UN Doc CCPR/C/21/Rev.1/Add.13 (26 May 2004) at para 8. See also: OHCHR, *Frequently Asked Questions About the Guiding Principles on Business and Human Rights* (New York & Geneva: United Nations, 2014) at 7 [*Guiding Principles FAQ*].

¹⁹ A/HRC/25/53, *supra* note 6 at para 80.

²⁰ ETO Consortium, *Maastricht Principles on Extraterritorial Obligations of States in the Area of Economic, Social and Cultural Rights* (Heidelberg, Germany: FIAN International, 2013) at Principle 3 [*Maastricht Principles*]. The Maastricht Principles do not establish new elements of human rights law; rather, they clarify extraterritorial obligations of States on the basis of existing international law. See also: Principles 4, 25(a)(d), 26, and 37.

²¹ *Ibid* at Principle 25(a)(d).

²² A/HRC/31/52, *supra* note 6 at para 66.

²³ OHCHR, *Report of the Special Representative of the Secretary General on the Issue of Human Rights and Transnational Corporations and Other Business Enterprises*, John Ruggie - *Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework*, UN Doc A/HRC/17/31 (21 March 2011) [*Guiding Principles*]. The Guiding Principles "clarify and elaborate on the implications of relevant provisions of existing international human rights standards, some of which are legally binding on States, and provide guidance on how to put them into operation. The Guiding Principles refer to and derive from States' existing obligations under international law" (Guiding Principles FAQ, *supra* note 18 at 8).

²⁴ *Guiding Principles*, *ibid* at Principle 11.

²⁵ *Guiding Principles FAQ*, *supra* note 18 at 7.

The Guiding Principles also provide that “[w]here business enterprises identify that they have caused or contributed to adverse impacts, they should provide for or cooperate in their remediation through legitimate processes.”²⁶ Corporations are thus held to a “know and show” standard – “companies must know their impact, avoid human rights infringements and address any potential or actual impact”, in addition to providing for or participating in effective remedy processes via judicial or non-judicial grievance mechanisms in cases where harm has occurred.²⁷

III. Impacts of climate change on the realization of specific human rights

I will now turn to an overview of the ways in which climate change threatens the realization of specific economic, social and cultural rights, as codified in the ICESCR and other core human rights treaties. Although I will be addressing these rights individually, it is important to note that under international human rights law, all rights are considered to be universal, inalienable, indivisible, interdependent, and interrelated, and the deprivation of one right adversely affects all the others.²⁸ For this reason, in addition to the rights highlighted in the Petition, I will also be addressing the right to education and the right to culture.

(i) Right to equality and non-discrimination²⁹

Under international human rights law, the concept of equality is implemented through the prohibition of certain types of discrimination. Discrimination is defined, according to the Committee on Economic, Social and Cultural Rights (CESCR), as

any distinction, exclusion, restriction or preference or other differential treatment that is directly or indirectly based on the prohibited grounds of discrimination and which has the intention or effect of nullifying or impairing the recognition, enjoyment or exercise, on an equal footing, of Covenant rights.³⁰

As the CESCR has emphasized, “[d]iscrimination undermines the fulfilment of economic, social and cultural rights for a significant proportion of the world’s population.”³¹

Climate change may infringe on the right to equality and non-discrimination because the failure to reduce carbon emissions and to adopt adaptation measures will have

²⁶ *Guiding Principles*, *supra* note 23 at Principle 22.

²⁷ *Guiding Principles FAQ*, *supra* note 18 at 8.

²⁸ See eg: OHCHR, “What are human rights?”, online:

<<https://www.ohchr.org/en/issues/pages/whatarehumanrights.aspx>>.

²⁹ ICESCR, *supra* note 16 at Art 2(2); *Universal Declaration of Human Rights* (UDHR), GA Res 217(III), UN GAOR, 3d Sess, Supp No 13, UN Doc A/810 (1948) at Arts 1 and 2 [UDHR]; *International Covenant on Civil and Political Rights* (ICCPR), 16 December 1966, 999 UNTS 171 at Art 2(1) [ICCPR]. See also: *Convention on the Elimination of All Forms of Discrimination Against Women* [CEDAW]; *Convention on the Rights of the Child*, 20 November 1989, 1577 UNTS 3 [CRC]; *Convention on the Rights of Persons with Disabilities*, 13 December 2006, 2515 UNTS 3 [CRPD]; and UNGA, *UN Declaration on the Rights of Indigenous Peoples*, 2 October 2007, UN Doc A/RES/61/295 [UNDRIP].

