INTERNATIONAL COURT OF JUSTICE

OBLIGATIONS OF STATES IN RESPECT OF CLIMATE CHANGE

(REQUEST FOR ADVISORY OPINION)



WRITTEN STATEMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

22 March 2024

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I.

INTRODUCTION

1. This Written Statement is filed by the People's Republic of Bangladesh ("*Bangladesh*") pursuant to the Court's Orders of 20 April, 4 August, and 15 December 2023 in *Obligations of States in respect of Climate Change (Request for Advisory Opinion)*.

2. On 12 April 2023, Secretary-General Guterres transmitted a Request for an Advisory Opinion entitled "*Request for an advisory opinion of the International Court of Justice on the obligations of States in respect of climate change*" (the "*Request*"). The Request was adopted by the United Nations General Assembly on 29 March 2023 in Resolution 77/276, in accordance with Article 96 of the Charter of the United Nations. The Request seeks the Court's advisory opinion, pursuant to Article 65 of the Statute of the Court, on the following questions:

> Having particular regard to the Charter of the United Nations, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the United Nations Framework Convention on Climate Change, the Paris Agreement, the United Nations Convention on the Law of the Sea, the duty of due diligence, the rights recognized in the Universal Declaration of Human Rights, the principle of prevention of significant harm to the environment and the duty to protect and preserve the marine environment,

> What are the obligations of States under international law to ensure the protection of the climate system and other parts of the environment

from anthropogenic emissions of greenhouse gases for States and for present and future generations;

What are the legal consequences under these obligations for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, with respect to:

States, including, in particular, small island developing States, which due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change?

Peoples and individuals of the present and future generations affected by the adverse effects of climate change?

3. With the adoption of Resolution 77/276—by consensus, without a vote—the international community of States has sounded the alarm over a global, human-induced climate crisis, "an unprecedented challenge of civilizational proportions". As the Resolution notes, there is also unprecedented global scientific consensus, reflected in particular in the reports of the Intergovernmental Panel on Climate Change (the "IPCC"), that "anthropogenic emissions of greenhouse gases are unequivocally the dominant cause of the global warming observed since the mid-20th century" which in turn has caused "widespread adverse impacts and related losses and damages to nature and people" around the world. Indeed, record-breaking temperatures, extreme weather events, and rising sea-levels have now become the norm. In 2022, for example, the measured accumulated heat in the ocean was the highest on record, the global mean sea-level reached a new record high, and record high annual temperatures were reported across the globe—only to be surpassed in 2023, which was "Earth's

hottest" summer on record. In the face of these unprecedented impacts, the IPCC issued a stark warning in its most recent assessment report:

Climate change is a threat to human well-being and planetary health (very high confidence). <u>There is a</u> <u>rapidly closing window of opportunity to secure a</u> <u>liveable and sustainable future for all (very high</u> <u>confidence)</u> . . . The choices and actions implemented in this decade will have impacts now and for thousands of years (high confidence)¹.

4. Despite these urgent calls for action, there remains a "significant gap" between States' current commitments to reduce their greenhouse gas ("GHG") emissions and the emissions reductions required to hold the increase in global average temperature to 1.5 °C above pre-industrial levels, which the scientific and international community confirms "would significantly reduce the risks and impacts of climate change"². Current commitments to provide financing and other assistance to Least Developed Countries ("LDCs") and climate-vulnerable States have also fallen far short of what is needed to adapt to climate impacts.

5. As a result, climate change is projected to worsen in the coming decades, with devastating results for human populations, ecosystems, and economies around the world. Despite having the lowest historical emissions and thus contributing the least to climate change, LDCs and climate-vulnerable States have suffered a disproportionate share of global climate impacts and will continue to be the most severely impacted.

¹ Intergovernmental Panel on Climate Change ("*IPCC*"), *AR6 Synthesis Report*, "Headline Statements" (2023), https://www.ipcc.ch/report/ar6/syr/resources/spm-headline-statements/, p. 24 (emphasis added).

² Paris Agreement, 3156 U.N.T.S. 79 (12 December 2015) (hereinafter, "*Paris Agreement*"), Article 2(1)(a).

6. As one such State, Bangladesh is uniquely placed to furnish information on the questions submitted to the Court. As H.E. Sheikh Hasina, the Prime Minister of Bangladesh, highlighted during the 26th Conference of the Parties ("*COP*") to the United Nations Framework Convention on Climate Change ("*UNFCCC*") in 2021, Bangladesh is "*one of the most climate-vulnerable countries*" in the world, despite "*contributing less than 0.47% of global emissions*"³. It has been experiencing devastating climate change-related effects for decades, including increasingly frequent and destructive tropical cyclones, unprecedented levels of flooding, and slow-onset sea-level rise. Climate effects already have had a significant human and economic impact on the country: they have directly caused loss of human life, destroyed agriculture and infrastructure, and displaced millions of people from their homes.

7. For Bangladesh, the negative impact of forced displacement alone due to climate change is staggering. Between 2008 and 2014, more than 4.7 million people were displaced due to climate disasters, and the number of internal climate migrants in Bangladesh could reach 19.9 million by 2050 if global temperatures continue to rise and climate impacts worsen.

8. In response to the climate crisis, Bangladesh has taken on a global leadership role in climate change negotiations and has advocated for States to take measures to effectively address the climate crisis. Bangladesh ratified the UNFCCC in 1994 and the Kyoto Protocol in 2001, and signed the Paris Agreement in 2016. Since the first COP in 1995, Bangladesh has played a key role in climate negotiations on behalf of climate-vulnerable States, including leading negotiations for the group of LDCs at the UNFCCC from 2005 to 2006.

³ H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, *National Statement at the 26th Session of the Conference of the Parties (COP26)* (1 November 2021), https://unfccc.int/documents/309520, para. 2.

9. While Bangladesh has demonstrated great resilience in advancing its own mitigation measures and adaptive capacity, it cannot solve the climate crisis alone. The transboundary nature of climate change requires a global solution, in which each State fulfills its well-established obligation to "*ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control*"⁴. Yet, global GHG emissions and temperatures continue to increase, and climate impacts are becoming more extreme.

10. As Bangladesh has stressed, "[t]he best adaptation is mitigation"⁵. A global paradigm shift away from fossil fuels and commitment to the energy transition from <u>all States</u>—supported by the necessary domestic regulation—is essential. To that end, despite being one of the States least culpable for climate change, Bangladesh has committed to ambitious GHG emissions reduction targets in an effort to realize the transition to a low-carbon economy. This is consistent with Bangladesh's longstanding position that "<u>[e]very country must pursue an ambitious target to curb Greenhouse gas emissions to keep global temperature-rise below 1.5°C", regardless of other development needs⁶.</u>

11. Bangladesh is also recognized as a leader in climate adaptation, having been forced to implement a range of national measures aimed at protecting its population and infrastructure from the increasingly severe impacts of climate change. But this comes at great cost. Bangladesh's National Adaptation Plan estimates that "[d]eveloping climate resilience will require seven times the current

⁴ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996, para. 29.

⁵ "COP28 special interview with Saber Hossain Chowdhury," *The Report.live* (25 November 2023), https://www.youtube.com/watch?v=UQqcciVCk8E, at 3:59.

⁶ H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, Speech at the 1st Climate Vulnerable Finance Summit (8 July 2021), https://www.v-20.org/wpcontent/uploads/2021/07/HPM-V20-Opening-Speech-1.pdf.

spending to transform adaptation, at a rate of \$8.5 billion per year, with \$6.0 billion per year from external sources or international climate funds and development partners"⁷. Attempting to keep pace without the support and cooperation to which it is entitled under international law is exerting considerable stress on Bangladesh's economy and threatening its long-term development goals, particularly as it is forced to divert funds away from crucial social programs. Cooperative global efforts—knowledge sharing, technology transfer, and meaningful climate finance—are urgently required from developed States to increase climate resilience while promoting sustainable development in Bangladesh and other climate-vulnerable States.

12. Bangladesh notes the essential role that the Court's advisory opinions play in clarifying international law and strengthening peaceful relations between States. As set out in further detail below, international law <u>already</u> contains a plethora of relevant obligations related to climate change, which are partly set out in treaties, and partly embodied in well-established rules of customary international environmental law and related norms, principles and rules. States will benefit greatly from the Court's clarification of the actions they <u>are legally obliged</u> to take in the face of the climate catastrophe, in order to prevent fragmentation and inconsistent application of the relevant rules, enhance implementation of States' obligations, and avoid a catastrophic outcome for humankind. In this regard, Bangladesh reiterates that while it is disproportionally and specially affected as a climate vulnerable State, it is one of the States least culpable for climate change. This critical fact—a fundamental inequity that

⁷ Ministry of Environment, Forest and Climate Change of the Government of the People's Republic of Bangladesh, "National Adaptation Plan of Bangladesh (2023-2050)" (October 2022) (hereinafter, "*National Adaptation Plan*"), https://www.undp.org/bangladesh/publications/national-adaptation-plan-bangladesh-2023-2050, p. iv.

underpins and compounds the climate crisis—is a core consideration in the international law obligations that apply.

13. In light of its special position, Bangladesh seeks to assist the Court on the following matters:

- Section II provides relevant factual information on the questions submitted, in particular the global scientific consensus on climate change, as well as Bangladesh's specific vulnerabilities to the adverse effects of climate change and the mitigation and adaptation measures it has taken in response.
- Section III sets out the basis for the Court's jurisdiction, and why the Court ought to exercise its jurisdiction in this case.
- Section IV describes States' obligations under international law as well as well-established premises and principles underlying the international environmental law framework, and sets out the steps that States are legally obliged to take in response to climate change pursuant to a harmonious interpretation of these principles.
- Finally, Section V explains the legal consequences for States that are in breach of those obligations.

II.

RELEVANT FACTUAL INFORMATION ON THE QUESTIONS SUBMITTED TO THE COURT

14. Climate change is already causing serious deleterious effects, from record-breaking temperatures to rising sea-levels and extreme weather events.

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These impacts are expected to worsen in the coming decades as global average temperatures continue to rise, with devastating results for the planet and humankind. **Section A** of this Chapter discusses these impacts on a global scale, and sets out in detail the international and scientific consensus on the causes and effects of climate change, and what is needed to prevent future catastrophic harms.

15. Section B then describes the situation in Bangladesh, where climate change has already caused widespread devastation to people and ecosystems, and threatens further serious harms. Although Bangladesh is a low-emitter of GHGs and is thus one of the States least culpable for the climate crisis, it has committed to ambitious climate mitigation efforts. It has also implemented adaptation measures in an effort to protect its people and the environment from the adverse effects of climate change.

A. The Global Scientific Consensus on Climate Change

16. As set out below, there is international scientific consensus that: climate impacts are the direct result of human activities, principally GHG emissions released by developed States over the past century (Section 1); it is necessary to limit the global average temperature increase to $1.5 \, ^{\circ}$ C above pre-industrial levels in order to avoid future catastrophic harms (Section 2); and current efforts to address climate change on a global scale are inadequate to meet this goal (Section 3).

1. There is Scientific Consensus on the Causes and Effects of Climate Change

17. The causes and effects of climate change are the subject of an unprecedented global consensus based on the best available science. Indeed, it cannot be seriously disputed that the activities of human beings, principally through emissions of GHGs, have caused climate change (**Section a**). As

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described in **Section b**, recent studies confirm that developed States have long been the heaviest emitters, while LDCs and climate-vulnerable States have contributed the least to climate change. Despite this, LDCs have suffered the most serious climate impacts to date. Urgent, ambitious action is necessary to address these impacts, and to avoid catastrophic harm to the planet and populations around the world (**Section c**).

(a) Human activities have "unequivocally" caused climate change

18. The best available science on climate change is largely reflected in the climate assessments and special reports of the IPCC, which was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme and today counts as its members scientific experts representing 195 States⁸. Its three Working Groups identify points of agreement in the scientific community across key topic areas related to climate change, including: (*i*) the physical scientific basis of the climate system and climate change; (*ii*) the vulnerability of socio-economic and natural systems to climate change; and (*iii*) options for mitigating climate change⁹. This chapter is drawn from the IPCC's findings, as set out in the six assessment reports it has issued to date, as well as reports of the World Meteorological Organization and other reputable scientific and media sources that complement the IPCC's analysis.

19. In its earliest 1990 and 1992 assessment reports, the IPCC concluded that it was "certain" that "[e]missions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse

⁸ "About the IPCC", *IPCC*, https://www.ipcc.ch/about/.

⁹ "The Intergovernmental Panel on Climate Change", *IPCC*, https://www.ipcc.ch/.

gases ... resulting on average in an additional warming of the Earth's surface"¹⁰. Since then, evidence of "human influence" on the warming climate has "progressively strengthened"¹¹. By its Fifth Assessment Report in 2014, the IPCC concluded that the human influence on climate change was "clear" and "evident from increasing greenhouse gas concentrations in the atmosphere, positive radiative forcing, observed warming, and physical understanding of the climate system"¹².

20. The emission of GHGs—principally carbon dioxide and methane contributes to global warming by absorbing heat in the Earth's atmosphere and slowing heat loss to space¹³. The burning of fossil fuels and other human activities have significantly increased the concentration of GHGs in the atmosphere. Atmospheric methane levels, for example, have increased "*to levels unprecedented in at least 800,000 years*", and current concentrations of atmospheric carbon dioxide "*are higher than at any time over at least the past two million years*"¹⁴. In its Sixth Assessment Report published in March 2023, the IPCC described how large-scale indicators of climate change show "*clear responses to human influence*" consistent with model simulations. For example, the figure below shows how the observed annual average change in global surface

 12 Ibid.

¹⁰ IPCC, Policymaker Summary of Working Group I (Scientific Assessment of Climate Change) (June 1992), https://www.ipcc.ch/report/climate-change-the-ipcc-1990-and-1992assessments/, para. 1.0.1.

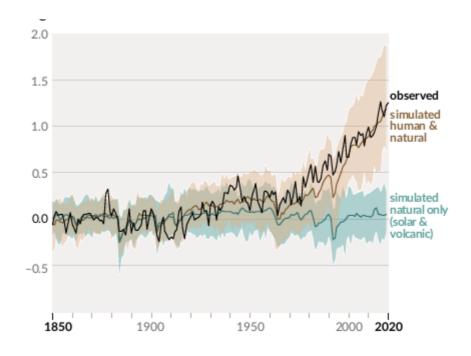
¹¹ IPCC, Sixth Assessment Report, Climate Change 2021: The Physical Science Basis (2021), p. 425.

¹³ See, e.g., "The Causes of Climate Change", United States National Aeronautics and Space Administration (NASA), https://climate.nasa.gov/causes/.

¹⁴ IPCC, Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)], Geneva, Switzerland, https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf (hereinafter, "IPCC Sixth Assessment Report"), p. 42.

temperature tracks simulated climate models using human and natural—as opposed to only natural—factors.

Change in average annual global surface temperature as observed (in black) and simulated using human and natural factors (in brown) versus only natural factors (in green)



21. The IPCC concluded in its Sixth Assessment Report that "[h]uman activities, principally through emissions of greenhouse gases, have <u>unequivocally</u> caused global warming", leading to "widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere"¹⁵. Moreover, "human-caused climate change is already affecting many weather and climate extremes . . . around the globe", as evidenced by changes in extreme weather events such as heatwaves, heavy precipitation, drought, and cyclones¹⁶.

¹⁵ IPCC Sixth Assessment Report, pp. 42, 46 (emphasis added).

¹⁶ IPCC Sixth Assessment Report, p. 46.

(b) Least Developed Countries and climate vulnerable States have contributed the least to climate change

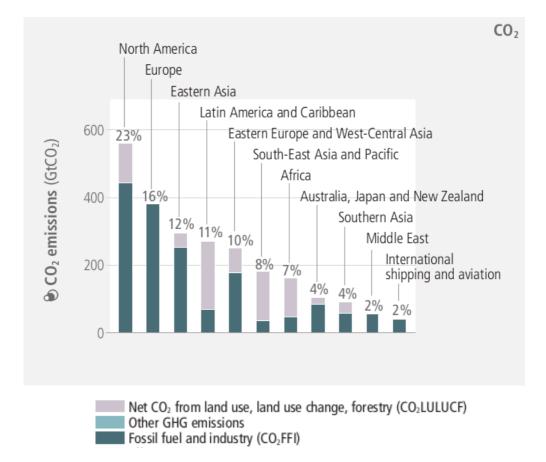
22. The IPCC has confirmed that human-caused climate change is the consequence of "more than a century of net GHG emissions", distributed unevenly across different regions¹⁷. Recent scientific developments have made it possible to identify the most significant emitter States, both in the present day and cumulatively since 1850, through GHG emissions inventories. For example, the Joint Research Centre of the European Commission ("JRC")'s Emissions Database for Global Atmospheric Research ("EDGAR") calculates both past and present day anthropogenic GHG emissions by country, following an IPCC-compliant methodology¹⁸. The IPCC utilized EDGAR as a primary data source throughout its Sixth Assessment Report, along with land-use CO₂ emissions sourced from various bookkeeping models¹⁹.

23. Based on these sources, the IPCC determined that developed States have historically contributed the most GHG emissions, as shown in the below graph.

¹⁷ IPCC Sixth Assessment Report, pp. 44–45.

¹⁸ "Methodology", *EDGAR*, https://edgar.jrc.ec.europa.eu/methodology.

¹⁹ IPCC, *Climate Change 2022: Mitigation of Climate Change (2022)*, Annex II, p. 1831.



Historical cumulative net anthropogenic CO_2 emissions per region (1850-2019)²⁰

24. In 2023, the JRC and the International Energy Agency similarly utilized EDGAR to determine the highest GHG emitters in 2022²¹. They found that China, the United States, India, the States of the European Union, Russia, and Brazil together accounted for 61.6 percent of global GHG emissions, while representing 50.1 percent of the global population²².

²⁰ IPCC Sixth Assessment Report, p. 45.

²¹ M. Crippa *et al.*, *GHG Emissions of All World Countries* (2023), https://edgar.jrc.ec.europa.eu/report_2023, pp. 4, 7.

²² *Ibid*.

25. By any metric, LDCs and climate-vulnerable States are shown to have "*much lower per capita emissions than the global average*"²³. Bangladesh, for example, contributed 0.28 percent of global CO₂ emissions in 2022, as compared to, for example, China's 32.88 percent or the United States' 12.6 percent ²⁴. These data confirm that Bangladesh is one of the States least culpable for human-caused climate change²⁵.

26. Anthropogenic climate change also plays a role in relation to "*specific extreme events*"²⁶. For example, World Weather Attribution—an organization comprised of scientists from Imperial College London's Grantham Institute on Climate Change and the Environment, The Royal Netherlands Meteorological Institute, the Laboratoire des Sciences du Climat et de l'Environnement, and the Red Cross Red Crescent Climate Centre—performs rapid attribution studies to determine how climate change influenced the likelihood of a particular weather event, as well as its intensity and impacts²⁷. Its peer-reviewed studies have confirmed that human-caused climate change: increased the probability of rainfall in the Seine and Loire basins, which contributed to historic flooding in France in 2016 that caused some casualties and over one billion euros in damage²⁸; made

²³ IPCC Sixth Assessment Report, p. 51.

²⁴ "GHG Emissions of all World Countries: Emissions by Country (CO2 total emissions)", *EDGAR*, https://edgar.jrc.ec.europa.eu/report_2023?vis=co2tot#emissions_table.

See World Bank Group, Country Climate and Development Report: Bangladesh (October 2022), https://openknowledge.worldbank.org/bitstreams/6d66e133-e49d-5ad9-b056-7b1a6c6206ed/download, p. 10 ("Bangladesh is a modest contributor to global greenhouse gas emissions, accounting for an estimated 0.4 percent of global emissions in 2018.").

²⁶ F. Otto et. al., *Assigning historic responsibility for extreme weather events*, NATURE CLIMATE CHANGE 7 (2017), https://doi.org/10.1038/nclimate3419, p. 6.

²⁷ See "FAQs", World Weather Attribution, https://www.worldweatherattribution.org/faqs/.

²⁸ S. Philip et. al., Validation of a Rapid Attribution of the May/June 2016 Flood-Inducing Precipitation in France to Climate Change (1 November 2018), https://journals.ametsoc.org/view/journals/hydr/19/11/JHM-D-18-0074.1.xml, pp. 1881-1882, 1894.

the UK Storm Desmond in 2017 more likely to occur²⁹; and increased rainfall intensity in Pakistan, leading to severe flooding in 2022³⁰. Other studies have determined States' contributions to slow-onset climate change events. One 2016 study, for example, showed that developed and developing countries contributed 61 percent and 39 percent, respectively, to global ocean warming, 53 percent and 47 percent to the decrease in Arctic sea-ice extent, and 56 percent and 44 percent to global permafrost degeneration³¹. Again, across all studies, LDCs have contributed the least to climate change³².

(c) The deleterious effects of climate change are unprecedented

27. The scale of changes to the atmosphere, ocean, cryosphere and biosphere as a result of human-caused climate change is "*unprecedented*"³³. In 2022, for example, record-breaking weather and climate events became the norm. The measured accumulated heat in the ocean was the highest on record; at the same time, the extent of Antarctic sea ice dropped to the lowest level ever recorded³⁴. The global mean sea-level continued to rise, reaching a new record high in 2022^{35} . Record high annual temperatures were reported in Western

³³ IPCC Sixth Assessment Report, p. 46.

³⁵ World Meteorological Organization, *State of the Global Climate 2022* (2023), p. ii.

²⁹ "UK Storm Desmond revisited, December 2017", World Weather Attribution (15 December 2017), https://www.worldweatherattribution.org/uk-storm-desmond-revisited-december-2017/.

³⁰ F. Otto *et. al.*, *Climate Change increased extreme monsoon rainfall, flooding highly vulnerable communities in Pakistan* (17 March 2023), https://iopscience.iop.org/article/10.1088/2752-5295/acbfd5/meta, p. 16.

³¹ T. Wei *et al.*, *Developed and developing world contributions to climate system change based on carbon dioxide, methane and nitrous oxide emissions*, ADVANCES IN ATMOSPHERIC SCIENCES 33 (2016), https://link.springer.com/article/10.1007/s00376-015-5141-4, p. 640.

 ³² See, e.g., "Extreme weather caused two million deaths, cost \$4 trillion over last 50 years", World Meteorological Organization (22 May 2023), https://news.un.org/en/story/2023/05/1136897.

³⁴ World Meteorological Organization, *State of the Global Climate 2022* (2023), p. 12.

Europe, the western Mediterranean, parts of Central and Eastern Asia, and New Zealand in 2022³⁶—only to be surpassed in summer 2023, which was "*Earth's hottest*" on record³⁷.

28. These unprecedented changes have caused substantial harm to the earth's ecosystems, including increasingly irreversible impacts such as the retreat of glaciers and permafrost thaw³⁸. Nearly 50 percent of coastal wetlands have been lost over the past 100 years³⁹, along with around 14 percent of the world's coral reefs since 2009 due to rising ocean temperatures and ocean acidification⁴⁰. Climate change currently affects more than 10,000 vulnerable species, increasing their likelihood of extinction⁴¹. At the same time, rising temperatures have contributed to the spread of vector- and water-borne diseases into new geographic areas⁴².

29. Alongside rising temperatures, severe weather events—including heatwaves, heavy precipitation, droughts, and tropical cyclones—are becoming increasingly common, with catastrophic effects on human populations⁴³. In May 2023, for example, the World Meteorological Organization reported that extreme

⁴¹ "Species and Climate Change", *International Union for Conservation of Nature* (December 2019), https://www.iucn.org/sites/default/files/2022-04/species_and_climate_change_issues_brief-2019-12.pdf, p. 1.