³⁰ CESCR, *General Comment No 20*, UN Doc E/C.12/GC/20 (2 July 2009) at para 7.

³¹ *Ibid.*

differential impacts on different countries, communities, and individuals. The IPCC has concluded that “people who are socially, economically, politically, institutionally or otherwise marginalized are especially vulnerable to climate change”.³² The Office of the High Commissioner for Human Rights (OHCHR) has similarly found that the negative impacts of climate change will have a disproportionate effect on individuals, groups and peoples in vulnerable situations, including women, children, older persons, Indigenous peoples, minorities, migrants, rural workers, persons with disabilities, the poor, and those living in vulnerable areas (for example: small islands, riparian and low-lying coastal zones, arid regions, and the poles).³³

(ii) Right to self-determination and development³⁴

The ICESCR affirms that “[a]ll peoples have the right of self-determination”, stating that “[b]y virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.”³⁵ As affirmed in the 1986 *Declaration on the Right to Development*,

the right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realized.³⁶

Both the economic and non-economic costs of climate change are immense, and pose a grave threat to the realization of sustainable development and self-determination in the Philippines. For example, the *2017 Philippine Climate Change Assessment* notes that in the area of human health alone, “[t]he potential impacts of climate change are projected to be USD 5 to 19 million by 2050 in terms of loss of public safety, increased vector- and water-borne diseases, and increased malnutrition from food shortages during extreme events”³⁷, not to mention those costs that cannot be easily quantified. The impacts of climate change on a range of economic sectors and services – including agriculture, water, fisheries, energy, transportation, and tourism – will diminish Filipinos’ ability to enjoy, contribute to, and participate fully in economic, social, and cultural development, and will make it more difficult for the government to ensure the realization of the right to development and other economic, social and cultural rights.

³² Intergovernmental Panel on Climate Change (IPCC) Working Group II, *Climate Change 2014: Impacts, Adaptation and Vulnerability, Summary for Policymakers* at 6 [IPCC].

³³ OHCHR *Discussion Paper*, *supra* note 10 at 1.

³⁴ ICESCR, *supra* note 16 at Art 1(1); ICCPR, *supra* note 29 at Art 1(1); UNGA Res 41/128, *Declaration on the Right to Development*, UN Doc A/RES/41/128 (4 December 1986) at Art 1(1) [*Declaration on the Right to Development*].

³⁵ ICESCR, *supra* note 16 at Art 1(1).

³⁶ *Declaration on the Right to Development*, *supra* note 34 at Art 1(1).

³⁷ Cruz *et al*, *supra* note 4 at 9.

(iii) Right to food³⁸

Climate change is progressively threatening food security.³⁹ The Intergovernmental Panel on Climate Change (IPCC) has stated that “all aspects of food security are potentially affected by climate change, including food access, utilization, and price stability.”⁴⁰ Variability in rainfall, changes in the suitability of arable land, pests, and drought are projected to increase crop losses and reduce agricultural production, thereby affecting the availability of food.⁴¹ Access to food can also be affected by damage to crop yields, damage to infrastructure, and the destruction of livelihoods caused by extreme weather events such as typhoons. These factors can in turn lead to higher levels of malnutrition, wasting, and micronutrient deficiency.⁴²

The impacts of climate change on the right to food will have a disproportionate effect on the developing world. Climate change is “projected to slow down economic growth, make poverty reduction more difficult, further erode food security, and prolong existing and create new poverty traps, the latter particularly in urban areas and emerging hotspots of hunger.”⁴³ Impoverished communities are particularly at risk of under-nutrition from diminished food production in poorer regions.⁴⁴

In the Philippines, the agricultural sector is strongly affected by climate change, and the increasing frequency and intensity of extreme weather events such as tropical cyclones is already having a detrimental effect on food security.⁴⁵ These impacts are expected to worsen over time. For example, models predict that an estimated 70,000 additional children will be malnourished in the Philippines by 2050 due to climate change impacts, amounting to an increase of 4%.⁴⁶

(iv) Right to water⁴⁷ and sanitation⁴⁸

Climate change is impacting the enjoyment of the right to water. The loss of glaciers and reductions in snow cover are projected to negatively affect populations supplied

³⁸ ICESCR, *supra* note 16 at Art 11; CRC, *supra* note 29 at Art. 24(c); CRPD, *supra* note 29 at Arts 25(f) and 28(1); CEDAW, *supra* note 29 at Art 14(2)(h); CERD, *supra* note 29 at Art 5(e).