³⁶ World Meteorological Organization, *State of the Global Climate 2022* (2023), p. 4.

³⁷ "NASA Announces Summer 2023 Hottest on Record", *NASA* (14 September 2023), https://www.nasa.gov/news-release/nasa-announces-summer-2023-hottest-on-record.

³⁸ IPCC Sixth Assessment Report, p. 46.

³⁹ IPCC Sixth Assessment Report, p. 46.

⁴⁰ "The Status of Coral Reefs of the World 2020", *Global Coral Reef Monitoring Network* (October 2021), https://gcrmn.net/wp-content/uploads/2023/01/Status-of-Coral-Reefs-of-the-World-2020-Full-Report.pdf, pp. 18, 20, 66-67.

⁴² "Climate Change and Infectious Diseases", *United States Centers for Disease Control and Prevention*, https://www.cdc.gov/ncezid/pdf/climate-change-and-infectious-diseases-H.pdf, pp. 1-2; IPCC Sixth Assessment Report, p. 46.

⁴³ IPCC Sixth Assessment Report, p. 50.

weather, climate, and water-related events have caused more than two million deaths and US\$ 4.3 trillion in economic losses over the last 50 years, with LDCs suffering a disproportionate share of that impact⁴⁴.

2. There is Scientific and International Consensus on the Importance of the 1.5 °C Threshold to Mitigate Climate Change

30. The international community has long recognized that the current rate of global GHG emissions, if left unchecked, will result in more frequent and severe climate impacts. As set out below, the IPCC has confirmed that catastrophic and irreversible climate impacts are likely to occur if the global average temperature exceeds $1.5 \, ^{\circ}$ C above pre-industrial levels (Section a). International treaties on climate change reflect this scientific consensus, including by explicitly recognizing the need to take urgent steps to limit global average temperature increase to $1.5 \, ^{\circ}$ C above pre-industrial levels (Section b) and towards climate adaptation (Section c).

(a) There is scientific consensus that 1.5 °C represents a critical climate threshold

31. Scientists agree that "*[e]very increment of global warming will intensify [the] multiple and concurrent hazards*"⁴⁵ already being felt around the world. In its Sixth Assessment Report, the IPCC confirmed that 1.5 °C is an especially important climate threshold, past which the risks of catastrophic harm significantly increase. With 2 °C warming, for example:

⁴⁴ "Extreme weather caused two million deaths, cost \$4 trillion over last 50 years", *United Nations News* (22 May 2023), https://news.un.org/en/story/2023/05/1136897; IPCC Sixth Assessment Report, p. 42.

⁴⁵ IPCC Sixth Assessment Report, p. 12.

- "heavy precipitation and flooding events are projected to intensify and become more frequent" in more regions around the world, "more frequent and / or severe agricultural and ecological droughts" are expected in Europe, Africa, Australia, and North, Central and South America, and "[c]ompound heatwaves and droughts" are likely to become more frequent, "including concurrently at multiple locations"⁴⁶;
- "climate-related changes in food availability and diet quality are estimated to increase nutrition-related diseases and the number of undernourished people", potentially affecting hundreds of millions of people around the world⁴⁷; and
- *"risks to cities, settlements and key infrastructure will rise sharply"*⁴⁸.

32. Under a 3 °C warming scenario, the IPCC predicts "widespread systemic impacts, irreversible change and many additional adaptation limits"⁴⁹. In particular, "very high extinction risk for endemic species in biodiversity hotspots" would increase by at least tenfold with 3 °C warming⁵⁰.

33. There is also scientific consensus as to what must be done in order to avoid these catastrophic outcomes. In short, limiting global warming requires *significantly reducing global net anthropogenic GHG emissions well before*

⁴⁶ IPCC Sixth Assessment Report, p. 69.

⁴⁷ IPCC Sixth Assessment Report, p. 71.

⁴⁸ IPCC Sixth Assessment Report, p. 71. See also IPCC Special Report, Global Warming of 1.5C (2018), https://www.ipcc.ch/sr15/, p. 39.

⁴⁹ IPCC Sixth Assessment Report, p. 71.

⁵⁰ *Ibid*.

<u> 2030^{51} </u>. This will require "*rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings) and industrial systems*" and the advancement of new technologies to remove carbon dioxide from the atmosphere⁵².

(b) International treaties on climate change reflect the strong scientific consensus on mitigation

34. The UNFCCC is the foundational treaty addressing climate change. It recognizes, in line with the scientific consensus, that "human activities have been substantially increasing the atmospheric concentrations of greenhouse gases" and "that this will result on average in an additional warming of the Earth's surface and atmosphere and may adversely affect natural ecosystems and humankind"⁵³. To address these concerns, the UNFCCC sets forth the "ultimate objective" of achieving "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system"⁵⁴. To that end, all States Parties to the UNFCCC—198 States in total—have committed to:

 Develop, update, and publish national inventories of anthropogenic emissions and removals of GHGs (Article 4(a)).

⁵¹ IPCC Sixth Assessment Report, p. 71. *See also* IPCC Special Report, *Global Warming of 1.5C* (2018), https://www.ipcc.ch/sr15/, p. 18.

⁵² IPCC Sixth Assessment Report, p. 71. *See also* IPCC Special Report, *Global Warming of 1.5C* (2018), https://www.ipcc.ch/sr15/, p. 15.

⁵³ United Nations General Assembly, Resolution 48/189, United Nations Framework Convention on Climate Change, U.N. Doc. A/RES/48/189 (20 January 1994) (hereinafter, "UNFCCC"), Preamble.

⁵⁴ UNFCCC, Article 2.

- Formulate and publish national programs containing measures to mitigate climate change by addressing anthropogenic emissions of GHGs (Article 4(b)).
- Promote and cooperate in: (*i*) the development, application and transfer of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases; (*ii*) scientific, technological, technical, socio-economic and other research, observation and development of data archives related to the climate system; (*iii*) the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change; and (*iv*) education, training and public awareness related to climate change (Articles 4(c), (g)-(i)).
- Promote sustainable management, and promote and cooperate in the conservation and enhancement of sinks and reservoirs of GHGs (Article 4(d)).
- Take climate change considerations into account, to the extent feasible, in their relevant social, economic and environmental policies (Article 4(f)).

35. In addition, developed country Parties must "adopt national policies and take corresponding measures on the mitigation of climate change, by limiting [their] anthropogenic emissions of greenhouse gases and protecting and enhancing [their] greenhouse gas sinks and reservoirs"⁵⁵. Pursuant to this

⁵⁵ UNFCCC, Article 4(2)(a).

commitment, developed country Parties resolve to take the lead in addressing the global climate crisis, in light of their disproportionate historical GHG emissions⁵⁶.

36. Following the UNFCCC's entry into force in 1994, the UNFCCC COP agreed to further commitments to address climate change, including under the Paris Agreement, which entered into force in 2016. The Paris Agreement aims to strengthen the global response to climate change in line with the best available science by "[h]olding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels"⁵⁷. 195 States and the European Union have signed the Paris Agreement, and it is perhaps the most comprehensive statement of the steps that States recognize are essential to combatting climate change.

37. To that end, the Paris Agreement requires States Parties, among other things, to:

"[P]repare, communicate and maintain successive nationally determined contributions that it intends to achieve" and "pursue domestic mitigation measures" with the aim of achieving such contributions. (Article 4(2)). These nationally determined contributions ("NDCs") are intended to contribute to the global peaking of GHG emissions as soon as possible and to reduce such emissions going forward, in line with best available science⁵⁸.

⁵⁶ UNFCCC, Preamble, Article 3(1).

⁵⁷ Paris Agreement, Article 2(1)(a).

⁵⁸ UNFCCC, "Nationally Determined Contributions (NDCs)", https://unfccc.int/process-andmeetings/the-paris-agreement/nationally-determined-contributions-ndcs.

- Account for anthropogenic emissions and removals corresponding to their NDCs, and in so doing, "promote environmental integrity, transparency, accuracy, completeness, comparability and consistency, and ensure the avoidance of double counting" (Article 4(13)).
- Provide support to developing country Parties. In particular, developed country Parties "shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation" (Article 9(1)).
- "[S]trengthen cooperative action on technology development and transfer" (Article 10(2)).
- Take into consideration in the implementation of the Paris Agreement *"the concerns of Parties with economies most affected by the impacts of response measures, particularly developing country Parties"* (Article 4(15)).
- "[S]trive to formulate and communicate long-term low greenhouse gas emission development strategies, mindful of Article 2 taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances" (Article 4(19)).

38. Moreover, the "Outcome of the first global stocktake", agreed during the 28th Conference of the Parties to the UNFCCC in December 2023 ("*COP 28*") "*underscores that the impacts of climate change will be much lower at the temperature increase of 1.5* °*C compared with 2* °*C*" and "*resolve[d] to pursue efforts to limit the temperature increase to 1.5* °*C*". In that regard, the COP

emphasized "the need for urgent action and support to keep the 1.5 °C goal within reach and to address the climate crisis in this critical decade"⁵⁹.

(c) International treaties on climate change reflect the strong scientific consensus on climate adaptation

39. In a similar vein, all States Parties to the UNFCCC have committed to take steps towards adaptation to climate impacts that cannot be avoided or reversed. In particular, States Parties must:

- "[f]ormulate, implement, publish and regularly update national ... programmes containing ... measures to facilitate adequate adaptation to climate change" (Article 4(1)(b)).
- "[c]ooperate in preparing for adaptation to the impacts of climate change" (Article 4(e)).

40. Article 4(4) UNFCCC further requires developed States Parties to "assist the developing country parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation" to adverse climate impacts. Specific adaptation commitments were further developed by the UNFCCC COP through:

 The 2007 Bali Action Plan, which called for "enhanced action on adaptation", including, inter alia, through consideration of "[i]nternational cooperation to support urgent implementation of

⁵⁹ UNFCCC, *Outcome of the first global stocktake, Fifth Session*, U.N. Doc. FCCC/PA/CMA/2023/L.17 (13 December 2023), paras. 4-5.

adaptation actions . . . [and] means to incentivize the implementation of adaptation actions³⁶⁰; and

The 2010 Cancun Agreements, which affirmed that "[a]daptation must be addressed with the same priority as mitigation and requires appropriate institutional arrangements to enhance adaptation action"⁶¹, and that the "[m]obilization and provision of . . . adequate and predictable financial resources is necessary to address the adaptation and mitigation needs of developing countries"⁶². The 2010 Cancun Agreements further call on States Parties to the UNFCCC to undertake the strengthening of "institutional capacities and enabling environments for adaptation, including for climate resilient development and vulnerability reduction"⁶³.

41. The Paris Agreement further memorialized adaptation as a priority for the international community. It calls upon States Parties to "[e]stablish the global goal . . . of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change"⁶⁴ while accounting for the "urgent and immediate needs of those developing country Parties that are particularly vulnerable to the adverse effects of climate change".⁶⁵ The entirety of Article 7 of the Paris Agreement is dedicated to outlining States Parties' adaptation obligations,

⁶⁰ UNFCCC, Report of the Conference of the Parties on its thirteenth session, U.N. Doc. FCCC/CP/2007/6/Add.1 (14 March 2008), Article 1(c)(i).

⁶¹ UNFCCC, Report of the Conference of the Parties on its sixteenth session, U.N. Doc. FCCC/CP/2010/7/Add.1 (15 March 2011), Article 2(c).

⁶² UNFCCC, Report of the Conference of the Parties on its sixteenth session, U.N. Doc. FCCC/CP/2010/7/Add.1 (15 March 2011), Article 2(d).

⁶³ UNFCCC, Report of the Conference of the Parties on its sixteenth session, U.N. Doc. FCCC/CP/2010/7/Add.1 (15 March 2011), Article 14(c).

⁶⁴ Paris Agreement, Article 7(1).

⁶⁵ Paris Agreement, Article 7(2).

including the requirement for each State Party to "*engage in adaptation planning* processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions" such as implementing adaptation actions and national adaptation plans⁶⁶.

3. Current Global Efforts Are Inadequate to Stay Within the 1.5 °C Threshold or to Adapt to Inevitable Climate Impacts

42. The current rate of global GHG emissions far exceeds the rate at which global average temperature increase could be limited to 1.5 °C. Moreover, State commitments to reduce GHG emissions in the near term, including as expressed in NDCs submitted under the Paris Agreement, are insufficient to limit warming to 1.5 °C. As the IPCC has explained: *"[g]lobal GHG emissions in 2030 associated with the implementation of NDCs announced prior to COP26 would make it likely that warming will exceed 1.5 °C during the 21st century and would make it harder to limit warming below 2 °C if no additional commitments are made or actions taken*"⁶⁷. The IPCC also called attention to the lack of sufficient financing and to limitations in technology development and transfer, which prevent developing States from being able to take the necessary climate action⁶⁸.

43. Further, many States have failed to fulfil their existing climate-related commitments, making it even more unlikely that the international community as a whole will be able to meet global climate targets. For example:

 During COP 15 in 2009, States Parties to the UNFCCC agreed on the Copenhagen Accord, which included a commitment by developed States to "a goal of mobilizing jointly USD 100 billion dollars a year

⁶⁶ Paris Agreement, Article 7(9).

⁶⁷ IPCC Sixth Assessment Report, p. 57 (emphasis original).

⁶⁸ IPCC Sixth Assessment Report, pp. 57, 61.

by 2020 to address the needs of developing countries"⁶⁹. In 2020, however, developed States fell short of this goal, providing only US\$ 83.3 billion (followed by US\$ 89.6 billion in 2021)⁷⁰. In any event, there is now international consensus that "the US\$100 billion goal is a fraction of what is needed to support developing countries to achieve climate goals in accordance with the Paris Agreement"⁷¹.

At COP 21 in 2021, more than 100 countries committed to working collectively "to halt and reverse forest loss and land degradation by 2030" in an effort to achieve a balance between GHG emissions and removal by GHG sinks⁷². However, recent findings of the Forest Declaration Assessment reveal that "[i]n 2022, 6.6 million hectares of deforestation occurred worldwide. That means that not only did the world miss its 2022 target for eliminating deforestation by the end of the decade, but there was a 4 percent increase in deforestation compared to 2021"⁷³.

⁶⁹ United Nations, Report of the Conference of the Parties on its fifteenth session, U.N. Doc. FCCC/CP/2009/11/Add.1 (30 March 2010), para. 8.

⁷⁰ Organisation for Economic Co-operation and Development, *Climate Finance Provided and Mobilised by Developed Countries in 2016-2020: Insights from Disaggregated Analysis* (22 November 2023), https://www.oecd.org/environment/climate-finance-provided-and-mobilised-by-developed-countries-in-2016-2020-286dae5d-en.htm, p. 11.

⁷¹ "A climate finance goal that works for developing countries", *United Nations Conference on Trade and Development* (14 June 2023), https://unctad.org/news/climate-finance-goal-works-developing-countries.

⁷² United Nations Climate Change Conference UK 2021, "Glasgow Leaders' Declaration on Forests and Land Use" (2 November 2021), https://webarchive.nationalarchives.gov.uk/ukgwa/20230418175226/https://ukcop26.org/glas gow-leaders-declaration-on-forests-and-land-use/.

⁷³ Forest Declaration Assessment, 2023 Forest Declaration Assessment: Off track and falling behind (23 October 2023), https://forestdeclaration.org/resources/forest-declarationassessment-2023/#div_block-64-171, pp. 1, 5.

• In 2023, the United Nations Environment Programme issued a report concluding that "[*a*]s a group, the G20 members are projected to fall short of their new and updated NDCs by 1.2 [gigatons of equivalent carbon dioxide] annually by 2030" and that "none of the G20 members are currently reducing emissions at a pace consistent with meeting their net-zero targets"⁷⁴.

44. Scientists agree that at current emissions rates, the critical 1.5 °C threshold will be reached as early as 2029⁷⁵. Further, even staying within the 1.5 °C threshold, the IPCC has found that "[*c*]limate-related risks to health, livelihoods, food security, water supply, human security, and economic growth are projected to increase"⁷⁶. Although these impacts will be felt across the globe, LDCs and climate-vulnerable States will be at disproportionately higher risk⁷⁷. Immediate action is therefore crucial. As the IPCC concluded in its Sixth Assessment Report:

The cumulative scientific evidence is <u>unequivocal</u>: climate change is a threat to human well-being and planetary health. . . . Any further delay in concerted anticipatory global action on adaptation and mitigation will miss a brief

⁷⁴ United Nations Environment Programme, Emissions Gap Report 2023: Broken Record: Temperatures hit new highs, yet world fails to cut emissions (again) (20 November 2023), https://www.unep.org/resources/emissions-gap-report-2023, pp. XIX, XX.

 ⁷⁵ See, e.g., IPCC Special Report, Global Warming of 1.5C (2018), https://www.ipcc.ch/sr15/, p. 61; "Window to avoid 1.5°C of warming will close before 2030 if emissions not reduced", Imperial College London (30 October 2023), https://www.imperial.ac.uk/news/248913/window-avoid-15c-warming-will-close/.

⁷⁶ IPCC Sixth Assessment Report, p. 71.

⁷⁷ *Ibid*.

and rapidly closing window of opportunity to secure a liveable and sustainable future for all.⁷⁸

B. Bangladesh is One of the States Most Impacted by Climate Change

45. Bangladesh is uniquely vulnerable to climate change due to its low-lying topography and dense population, and is already suffering severe climate impacts as a result of sea-level rise, storms, extreme precipitation events, and drought. These and other climate events have had devastating effects on Bangladesh's population, infrastructure, and economy, which are predicted to worsen as global GHG emissions increase (Section 1). Despite being among the least culpable for climate change due to its historically low GHG emissions, Bangladesh has committed to ambitious climate mitigation efforts and to transitioning to a green economy (Section 2). Bangladesh has also implemented extensive adaptation measures in an effort to reduce the adverse impacts of climate change on its population while promoting sustainable development, and indeed has become a global leader in climate adaptation (Section 3).

1. Bangladesh is Suffering Increasingly Severe Climate Change-Related Impacts

46. Bangladesh is one of the world's most climate-vulnerable States, in large part due to its unique geography in the low-lying Ganges Delta, which leaves it particularly susceptible to sea-level rise, flooding and drought (Section a). Climate change has already caused widespread and devastating effects across Bangladesh, and has emerged as the most significant threat to sustainable development in the country. Without urgent, ambitious global action to curb GHG emissions, these climate-related impacts will worsen in the coming decades, with catastrophic results for Bangladesh (Section b).

⁷⁸ IPCC Sixth Assessment Report, p. 89 (emphasis added).

(a) Bangladesh is uniquely vulnerable to climate change

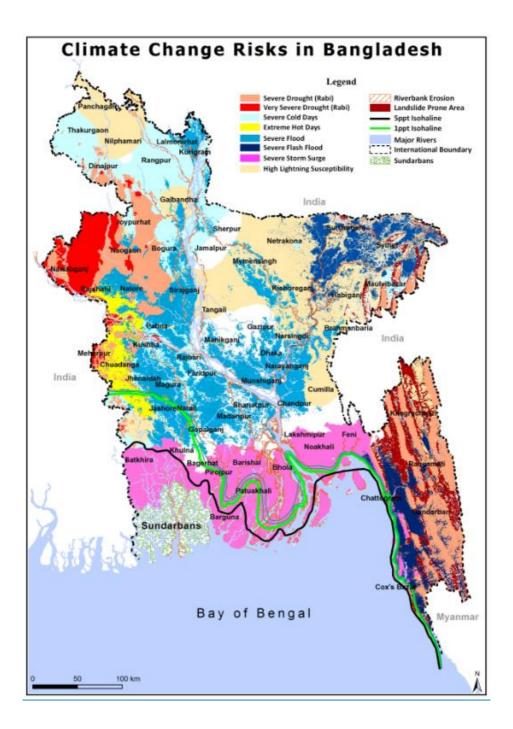
47. More than half of Bangladesh's territory is comprised of the Ganges Delta: the world's largest river delta, located between the Hindu Kush Himalayan region to the north and the Bay of Bengal to the south. The Delta spans over 100,000 square kilometers—about the size of Iceland or the Republic of Korea—and lies fewer than five meters above sea level at its highest points. The satellite image below shows the Ganges Delta, with rivers flowing from the Himalayas to the Bay of Bengal.



Ganges Delta, Located Between the Himalayas and the Bay of Bengal

48. Bangladesh's geography and low-lying delta topography make it especially vulnerable to major climate hazards. The map below shows the broad areas of the country that are susceptible to increasing salinity due to sea-level rise

(shown as solid black and green lines), floods (in blue and dark blue), storm surge (in pink) and drought (in red).



49. As the map makes clear, <u>flooding</u> and <u>drought</u> are both primary climate risks in Bangladesh. In 2022, for example, more than 40 percent of rural households in Bangladesh reported exposure to floods⁷⁹. That same year, unprecedented flash floods affected 7.2 million people in nine northeastern districts of the country: they displaced 480,000 people, damaged 1,133 square kilometers of croplands, and resulted in livestock losses totaling more than US\$ 27 million⁸⁰. At the same time, areas of Bangladesh are experiencing increasingly frequent dry days and extreme summer temperatures of more than 40° C, exacerbating severe droughts. On average, between 1.2 million and 2.32 million hectares per year of agricultural lands are damaged during a typical drought event⁸¹.

50. Several events caused or exacerbated by anthropogenic climate change have significantly increased the flood risk in Bangladesh; namely <u>sea-level rise</u>, <u>cyclones and storm surges</u>, and <u>extreme precipitation events</u>.

51. <u>Sea-level rise</u>: One of the most significant climate impacts for Bangladesh is sea-level rise. Heat absorption by the marine environment causes sea-level rise for two reasons: (*i*) *first*, heat causes water to expand as it warms, which accounts for approximately 50 percent of sea-level rise from 1971 to 2018; and (*ii*) *second*, it causes the marine cryosphere to melt, which contributed approximately 20 percent of mean sea-level rise in the same period ⁸².

⁷⁹ UN General Assembly, Report of the Special Rapporteur on the promotion and protection of human rights in the context of climate change, Ian Fry, on his visit to Bangladesh, U.N. Doc. A/HRC/53/35/Add.1 (18 April 2023), paras. 5-7.

⁸⁰ Office of the UN Resident Coordinator Bangladesh, 2022 Severe Flash Floods, Situation Update #2 (22 June 2022), https://reliefweb.int/report/bangladesh/bangladesh-2022-severe-flash-flood-office-un-resident-coordinator-situation-update-2-22-june-2022.

⁸¹ National Adaptation Plan, p. 23.

⁸² IPCC, *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate* (2019), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Chapter09.pdf,

Bangladesh's low-lying coastal zone—where 20 percent of its population resides—is particularly susceptible to flooding due to sea-level rise⁸³. Indeed, over the last 30 years, average sea-level rise in coastal areas of Bangladesh has measured from 3.8 to 5.8 millimeters, well above the global average⁸⁴. At this rate, nearly 18 percent of Bangladesh's coastal areas could be submerged by 2100⁸⁵. The Bangladesh Ministry of Disaster Management and Relief has explained that the "most critical and foreseeable impact" of sea-level rise is salinity intrusion of arable land, approximately 30 percent of which is located in coastal zones⁸⁶. Sea-level rise alone could therefore have devastating consequences for the food production system in Bangladesh; indeed, rice crop production in the country is expected to decline by between six and nine percent this century as a result of sea-level rise, and increasingly saline waters threaten fisheries in coastal communities⁸⁷. Sea-level rise is also one of the "critical triggers" of displacement

pp. 1214, 1216, 1218, 1220-21; "Ocean Warming", NASA, https://climate.nasa.gov/vital-signs/ocean-warming.