³⁹ See eg: OHCHR, *Report of the Special Rapporteur on the right to food*, Jean Ziegler, UN Doc A/HRC/7/5 (10 January 2008) at para 51; OHCHR, *Report of the Special Rapporteur on the right to food: Mission to Bolivia*, UN Doc A/HRC/7/5/Add.2 (30 January 2008) at paras 11 and 15; A/HRC/31/52, *supra* note 6 at 26.

⁴⁰ IPCC, *supra* note 32 at 18.

⁴¹ See, eg: UNICEF Philippines, *supra* note 1 at 20; A/HRC/31/52, *supra* note 6 at 26.

⁴² UNICEF Philippines, *supra* note 1 at 20.

⁴³ IPCC, *supra* note 32 at 20, 6-8. See also: Columbia Law School – Human Rights Institute, *Volume 8: Climate Change and the Right to Food: A Comprehensive Study (Executive Summary)* (Berlin: Heinrich-Böll-Stiftung, 2009) at 14.

⁴⁴ *Ibid* at 19.

⁴⁵ Timothy S Thomas, Angga Pradesha & Nicostrato Perez, *Agricultural Growth, Climate Resilience, and Food Security in the Philippines* (Washington: IFPRI, 2016) at 1.

⁴⁶ UNICEF Philippines, *supra* note 1 at 20.

⁴⁷ ICESCR, *supra* note 16 at Art 11; CEDAW, *supra* note 29 at Art 14(2)(h); and CRPD, *supra* note 29 at Art 28(2)(a). See also: CRC, *supra* note 29 at Art 24(2)(c).

⁴⁸ See eg: HRC, *Report of the Independent Expert on the Issue of Human Rights Obligations related to Access to Safe Drinking Water and Sanitation*, Catarina de Albuquerque, UN Doc A/HRC/12/24 (1 July 2009); GA Res 64/292, *The Human Right to Water and Sanitation*, UN Doc A/RES/64/292 (28 July 2010). HRC Res 15/9, *Human Rights and Access to Safe Drinking Water and Sanitation*, UN Doc A/HRC/RES/15/9 (6 October 2010); CESCR, *Statement on the Right to Sanitation*, UN Doc E/C.12/2010/1 (19 November 2010) at para 8; and CESCR, *General Comment No 15*, UN Doc E/C.12/2002/11 (26 November 2002) at para 1 [*General Comment No 15*].

by melt water from mountain ranges,⁴⁹ while extreme weather events, increased temperatures, changes in precipitation, and sea level rise will also impact water supplies for human consumption and agriculture, and harm freshwater ecosystems.⁵⁰

As the OHCHR notes, “[c]limate change will thus exacerbate existing stresses on water resources and compound the problem of access to safe drinking water, currently denied to an estimated 1.1 billion people globally and a major cause of morbidity and disease.”⁵¹ Moreover, the extent to which the right to water is affected will increase as the global mean temperature increases. The IPCC has estimated that a 1°C temperature rise would result in approximately 8 percent of the world population experiencing a severe reduction in water resources, while that percentage would rise to 14 percent at 2°C warming.⁵²

The right to adequate sanitation is inseparable from the right to water, as poor sanitation is the primary cause of water contamination and diseases linked to water.⁵³ Climate change effects such as rising sea levels, tropical storms, heat stress, extreme precipitation, flooding, and landslides will all have serious impacts on infrastructure and services related to sanitation, and will in many cases exacerbate existing vulnerabilities.⁵⁴ For example, in the Philippines, flooding and intense rainfall can damage and contaminate water sources, increasing the prevalence of illness such as diarrhea, which is one of the primary causes of death for children under five.⁵⁵