⁸³ International Centre for Climate Change and Development, Climate Change Impacts in Bangladesh: What Climate Change Means for a Country and its People (11 February 2024) (hereinafter, "2024 ICCCAD Report"), https://www.icccad.net/publications/climate_change_impacts_in_bangladesh_report_2024/, pp. 7, 9.

⁸⁴ Ministry of Environment, Forest and Climate Change of the Government of the People's Republic of Bangladesh, *Climate Change Initiatives of Bangladesh: Achieving Climate Resilience* (2 November 2022), https://moef.portal.gov.bd/sites/default/files/files/moef.portal.gov.bd/page/8401345e_0385_4 979_8381_801492e3b876/1.% 20Brochure% 200n% 20CC% 20Initiatives% 20of% 20Banglades h% 20-% 20Final_compressed.pdf, p. 2.

⁸⁵ *Ibid*.

⁸⁶ Ministry of Disaster Management and Relief, Government of the People's Republic of Bangladesh, *National Strategy on Internal Displacement Management* (2021), p. 1; National Adaptation Plan, p. 28.

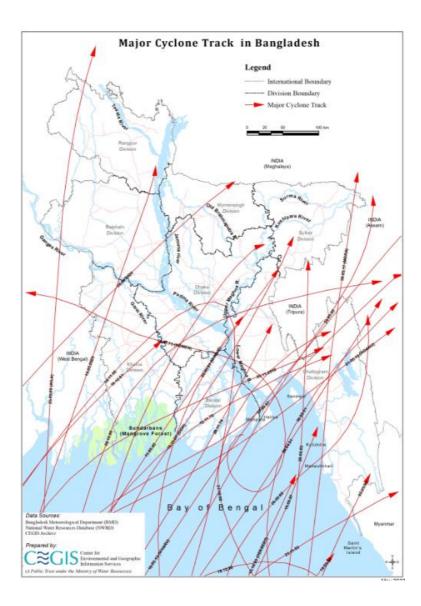
⁸⁷ 2024 ICCCAD Report, p. 18.

from coastal areas in Bangladesh, where it is expected to force as many as 950,000 people from their homes by 2050^{88} .

52. <u>Cyclones and storm surges</u>: Cyclones are a regular phenomenon in Bangladesh, typically making landfall every two to three years⁸⁹. The below map shows major cyclone tracks across the country.

⁸⁸ Ministry of Disaster Management and Relief, Government of the People's Republic of Bangladesh, *National Strategy on Internal Displacement Management* (January 2021), p. 2; 2024 ICCCAD Report, p. 18.

⁸⁹ 2024 ICCCAD Report, p. 7.

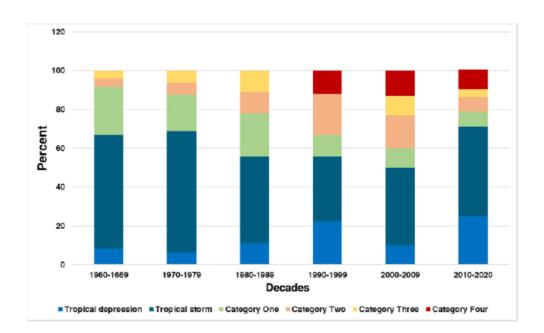


53. Over the past several decades, the Bay of Bengal has steadily warmed due to climate change⁹⁰, leading to cyclones with higher wind speeds and heavier rains⁹¹. As shown in the below graph, the number of category four cyclones that

⁹⁰ "Sea Surface Temperature (Bay of Bengal)", *United States Agency for International Development*, https://cch.icddrb.org/sea-surface-temperature-bay-bengal-.

⁹¹ "Climate Change Indicators: Tropical Cyclone Activity", *United States Environmental Protection Agency* (1 November 2023), https://www.epa.gov/climate-indicators/climate-change-indicators-tropical-cyclone-activity.

have struck the Bangladesh coast with wind speeds of more than 200 kilometers per hour has increased significantly since 1990.



Distribution of Categories of Cyclones in Bangladesh (1960-2020)⁹²

54. Storm surges—the abnormal rise in seawater level during or after a storm ⁹³—are common after cyclones, and cause widespread devastation in low-lying coastal communities⁹⁴. In 2007 and 2009, for example, Cyclones Sidr and Aila were accompanied by storm surges reaching between three and five and a half meters, which inundated agricultural lands with saltwater and flooded homes and other infrastructure in many coastal communities⁹⁵. In 2020, Cyclone

⁹² National Adaptation Plan, pp. 26-27.

⁹³ "What is storm surge?", *National Oceanic and Atmosphere Administration*, https://oceanservice.noaa.gov/facts/stormsurge-stormtide.html.

⁹⁴ National Adaptation Plan, p. 27.

⁹⁵ Ministry of Environment, Forest and Climate Change of the People's Republic of Bangladesh, *Third National Communication of Bangladesh to the United Nations*

Amphan killed 26 people and caused damage totaling more than US\$100 million, including damage to more than 55,000 houses and 149,000 hectares of agricultural land⁹⁶. In recent years, the number of deaths from cyclones has fallen significantly due to the success of Bangladesh's Cyclone Preparedness Program, although the intensity and frequency of such storms is increasing. In May 2023, for example, when Cyclone Mocha struck the Bangladesh coast with heavy rains and winds up to 220 kilometers per hour, the Bangladesh Meteorological Department issued a "*great danger*" signal for certain coastal districts and offshore islands, and more than 700,000 people were evacuated to cyclone shelters or makeshift facilities⁹⁷.

55. <u>Extreme precipitation events</u>: Heavy or excessive rainfall and longer monsoon seasons have exacerbated seasonal river flooding and caused flash floods and urban floods across low-lying areas of Bangladesh⁹⁸. These changing weather patterns are the direct result of an increase in global average temperature; as the Earth warms, it increases the amount of water vapor in the atmosphere, which can produce more intense precipitation events and storms⁹⁹. Unexpected or severe flooding events can be disastrous: they inundate crops, damage infrastructure, and often cause loss of life. In March and April 2017, for example, flash floods following heavy rain damaged 220,000 hectares of summer crops ripe for harvesting, contributing to a record 30 percent rise in rice prices compared to

⁹⁸ National Adaptation Plan, pp. 21-22, 25-26.

Framework Convention on Climate Change (June 2018) (hereinafter, "Third National Communication to UNFCCC"), p. X.

⁹⁶ National Adaptation Plan, pp. 27-28.

⁹⁷ "Early warning, preparedness likely saved thousands of lives during Cyclone Mocha", AP News (15 May 2023), https://apnews.com/article/cyclone-mocha-preparedness-refugeesmyanmar-bangladesh-6d7bacaf38171461436826a9757e2233; International Federation of Red Cross and Red Crescent Societies, Bangladesh Cyclone Mocha 2023 DREF Final Report (May 14, 2023), p. 2.

⁹⁹ "The Causes of Climate Change", *NASA*, https://climate.nasa.gov/causes/.

the prior year¹⁰⁰. Heavy rainfall during the monsoon season has caused a number of major river floods throughout Bangladesh; one of the most recent, in 2020, killed 41 people¹⁰¹. During heavy monsoons, nearly 70 percent of the country experiences flooding¹⁰². The impact is particularly acute in urban areas with high population density. In 2004, for example, Dhaka saw record high daily rainfall causing widespread flooding that affected 80 percent of the city and more than five million people¹⁰³.

56. <u>Drought</u>: In addition to flood risk, regions of Bangladesh suffer severe droughts, which occur on average once every two and a half years¹⁰⁴. The impacts of droughts are compounded by some of the highest temperatures in Asia, which regularly exceed 35° C and in summer 2023 surpassed 40° C¹⁰⁵. Prolonged heatwaves and drought are devastating to crops, causing on average around 2.32 million hectares of agricultural damage to monsoon crops (such as rice) every year, and approximately 1.2 million hectares of agricultural damage to crops typically sown after monsoon season (such as wheat)¹⁰⁶. The below map shows areas of Bangladesh susceptible to monsoon season droughts, including the nearly 30 percent of the country that is prone to very severe, severe, or moderate droughts.

¹⁰⁰ 2024 ICCCAD Report, p. 9.

¹⁰¹ National Adaptation Plan, p. 21.

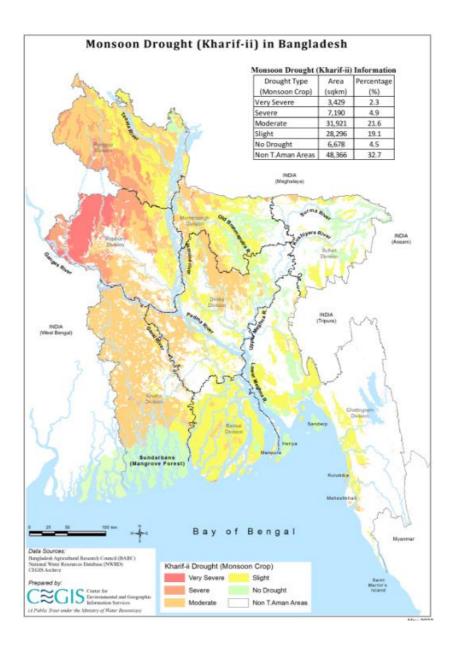
¹⁰² National Adaptation Plan, p. 17.

¹⁰³ National Adaptation Plan, p. 25.

¹⁰⁴ National Adaptation Plan, p. 23.

¹⁰⁵ 2024 ICCCAD Report, p. 9.

¹⁰⁶ National Adaptation Plan, p. 23.



57. Droughts also cause untold damage to human populations, particularly in northwestern areas of Bangladesh, contributing to internal displacement¹⁰⁷.

¹⁰⁷ Ministry of Disaster Management and Relief, Government of the People's Republic of Bangladesh, *National Strategy on Internal Displacement Management* (January 2021), p. 1.

58. In short, anthropogenic climate change has been catastrophic for Bangladesh. Indeed, Bangladesh was the seventh-most climate-affected country in the world between 2000 and 2019, when accounting for fatalities, economic losses, and number of climate events¹⁰⁸. These impacts have been compounded by vulnerable social conditions, as approximately 18.7 percent of the population lived below the national poverty line as of 2022¹⁰⁹.

(b) Climate change has already caused widespread devastation in Bangladesh

59. The extreme climate and weather events caused by anthropogenic climate change have had a significant human and economic impact in Bangladesh. In particular, drought and flooding due to sea-level rise, storm surges, and extreme precipitation events have led to the loss of traditional livelihoods and increased mortality and incidences of adverse health impacts (**Section i**), destroyed infrastructure, including homes, schools and sites of cultural significance (**Section ii**), and caused widespread internal displacement (**Section ii**).

(i) Loss of traditional livelihoods, increased mortality and adverse health impacts

60. Climate events increasingly pose a threat to traditional livelihoods in Bangladesh. For example, flooding, increased salinity and severe drought destroy crops, increasing the risk of food insecurity and threatening agriculture-based livelihoods, which are the main source of income in many rural communities in Bangladesh¹¹⁰. A recent study by the World Bank found that "*cumulative*

¹⁰⁸ Germanwatch, Briefing Paper: Global Climate Risk Index 2021: Who Suffers Most from Extreme Weather Events? Weather-related Loss Events in 2019 and 2000 to 2019 (2021), https://www.germanwatch.org/sites/default/files/Global%20Climate%20Risk%20Index%202 021_2.pdf, p. 13, Table 2.

¹⁰⁹ United Nations, Bangladesh: Statement by H.E. Sheikh Hasina, Prime Minister (22 September 2023), https://gadebate.un.org/en/78/bangladesh.

¹¹⁰ 2024 ICCCAD Report, p. 18.

production" of rice crops "will be reduced by 80 million tons in the 45-year period between 2005 and 2050" due to climate change¹¹¹. Moreover, it is projected that Bangladesh's "agricultural GDP will be 3.1 percent lower each year as a result of climate change", ultimately costing Bangladesh US\$ 129 billion in "total GDP equivalent"¹¹².

61. Rising temperatures and extreme precipitation events also provide ideal conditions for the spread of diseases. In particular, early and prolonged monsoon seasons contribute to excessive flooding, which in turn exacerbates the spread of vector- and water-borne diseases such as diarrhea, malaria, and dengue. Public reports note that in 2023 alone, more than 1,400 people died from dengue and more than 290,000 were infected in the country's worst recorded outbreak¹¹³. These health impacts disproportionately impact children, the elderly, and people with disabilities¹¹⁴.

62. Risks to health and life are exacerbated by increased salinity of freshwater and soil due to sea-level rise and storm surges. Already, fresh water scarcity has led to life threatening conditions and deaths in Bangladesh, especially among children and rural indigenous women¹¹⁵. In particular, high levels of salinity in fresh water are associated with health problems, including hypertension in adults, birth complications among pregnant women, higher incidences of children born with disabilities and greater incidences of skin diseases, diarrhea,

¹¹¹ Third National Communication to UNFCCC, p. XIV.

¹¹² *Ibid*.

¹¹³ "Rising temperatures, longer monsoon drive Bangladesh's worst dengue outbreak" *Reuters* (14 November 2023), https://www.reuters.com/world/asia-pacific/rising-temperatures-longermonsoon-drive-bangladeshs-worst-dengue-outbreak-2023-11-13/.

¹¹⁴ National Adaptation Plan, p. 48.

¹¹⁵ United Nations General Assembly, *Report of the Special Rapporteur on the promotion and protection of human rights in the context of climate change, Ian Fry, on his visit to Bangladesh*, U.N. Doc. A/HRC/53/35/Add.1 (18 April 2023), paras. 21, 23, 25, 37.

and cardiovascular disease¹¹⁶. These threats to health and life are expected to worsen in the coming decades. For example, the World Bank has predicted that the total area of Bangladesh served by freshwater rivers—currently, approximately 41 percent—will drop to 17 percent by 2050, further exacerbating drinking water shortages and adversely impacting irrigation for inland farming¹¹⁷. Also by 2050, lack of access to potable water is expected to displace between six and eight million people across the country¹¹⁸.

(ii) Destruction of infrastructure

63. Sea-level rise and extreme precipitation events have also destroyed critical infrastructure in Bangladesh, including roads, schools, houses and, in some instances, entire villages. The average annual loss due to climate-related disasters is around US\$ three billion¹¹⁹. For example, severe flooding in 2020 affected thirteen districts, including Sirajganj, Bangladesh, affecting more than one million people. The picture below shows a family in Sirajganj taking refuge from the floods on the roof of their home.

¹¹⁶ National Adaptation Plan, p. 48; United Nations General Assembly, *Report of the Special Rapporteur on the promotion and protection of human rights in the context of climate change, Ian Fry, on his visit to Bangladesh*, U.N. Doc. A/HRC/53/35/Add.1 (18 April 2023), para. 23.

¹¹⁷ "Rising salinity threatens Bangladesh's coastal communities–experts", *Reuters* (13 October 2015), https://www.reuters.com/article/uk-bangladesh-salinity-water/rising-salinity-threatens-bangladeshs-coastal-communities-experts-idUKKCN0S718W20151013/.

¹¹⁸ Third National Communication to UNFCCC, p. 183.

¹¹⁹ 2024 ICCCAD Report, p. 10.

Homes Inundated by Severe Flooding in 2020¹²⁰



64. Such large-scale destruction due to flooding is not an isolated incident. Between 2015 and 2020, for example, 28,733 children missed school due to damage to school infrastructure, primarily due to flooding¹²¹, and in May 2022 alone, flash flooding submerged more than 873 educational institutions in northeastern Bangladesh¹²². Other villages lost "*[h]ouses, roads, shops and*

¹²⁰ 2024 ICCCAD Report, p. 10.

¹²¹ Bangladesh Bureau of Statistics, *Bangladesh Disaster-related Statistics 2021 Climate Change* and *Natural Disaster Perspectives* (May 2022), https://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/b343a8b4_956b_45ca _872f_4cf9b2f1a6e0/2022-06-19-13-40-ddf8d0fd849e94d733a06d2d38dcd90b.pdf, p. 102.

¹²² International Federation of Red Cross and Red Crescent Societies, "Bangladesh Floods" (30 September 2023), https://adore.ifrc.org/Download.aspx?FileId=454009, p. 2.

culturally significant sites, such as a 150-year-old Banyan tree and a Hindu temple" as a result of flooding¹²³.

65. More recently, in August 2023, torrential rains caused unprecedented flooding across Bangladesh, including in the capital city of Dhaka. Flooding affected approximately 2.4 million people—more than 400,000 of them children—and killed more than 50 people. In Chattogram, approximately 5,000 businesses and facilities housing daily essential commodities were completely destroyed¹²⁴. Floods were "*knee-deep*" and "*[e]very river, canal and drain in the area was filled to the brim with flood water*"¹²⁵. The photographs below show vehicles and rickshaws driving through the flooded streets of Chattogram on 6 August 2023.

¹²³ ICCCAD, Voices from the Frontline Phase II, Months of persistent action: Kamarkhali's fight to save their village from riverbank erosion (16 January 2023), https://www.icccad.net/voices-from-frontline-p2/months-of-persistent-action-kamarkhalis-fight-to-save-their-village-from-riverbank-erosion/.

¹²⁴ International Federation of Red Cross and Red Crescent Societies, "Flash Flood and Landslides in Chattogram Region" (16 August 2023), https://reliefweb.int/attachments/ab86d739-19a2-4963-b174-fd54906f5342/BDRCS-Flash-Flood-SitRep-2-16-Aug-2023-1.pdf, p. 2.

¹²⁵ *Ibid*.



Severe Flooding in Chattogram, Bangladesh, August 2023

66. In addition to flooding, increasingly frequent and severe tropical storms and cyclones have wreaked havoc on Bangladesh's infrastructure. In

October 2022, for example, Tropical Storm Sitrang killed 35 people, and damaged or destroyed more than 10,000 homes and over 1,000 fish farms¹²⁶. The photograph below shows residents searching for their belongings among the rubble of collapsed homes following the storm.



Residents Search for Belongings Near Collapsed Homes, 25 October 2022

67. Just one year later, in October 2023, Cyclone Hamoon made landfall in Cox's Bazar, disrupting power, electricity, and internet services for several days¹²⁷.

¹²⁶ 2024 ICCCAD Report, p. 4; International Federation of Red Cross and Red Crescent Societies, "Cyclone Sitrang, Bangladesh Situation Report #2" (26 October 2022), https://bdrcs.org/wp-content/uploads/2022/10/BDRCS-Sitrep2-Cyclone-Sitrang_1600_261022.pdf, p. 1.

¹²⁷ International Federation of Red Cross and Red Crescent Societies, "Cyclone Hamoon Situation Report" (25 October 2023), https://reliefweb.int/attachments/c86623d9-b900-4720-

(iii) Large scale displacement

68. The confluence of climate-related impacts in Bangladesh has caused widespread internal displacement. In 2019 alone, climate events displaced more than 4.1 million persons in Bangladesh¹²⁸. That number is expected to increase as climate impacts worsen, particularly in vulnerable coastal areas affected by sea-level rise and storm surges¹²⁹. According to the United States Agency for International Development, Bangladesh has the second highest number of people facing very high exposure to climate displacement¹³⁰. Indeed, Bangladesh's National Adaptation Plan estimates that there may be as many as 19.9 million internal climate migrants in Bangladesh by 2050¹³¹; by some projections, one in every seven Bangladeshis will have been displaced by climate change by 2051¹³².

69. The effects of migration and displacement are particularly acute in major cities. For example, an estimated 2,000 people are moving to Dhaka every day from other areas of the country, placing a serious strain on available resources

bb2c-16b8f888a136/BDRCS-Situation-Report-01-Cyclone-HAMOON-25Oct2023-9AM.pdf, pp. 1–2.

¹²⁸ 2024 ICCCAD Report, p. 10.

¹²⁹ Ministry of Disaster Management and Relief, Government of the People's Republic of Bangladesh, *National Strategy on Internal Displacement Management* (2021), p. 1; 2024 ICCCAD Report, p. 18.

¹³⁰ "Fragility and Climate Risks in Bangladesh", United States Agency for International Development (September 2018), https://pdf.usaid.gov/pdf_docs/PA00TBFJ.pdf, p. 4.

¹³¹ National Adaptation Plan, p. iii.

¹³² International Organization for Migration, "Bangladesh redoubles efforts to include migration and human mobility in climate change discussions" (25 October 2022), https://bangladesh.iom.int/news/bangladesh-redoubles-efforts-include-migration-and-humanmobility-climate-change-discussions. See also IPCC, IPCC Special Report on the Ocean and Cryosphere in Changing Climate (2019),a https://www.ipcc.ch/site/assets/uploads/sites/3/2022/03/06_SROCC_Ch04_FINAL.pdf, p. 397 (estimating that by 2050, nearly one million people in Bangladesh will migrate permanently due to sea-level rise alone, with that number rising to 2.1 million by 2100).

and infrastructure¹³³. The city's population grew by 3.39 percent from 2021 to 2022, compared to an annual rate of around one percent population growth across the rest of the country. To meet the growing demand for available housing, settlements in Dhaka have expanded into low-lying areas that are extremely vulnerable to sea-level rise, placing thousands of residents at risk¹³⁴.

(c) The financial cost of climate change in Bangladesh

70. The financial cost of climate change has been extremely high for Bangladesh. In 2021 alone, Bangladesh suffered approximately US\$ 11.3 billion in losses due to climate change-induced national disasters¹³⁵. Destruction caused by cyclones cost Bangladesh more than US\$ 1 billion annually between 1970 and 2015, an amount equal to 0.7 percent of its GDP¹³⁶. As of 2024, the annual cost of climate-related disasters has risen to approximately US\$ three billion¹³⁷.

71. The knock-on effects of climate change may have even greater costs. For example, the World Bank estimates that by 2050, one third of Bangladesh's agricultural GDP could be lost due to climate variability and extreme weather events¹³⁸. Severe flooding is likely to continue taking a significant financial toll,

¹³³ International Federation of Red Cross and Red Crescent Societies, "Bangladesh: Working Together to Ensure Disaster Laws Count" (16 December 2015), https://disasterlaw.ifrc.org/node/112. See also UN General Assembly, Report of the Special Rapporteur on the promotion and protection of human rights in the context of climate change, Ian Fry, on his visit to Bangladesh, U.N. Doc. A/HRC/53/35/Add.1 (18 April 2023), para. 56.

¹³⁴ Ministry of Disaster Management and Relief, Government of the People's Republic of Bangladesh, *National Plan for Disaster Management* (2021-2025) (March 2020), paras. 46-47.

¹³⁵ National Adaptation Plan, p. 2.

¹³⁶ 2024 ICCCAD Report, p. 9.

¹³⁷ 2024 ICCCAD Report, pp. 9–10.

¹³⁸ United Nations Bangladesh, Bangladesh's Energy Transition Journey So Far (17 February 2024), https://bangladesh.un.org/en/260959-bangladesh%E2%80%99s-energy-transitionjourney-so-

affecting up to nine percent of Bangladesh's GDP¹³⁹. This could, in turn, impact Bangladesh's ability to cover the necessary costs of climate adaptation, which are expected to be significant over the coming decades: all told, the Government estimates that investments worth around US\$ 406 billion will be required to meet Bangladesh's mitigation goals and adaptation needs¹⁴⁰. As Prime Minister H.E. Sheikh Hasina has explained, Bangladesh is "*investing out of our own taxpayers money US\$ two billion of financing into climate adaptation, but our investment needs on adaptation* . . . *which we pay ourselves, it's US\$ eight billion per year*."¹⁴¹.