(v) Right to adequate housing⁵⁶

Climate change may impact upon the right to housing in many ways. The OHCHR has observed that sea level rise and storm surges are having a direct impact on a number of coastal settlements, threatening homes, critical infrastructure, and other services.⁵⁷ Settlements in low-lying mega-deltas are also particularly at risk, “as evidenced by the millions of people and homes affected by flooding in recent years.”⁵⁸

Impacts on the right to housing may also be linked to climate-induced migration. For example, the OHCHR observes that “[t]he erosion of livelihoods, partly caused by climate change, is a main ‘push’ factor for increasing rural to urban migration”, noting that as a result, “[m]any will move to urban slums and informal settlements where they are often forced to build shelters in hazardous areas.”⁵⁹

⁴⁹ A/HRC/10/61, *supra* note 6 at para 29.

⁵⁰ *Ibid*; UNEP, *supra* note 13 at 3.

⁵¹ A/HRC/10/61, *ibid*; A/HRC/31/52 at para 25.

⁵² IPCC, *supra* note 32 at 250.

⁵³ *General Comment No 15*, *supra* note 48 at para 31.

⁵⁴ UNEP, *supra* note 13 at 5.

⁵⁵ UNICEF Philippines, *supra* note 1 at 20.

⁵⁶ See eg: ICESCR, *supra* note 16 at Art 11. See also: UDHR, *supra* note 29 at Art 25(1); CERD, *supra* note 29 at Art 5(e)(iii); CEDAW, *supra* note 29 at Art 14(2); CRC, *supra* note 29 at Art 27(3); CRPD, *supra* note 29 at Arts 9(1)(a), 28(1) and (2)(d).

⁵⁷ A/HRC/10/61, *supra* note 6 at para 36.

⁵⁸ *Ibid*.

⁵⁹ *Ibid* at para 37. UNEP, *supra* note 13 at 5.

In the Philippines, many poor people in urban areas lack access to infrastructure and basic services, and many live in settlements located in low-lying coastal areas.⁶⁰ These communities are particularly vulnerable to climate impacts such as flash flooding, landslides, sea level rise, and storm surges, which jeopardize their enjoyment of the right to housing.⁶¹

(vi) Right to work⁶² and social security⁶³

Climate change may affect the right to work in a number of ways, including by provoking significant economic transformations. For example, with the expected bleaching of coral reefs due to increased temperatures and ocean acidification,⁶⁴ and with changes to ecosystems and wildlife stocks, the tourism industry in certain locations may decline, resulting in the loss of employment. Similarly, changes in ocean acidity and temperature may impact fisheries and the livelihoods of fisherfolk, as fish stocks collapse or migrate.⁶⁵ Other slow onset events such as increased temperatures, rainfall variability, and water salinization will also affect the agricultural sector, impacting livelihoods.⁶⁶ Indeed, in the context of the Philippines, UNICEF has noted that “[s]ubsistence livelihoods in rain-fed agriculture are especially threatened by climate change and environmental degradation.”⁶⁷

Extreme weather events leading to the destruction of infrastructure, displacement, and damage to crop yields will also have important economic consequences and may directly affect the right to work.⁶⁸ In addition, UNEP has observed that climate-related hazards “will also have indirect effects on livelihoods by exacerbating other stressors”, noting that climate change may contribute to “(i) increases in the prices of food, energy, and other critical commodities; (ii) political instability and large-scale conflict; and (iii) individual and household-level disturbances.”⁶⁹

Climate change impacts may decrease access to safe working conditions.⁷⁰ For example, more intense heat waves can result in the greater risk of injury, disease and death amongst workers.⁷¹ Malnutrition due to decreased food security and the increased risk of food-, water-, and vector-borne diseases may also impact individuals’ ability to work.⁷² The United Nations Environment Programme (UNEP)

⁶⁰ Katherine Lofts & Alex Kenny, *Mainstreaming Climate Resilience into Government: The Philippines’ Climate Change Act* (CDKN 2012) at 1.

⁶¹ See: UNICEF Philippines, *supra* note 4 at 21.

⁶² ICESCR, *supra* note 16 at Arts 6-8; ICCPR, *supra* note 29 at Art 8(3)(a); CERD, *supra* note 29 at Art 5(e)(i); CEDAW, *supra* note 29 at Art 11(1)(a); CRC, *supra* note 29 at Art 32; *International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families*, 18 December 1990, 2220 UNTS 3 at Arts 11, 25, 26, 40, 52 and 54.

⁶³ ICESCR, *supra* note 16 at Art 9; CERD, *supra* note 29 at Art 5(e)(iv); CEDAW, *supra* note 29 at Art 11 and 14; CRC, *supra* note 29 at Art 26.

⁶⁴ IPCC, *supra* note 32 at 17.

⁶⁵ *Ibid.*

⁶⁶ International Labour Organization, *Employment Working Paper No. 104: Towards an ILO Approach to Climate Change Adaptation* (Geneva: ILO, 2011) at 18.

⁶⁷ UNICEF Philippines, *supra* note 4 at 20.

⁶⁸ UNEP, *supra* note 13 at 7.

⁶⁹ *Ibid.*

⁷⁰ See: A/HRC/31/52, *supra* note 6 at para 24.

⁷¹ UNEP, *supra* note 13 at 8.

⁷² *Ibid.*

notes that “[i]n some regions, the combined effects of higher average temperatures and higher humidity will also create significant health risks.”⁷³

The right to social security is also affected by climate change. This right represents an important legal guarantee aimed at ensuring the right of everyone to live a life in human dignity in situations of social distress such as old age, disability, unemployment, employment injury, illness, childbirth, death, or other unforeseen circumstances.⁷⁴

The inter-linkages between climate change and social security are vast, as climate change impacts add stress to wide range of pre-existing social issues. The IPCC warns that climate change will significantly decrease access to basic necessities – for example, through lower crop productivity, increased coastal erosion and flooding, and species extinction.⁷⁵ Extreme weather events are also likely to increase rates of injury, malnutrition, disease and death, and will put a strain on States’ capacity to provide social security services in accordance with international standards.

Moreover, the additional stresses caused by climate change will have a disproportionate impact on individuals and social groups that are already in positions of vulnerability, including women, children, older persons, Indigenous peoples, minorities, migrants, rural workers, persons with disabilities, the poor, and those living in particularly at-risk areas.⁷⁶

(vii) Right to the highest attainable standard of physical and mental health⁷⁷

The right to health is connected to, and dependent upon, the realization of other human rights contained in the *Universal Declaration of Human Rights*, the *International Covenant on Civil and Political Rights*, and the ICESCR, including the rights to food, housing, work, education, human dignity, non-discrimination, equality, the prohibition against torture, privacy, access to information, and freedom of association, assembly and movement.⁷⁸ The right to health is also intimately tied to the right to life.⁷⁹

Climate change is responsible for a range of increased health hazards affecting the enjoyment of the right to health. UNEP has noted that climate change is already having a negative impact on health, and observes that projected climate change scenarios will result in a range of worsening health impacts, including:

⁷³ *Ibid.*

⁷⁴ CESCR, *Day of General Discussion: The Right to Social Security (Article 9 of the Covenant)*, UN Doc E/2007/22/CRP.3 (15 May 2006) at para 5 (comment made by Mr. Alessio Bruni, Team Leader of the Treaty Implementation and Follow-up Team I at the United Nations High Commissioner for Human Rights).

⁷⁵ IPCC, *supra* note 32.

⁷⁶ OHCHR *Discussion Paper*, *supra* note 10 at 1.

⁷⁷ See, eg: ICESCR, *supra* note 16 at Art. 12; UDHR, *supra* note 29 at Art 25; CRPD, *supra* note 29 at 25.

⁷⁸ CESCR, *General Comment No 14*, UN Doc E/C.12/2000/4 (11 August 2000) at para 3.

⁷⁹ UDHR, *supra* note 29 at Art 3; ICCPR, *supra* note 29 at Arts 6 and 9.

(i) greater risk of injury, disease, and death due to more intense heat waves and fires; (ii) increased risk of under-nutrition resulting from diminished food production in poor regions; (iii) health consequences stemming from lost work capacity and reduced labor productivity in vulnerable populations; and (iv) increased risk of food-, water- and vector-borne diseases.⁸⁰

In the Philippines, the WHO has identified several priority health issues linked to climate change, including risks from infectious and vector-borne diseases, ambient and indoor air pollution, sea-level rise, heat-related deaths, and under-nutrition.⁸¹