2. Bangladesh Has Committed to Take Significant Mitigation Actions, Despite Being Least Culpable

72. Despite being among the least culpable for the climate crisis, Bangladesh has committed to undertaking ambitious domestic mitigation measures with the aim of meeting the long-term goals of the Paris Agreement, and has already taken steps to meet these commitments.

73. In 2021, Bangladesh submitted a revised and updated NDC that set out enhanced commitments to reduce GHG emissions. In particular, Bangladesh committed to reducing GHG emissions by 21.85 percent relative to "*business as*

far#:~:text=It%20witnessed%20185%20extreme%20weather,climate%20variability%20and%20extreme%20events.

¹³⁹ Asian Development Bank, Bangladesh Could See Climate Change Losses Reach Over 9% Of GDP (19 August 2014), https://www.adb.org/news/bangladesh-could-see-climate-changelosses-reach-over-9-gdp-report.

¹⁴⁰ This includes US\$ 176 billion by 2030 for mitigation actions as per Bangladesh's 2021 Nationally Determined Contribution and US\$ 230 billion for adaptation measures as per the National Adaptation Plan. Ministry of Environment, Forest and Climate Change of the Government of the People's Republic of Bangladesh, "Bangladesh First Biennial Update Report (BUR1) to the UNFCCC" (June 2023), https://unfccc.int/documents/634149, p. 128.

¹⁴¹ "No One Is Investing in Adaptation, the 'Poor Cousin' of the Climate Debate", *Bloomberg* (11 December 2023), https://www.bloomberg.com/news/articles/2023-12-11/why-no-one-is-investing-in-climate-adaptation?embedded-checkout=true.

usual" by 2030¹⁴². As described by Prime Minister H.E. Sheikh Hasina during COP 26, Bangladesh quickly took steps towards meeting this commitment. For example, Bangladesh has publicly announced its goal "*to have 40% of [its] energy from renewable sources by 2041*" and "*cancelled 10 coal-based power plants worth 12 billion dollars of foreign investment*"¹⁴³.

74. The mitigation measures involved in reaching Bangladesh's emissions goal span all sectors to ensure "an economy-wide GHG emission reduction"¹⁴⁴. The power sub-sector accounts for 48.9 percent of the GHG reductions proposed in the 2021 NDC, based on measures to enhance the efficiency of existing power plants using improved technology and to implement 911.8 MW of renewable energy projects unconditionally and 4114.3 MW of renewable energy projects conditional on receiving international support ¹⁴⁵. Bangladesh is also implementing renewable projects at a household and community level. It has "installed more than five million solar home systems in off grid areas of the country and more than 3.5 million improved cook stoves in rural areas"¹⁴⁶, in addition to distributing and installing streetlights, water purifiers and irrigation

¹⁴² Ministry of Environment, Forest and Climate Change of the Government of the People's Republic of Bangladesh, *Nationally Determined Contributions (NDCs) 2021, Bangladesh (Updated) (26 August 2021)*, https://www.undp.org/bangladesh/publications/nationallydetermined-contributions-2021-bangladesh (hereinafter, "2021 NDC"), pp. 6-7, 26.

¹⁴³ H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, National Statement at the 26th Session of the Conference of the Parties (COP26) (1 November 2021), https://unfccc.int/documents/309520.

¹⁴⁴ 2021 NDC, p. 2.

¹⁴⁵ 2021 NDC, pp. 7-11.

¹⁴⁶ Mr. Abdullah Al Mohsin Chowdhury, Permanent Secretary of the Ministry of Environment, Forest and Climate Change of the People's Republic of Bangladesh, *Statement at the Twentyfourth session of the Conference of the Parties to UN Framework Convention on Climate Change* (COP 24) (December 2018), https://unfccc.int/sites/default/files/resource/BANGLADESH_cop24cmp14cma1-3.pdf.

pumps, and household and community biogas plants¹⁴⁷. It has committed to reducing methane emissions from flooded rice fields and waste and other emissions from the agricultural sector¹⁴⁸. Alongside plans to reduce deforestation and restore deforested and degraded forests, Bangladesh has proposed extensive afforestation projects, with plans to increase tree coverage to 25 percent by 2030¹⁴⁹. The World Bank has calculated that it will cost Bangladesh US\$ 32.3 billion (0.78 percent of its annual GDP) to meet its unconditional climate mitigation objectives, and an additional US\$ 143.7 billion from international sources to meet its conditional objectives¹⁵⁰.

75. Bangladesh has also produced the Mujib Climate Prosperity Plan 2022-2041 to facilitate its transition to a green economy. The primary goal of the Plan is to "*secure Bangladesh's prosperity by 2041*", including through actions to "*reach 30% renewable energy by 2030 and up to 40% by 2041*"¹⁵¹. The success of the Plan will depend in large part on international and other investment support to Bangladesh.

¹⁴⁷ Ministry of Environment, Forest and Climate Change of the Government of the People's Republic of Bangladesh, *Climate Change Initiatives of Bangladesh: Achieving Climate Resilience* (2 November 2022), p. 4.

¹⁴⁸ Ministry of Environment, Forests and Climate Change of the Government of the People's Republic of Bangladesh, *Bangladesh Climate Change Strategy and Action Plan* (September 2009),

https://policy.asiapacificenergy.org/sites/default/files/Bangladesh%20Climate%20Change%2 0Strategy%20and%20Action%20Plan%202009.pdf, p. 23.

¹⁴⁹ 2021 NDC, pp. 10, 13; National Adaptation Plan, p. 6.

¹⁵⁰ World Bank Group, *Country Climate and Development Report: Bangladesh* (October 2022), https://openknowledge.worldbank.org/bitstreams/6d66e133-e49d-5ad9-b056-7b1a6c6206ed/download (hereinafter, "*World Bank Country Climate Report*"), p. 19.

¹⁵¹ Mujib Climate Prosperity Plan 2022-2041, p. vi.

3. Bangladesh Also Has Committed Significant Resources to Implementing Adaptation Measures

76. Recognizing the critical importance of safeguarding its communities and economy from the impacts of climate change and adapting to the worst impacts, "*Bangladesh has been proactive and adept in climate change adaptation*"¹⁵². As Bangladesh's Special Envoy to the Prime Minister H.E. Sheikh Hasina for Climate Change has explained, "*[a]daptation is really a life and death issue*" in Bangladesh in light of the impact of climate change on "*lives and livelihoods*"¹⁵³. The State has therefore invested, and continues to invest, in transformative adaptation measures, while also pursuing sustainable development. In 2009, for example, it created a dedicated Climate Change Trust Fund to finance adaptation and mitigation programs and has allocated funding to more than 850 projects¹⁵⁴.

77. Bangladesh's October 2022 National Adaptation Plan sets forth adaptation strategies and interventions aimed at increasing climate resiliency and fostering sustainable economic growth. Importantly, they seek to include historically disadvantaged groups—including women, people with diverse gender identities, the elderly, persons with disabilities, youth, and ethnic communities—

¹⁵² National Adaptation Plan, p. i.

¹⁵³ S. Jessop, *et. al.*, "COP28 calls for adapting to warmer world without resolving how to pay," *Reuters* (13 December 2023), https://www.reuters.com/business/environment/cop28-calls-adapting-warmer-world-without-resolving-how-pay-2023-12-13/.

¹⁵⁴ See H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, Statement 79th at the Annual Session of the **UNESCAP** (15)Mav 2023), https://erd.portal.gov.bd/sites/default/files/files/erd.portal.gov.bd/press release/7441a0c8 ade 6_4337_883f_d2d2ef2d67ed/UNESCAP%20HPM's%20Speech%20(1).pdf; Mr. Abdullah Al Mohsin Chowdhury, Permanent Secretary of the Ministry of Environment, Forest and Climate Change of the People's Republic of Bangladesh, Statement at the Twenty-fourth session of the Conference of the Parties to UN Framework Convention on Climate Change (COP24) (December 2018). https://unfccc.int/sites/default/files/resource/BANGLADESH cop24cmp14cma1-3.pdf.

throughout the adaptation process¹⁵⁵. In addition to its ambitious National Adaptation Plan, Bangladesh produced the Bangladesh Delta Plan 2100, a comprehensive 100-year plan for sustainable development in the face of climate change. In addition, Bangladesh has implemented the following specific adaptation measures to address the most deleterious climate impacts:

- Improving food security. Salinity intrusion and flooding pose significant dangers to the food security of Bangladesh's resident population. To address that challenge, the Government is developing and promoting flood-resistant rice varieties that minimize crop losses during monsoon floods. Crops with greater tolerance to salinity are also being developed to enable farmers to continue production in areas affected by saltwater intrusion¹⁵⁶. In addition, the Government has taken steps to ensure food for everyone, including providing 10 million low-income residents with rice and other commodities at affordable prices¹⁵⁷.
- Implementing effective disaster response and management strategies. Given its susceptibility to extreme or fast onset events, Bangladesh is also taking steps to implement effective disaster response and management strategies, and currently spends at least US\$ 319 million annually on post-disaster intervention ¹⁵⁸. It has established an effective early warning system that provides timely information on cyclones, floods, and other weather-related hazards. This system

¹⁵⁵ National Adaptation Plan, pp. iii, 69-79.

¹⁵⁶ National Adaptation Plan, p. 68.

 ¹⁵⁷ H.E. Sheikh Hasina, Prime Minister of Bangladesh, Address at the Seventy-eighth session of the United Nations General Assembly, 10th plenary meeting, U.N. Doc. A/78/PV.10 (22 September 2023).

¹⁵⁸ World Bank Country Climate Report, p. 41.

enables effective evacuations and disaster preparedness, reducing the loss of lives and property¹⁵⁹.

- Constructing climate-resilient infrastructure. Over the past decade, Bangladesh has protected 726 km of river banks, dredged and excavated 2,123 km of rivers, excavated and re-excavated 181 km of irrigation canals and 499 km drainage canals, and reclaimed 2.58 million hectares of land from rivers and estuary areas ¹⁶⁰. The Government, alongside regional authorities, is also planting mangrove forests to act as natural barriers to flooding and erosion along the coast ¹⁶¹. Further, the Government has rehabilitated or constructed cyclone shelters to provide refuge for vulnerable populations during extreme weather events, as well as climate-resilient housing¹⁶².
- Developing strategies to assist displaced individuals. As discussed in Section II.B, Bangladesh's unique vulnerabilities to climate impacts put its citizens at extreme risk of climate displacement. The Government of Bangladesh has therefore developed schemes to rehabilitate and accommodate the growing number of displaced individuals, including the Ashrayan Project, which has rehoused 3,700,160 people since 1997¹⁶³. In 2014, the Government launched the "*Khurushkul Special Ashrayan Project*", pursuant to which it plans to build 139 five-storied buildings in Cox's Bazar to rehabilitate 4,409 displaced families and provide "[t]raining programmes and loan

¹⁵⁹ World Bank Country Climate Report, p. 32.

¹⁶⁰ 2021 NDC, pp. 20-21.

¹⁶¹ National Adaptation Plan, p. 6.

¹⁶² *Ibid*.

¹⁶³ National Adaptation Plan, p. 5.

disbursements . . . *to make the rehabilitated families financially self-reliant*^{"164}.

Ensuring the availability of drinking water. Sea-level rise, saltwater intrusion, droughts and extreme heat all threaten the availability of drinking water¹⁶⁵. To mitigate the risk of drinking water crises, municipal water supply and sewerage authorities in Bangladesh are implementing projects to increase surface water use and reduce ground water use such as building drinking water treatment plants¹⁶⁶. The Government is also rehabilitating springs and traditional water wells as well as implementing rainwater harvesting¹⁶⁷.