Climate change is also linked to increased rates of mortality. Indeed, the WHO has projected that climate change will cause approximately 250,000 additional deaths per year in the period from 2030 to 2050 due to increased malnutrition, malaria, dengue, diarrhea, and heat stress alone,⁸² while a study commissioned by the Climate Vulnerable Forum placed the figure at an additional 700,000 deaths per year by 2030.⁸³ The same study found that climate change is currently responsible for 400,000 deaths per year.⁸⁴

In addition, climate change impacts pose significant risks to mental health. For example, climate change disasters are associated with an increase in stress-related psychiatric disorders.⁸⁵ Increased psychological distress and impaired mental health has also been linked to a range of other climate impacts, including slow onset events such as drought, economic stressors, and climate-induced migration.⁸⁶

(viii) Right to education⁸⁷

Climate change may impact the right to education in many ways. Extreme weather events such as landslides, flooding, and tropical storms can destroy school buildings, power lines, and roads, and disrupt transportation systems. In some cases, children may be unable attend school due to climate-induced displacement and migration. Climate change impacts may also result in increased poverty, which may in turn force children out of school and into the workforce.⁸⁸ In the context of the Philippines, UNICEF states that climate change poses a severe threat to children's education, in part because "[t]he increasing intensity and frequency of extreme weather events lead to suspended classes which can disrupt school attendance."⁸⁹ Climate change may also have indirect impacts on the right to education. For example, physical vulnerabilities linked to climate change impacts (such as illness or malnourishment) may constrain children's ability to obtain an education.

⁸⁰ UNEP, *supra* note 13 at 8.

⁸¹ UNICEF Philippines, *supra* note 1 at 20.

⁸² World Health Organization, *Quantitative Risk Assessment of the Effects of Climate Change on Selected Causes of Death, 2030s and 2050s* (Geneva: WHO, 2014) at 13.

⁸³ DARA and the Climate Vulnerable Forum, *Climate Vulnerability Monitor 2nd Edition: A Guide to the Cold Calculus of a Hot Planet* (Madrid: Fundación DARA Internacional, 2012) at 17.

⁸⁴ *Ibid.*

⁸⁵ See, eg: SK Padhy *et al.*, "Mental Health Effects of Climate Change" (2015) 19:1 Indian J Occup Environ Med 3.

⁸⁶ *Ibid.*

⁸⁷ See eg: ICESCR, *supra* note 16 at Art 13; UDHR, *supra* note 29 at 26.

⁸⁸ UNICEF Philippines, *supra* note 1 at 23.

⁸⁹ *Ibid* at 22.

(ix) Right to culture⁹⁰

Finally, climate change can impact the enjoyment of the right to culture, particularly insofar as the culture is closely connected to the natural environment. For example, the traditional livelihoods and ancestral traditions of many Indigenous communities are dependent on natural resources that may be threatened by climate change.⁹¹ An illustrative example is the 2005 petition presented by the Inuit Circumpolar Conference to the Inter-American Commission on Human Rights. Among other violations, the petitioners claimed that changes to the Arctic environment resulting from climate change infringed on the Inuit's enjoyment of the right to culture, arguing that "[a]ll aspects of the Inuit's lives depend upon their culture, and the continued viability of the culture depends in turn on the Inuit's reliance on the ice, snow, land and weather conditions in the Arctic."⁹²

Climate change-related displacement and migration may also threaten the right to culture, as communities may be split apart and forced to relocate, disrupting cultural practices and social cohesion.⁹³

IV. Conclusion

In sum, climate change is a clear and massive impediment to the realization of economic, social and cultural rights. Both States and corporate actors alike have obligations to address the human rights aspects of climate change. While States are bound to respect, protect and fulfil human rights, corporate actors have a responsibility to avoid infringing the rights of others, and to address any adverse human rights impacts with which they are involved.

Signed:



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Date: 16 September 2018

At: Montreal, Canada

⁹⁰ See eg: ICESCR, *supra* note 16 at Art 15; UNDRIP, *supra* note 29 at Art 11.

⁹¹ See, eg: UNICEF Philippines, *supra* note 1 at 8.

⁹² Inuit Circumpolar Conference, *Petition to the Inter-American Commission on Human Rights Seeking Relief from Violations Resulting from Global Warming Caused by Acts and Omissions of the United States* (7 December, 2005) at 35.

⁹³ UNEP, *supra* note 13 at 8.