78. Bangladesh has implemented these extensive adaptation measures at a significant cost. The Climate Change Trust Fund was established in 2009 using Bangladesh's own resources, and has invested around US\$ 490 million on mitigation and adaptation projects¹⁶⁸. Apart from the Fund, the Government "*currently spends US\$ 1 billion a year, around 6 to 7 per cent of its annual budget, on climate change adaptation*" as part of its Annual Development Plan¹⁶⁹. However, given its particular vulnerabilities to the accelerating impacts of climate change, Bangladesh will soon be forced to increase this expenditure. Bangladesh

¹⁶⁴ *Ibid*.

¹⁶⁵ National Adaptation Plan, pp. 45–46.

¹⁶⁶ 2021 NDC, p. 21.

¹⁶⁷ ICCCAD, Policy Brief: What does the IPCC Working Group II say about Bangladesh in its Sixth Assessment Report? (March 2022), https://www.icccad.net/wpcontent/uploads/2022/03/IPCC-BD-policy-brief-mar22.pdf, p. 3. See also: National Adaptation Plan, pp. 77, 79; World Bank Country Climate Report, p. 37.

¹⁶⁸ Ministry of Environment, Forest and Climate Change of the People's Republic of Bangladesh, *Climate Change Initiatives of Bangladesh: Achieving Climate Resilience* (2 November 2022), p. 2.

¹⁶⁹ 2021 NDC, p. 19. See also: National Adaptation Plan, p. ii.

estimates that it will need US\$ 8.5 billion in adaptation finance—more than seven times its current spending—including "US\$ 6.0 billion per year from external sources or international climate funds and development partners"¹⁷⁰. This will severely limit the country's progress towards long-term sustainable development as resources are reallocated to climate adaptation from other social goals¹⁷¹. Indeed, Bangladesh has already redirected funds from healthcare, education, and other social and development programs that would benefit its population and economy in order to cover climate adaptation needs¹⁷². As Prime Minister H.E. Sheikh Hasina noted during the 79th Annual Session of the Economic and Social Commission for Asia and the Pacific in May 2023, Bangladesh "has been recommended for graduation from the [Least Developed Countries] by 2026. However, the frequent climate-induced disasters may disrupt our smooth transition"¹⁷³.

¹⁷⁰ National Adaptation Plan, pp. iv, 93.

¹⁷¹ See, e.g., National Adaptation Plan, p. ii ("the changing climate regime and the unique geographical setting is exerting considerable stress on Bangladesh's economy and the advancement towards sustainable development."); World Bank Country Climate Report, p. 8 ("Bangladesh's vulnerabilities to climate change will put development progress at risk in the coming decades.").

See, e.g., National Adaptation Plan, p. 113; Special Rapporteur on Extreme Poverty and Human Rights, "Visit to Bangladesh: End of Mission Statement by Mr. Olivier De Schutter" (29 May 2023), https://bangladesh.un.org/en/233772-end-mission-statement-mr-olivier-deschutter-special-rapporteur-extreme-poverty-and-human, pp. 2–3, 14.

 ¹⁷³ H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, Statement at the 79th Annual Session of the UNESCAP (15 May 2023), https://erd.portal.gov.bd/sites/default/files/files/erd.portal.gov.bd/press_release/7441a0c8_ade 6_4337_883f_d2d2ef2d67ed/UNESCAP%20HPM's%20Speech%20(1).pdf.

THE COURT SHOULD EXERCISE ITS JURISDICTION TO ENTERTAIN THE REQUEST

79. The Court has jurisdiction to issue the advisory opinion sought in the Request pursuant to Article 65(1) of the Statute of the Court and Article 96(1) of the Charter of the United Nations. The Court should exercise its jurisdiction in this case because there are no compelling reasons to decline jurisdiction, and because the questions submitted urgently require clarification in order to allow States to understand and meet their obligations under international law and together address the existential climate crisis.

80. Article 65(1) of the Statute of the Court provides: "The Court may give an advisory opinion on any legal question at the request of whatever body may be authorized by or in accordance with the Charter of the United Nations to make such a request". Article 96(1) of the United Nations Charter, in turn, states that "The General Assembly . . . may request the International Court of Justice to give an advisory opinion on any legal question".

81. The current request for an advisory opinion plainly raises a "legal question". In the Western Sahara case, the Court found that questions "framed in terms of law and rais[ing] problems of international law . . . are by their very nature susceptible of a reply based on law . . . [and] appear . . . to be questions of a legal character"¹⁷⁴. That is the case here. The preamble of the request frames the questions in the context of various international treaties, including the United Nations Charter and the Universal Declaration of Human Rights, as well as recognized principles of customary international law, such as the principle of prevention of significant harm to the environment. The questions expressly refer

¹⁷⁴ Western Sahara, Advisory Opinion, I.C.J. Reports 1975, para. 15.

to States' obligations "*under international law*" and to the "*legal consequences*" arising from a breach of those obligations. In the words of the Court, these questions "*are scarcely susceptible of a reply otherwise than on the basis of law*"¹⁷⁵.

82. Where the conditions for jurisdiction are met, as they are here, Article 65(1) of the Statute grants the Court "*discretionary power*" either to give or decline to give an advisory opinion, and to answer the questions submitted as it sees fit¹⁷⁶. In previous cases, the Court has recognized that it "*should in principle not decline to give an advisory opinion*" and that "*only 'compelling reasons' should lead the Court to refuse its opinion*"¹⁷⁷. The present Court has never declined to respond to a request for an advisory opinion, and there are no compelling reasons for it to decline to reply to the questions put forward in the Request.

IV.

STATES' OBLIGATIONS UNDER INTERNATIONAL LAW IN THE CONTEXT OF THE CLIMATE CRISIS

83. Climate change is an unprecedented environmental crisis. To mitigate the deleterious effects of climate change around the world and to prevent further catastrophic impacts, all States must take urgent, coordinated action, consistent

¹⁷⁵ *Ibid*.

¹⁷⁶ Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004, p. 156, para. 44.

¹⁷⁷ Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004, p. 156, para. 44 (citing Certain Expenses of the United Nations (Article 17, Paragraph 2, of the Charter), Advisory Opinion, I.C.J. Reports 1962, p. 155; Difference Relating to Immunity from Legal Process of a Special Rapporteur of the Commission on Human Rights, Advisory Opinion, I.C.J. Reports 1999 (I), para. 29.

with well-established principles, norms and obligations under international environmental law.

84. As set out in **Section A** of this Chapter, these include the core obligation of all States under customary international environmental law to exercise due diligence to prevent transboundary environmental harm, and the obligation of States Parties to the United Nations Convention on the Law of the Sea ("*UNCLOS*") to prevent pollution of the marine environment. Both of these fundamental environmental law obligations are applicable in the climate context, where GHG emissions carry the inherent risk of adverse transboundary harm and constitute pollution of the marine environment.

85. The established legal framework that gives rise to these obligations to protect the environment reflects international consensus on three fundamental premises that, as set out in further detail in Section B, are particularly relevant in the climate change context: *first*, that environmental health is inextricably linked with human health and well-being and the full enjoyment of human rights; second, that harms to the environment affect all peoples around the world, including future generations; and *third*, that collective action on a global scale-including cooperative support to developing countries—is required to address the most serious interrelated environmental and human rights issues. These premises are also the basis for closely interrelated norms, principles and obligations, including those drawn from international human rights law, that must be considered in conjunction with States' obligations in respect of environmental protection. Recognition of these norms, principles and obligations in the climate context is necessary to avoid legal fragmentation and ensure consistent interpretation of the relevant rules of environmental and human rights law.

86. The specific steps that States must take pursuant to these well-established norms, principles and obligations in the climate context is informed by the unprecedented international and scientific consensus on relevant facts. Indeed, as described in **Section C**, the scientific community and States <u>agree</u> on the actions that States must take to address climate impacts and prevent further catastrophic climate effects. These actions provide the content and contours to States' legal obligations in respect of climate mitigation and adaptation.

A. States' Fundamental International Environmental Law Obligations

87. States are subject to a number of obligations related to environmental protection, both under customary international law and environmental treaties. Two of the most fundamental customary international law principles are explicitly mentioned in Resolution 77/276: the principle of prevention of significant harm to the environment and the related duty of due diligence (**Section 1**). Resolution 77/276 also explicitly refers to UNCLOS¹⁷⁸, which sets out important specific obligations for States Parties in respect of climate change (**Section 2**).

1. The customary international law principle of prevention and duty of due diligence

88. The Court has consistently recognized the general rule that it is "*every State's obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States*"¹⁷⁹. This obligation reflects fundamental principles of

¹⁷⁸ While a wide range of international environmental treaties are applicable in the climate change context, this submission addresses only those treaties explicitly mentioned in the question submitted to the Court.

¹⁷⁹ Corfu Channel (United Kingdom of Great Britain and Northern Ireland v. Albania), Merits, Judgment, I.C.J. Reports 1949, p. 22. See also Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010 (hereinafter, "Pulp Mills"), para. 101 (citing Corfu Channel and explaining that "the principle of prevention, as a customary rule, has its origins in the due diligence that is required of a State in its territory.").

international law and States' rights to sovereignty, territorial integrity, and non-interference¹⁸⁰. In the environmental context, it has developed into a well-established rule of customary international law that States must "*ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control*"¹⁸¹. This obligation applies equally in the context of climate change, where GHG-emitting activities in one State will necessarily contribute to significant harms to terrestrial, freshwater, and ocean ecosystems on a global scale.

89. As such, any State that "knowingly [allows] its territory to be used for acts contrary to the rights of other States", and fails to "ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control" is in breach of international law and subject to the principles of State Responsibility set out in further detail in Section V, below.

¹⁸⁰ See United Nations Charter Article 2(1), (4), (7). See also United Nations General Assembly, Draft Declaration on Rights and Duties of States, U.N. Doc. A/RES/375, 6 December 1949, Articles 1-3; International Law Association Study Group on Due Diligence in International Law, First Report (7 March 2014), 25-26.

¹⁸¹ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996, para. 29. See also: Trail Smelter (United States v. Canada), Award, 16 April 1938 and 11 March 1941, Reports on International Arbitration Awards, Vol. III, pp. 1905-82 (finding "no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence."); Pulp Mills, p. 46, para. 101; Declaration of the United Nations Conference on the Human Environment, U.N. Doc. A/CONF.48/14/Rev.1, 5-16 June 1972 ("Stockholm Declaration"), Principle 21, p. 5 ("States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States"). See generally United Nations General Assembly, Report of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities, Yearbook of the International Law Commission, 2001, Vol. II (Part Two), U.N. Doc. A/CN.4/SER.A/2011/Add.1; United Nations General Assembly, Cooperation between States in the Field of the Environment, U.N. Doc. A/RES/2995(XXVII) (15 December 1972).

90. The principle of prevention entails an obligation of due diligence, requiring a State to exert "*reasonable efforts*" to prevent—or if prevention is not possible, to minimize the risk of—transboundary harms¹⁸². The Court has clarified the specific contours of this obligation in situations involving transboundary environmental contaminants. In *Pulp Mills*, for example, the Court explained that reasonable efforts entail both "*the adoption of appropriate rules and measures*" and "*a certain level of vigilance in their enforcement*"¹⁸³. What is considered "*reasonable*" or "*appropriate*" for the purposes of meeting the due diligence obligation to prevent harm will depend on:

The specific circumstances, including the <u>nature</u> and <u>gravity</u> of the potentially harmful activity¹⁸⁴, and the <u>inherent risk</u> that it will cause transboundary harm. Activities that entail a high risk of transboundary harm are subject to a higher due diligence standard¹⁸⁵.

See Report of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities, Yearbook of the International Law Commission, 2001, Vol. II (Part Two), Commentary to Article 3, p. 148. See also Responsibilities and Obligations of States with Respect to Activities in the Area, Request for Advisory Opinion Submitted to the Seabed Disputes Chamber, Case No. 17, Advisory Opinion, ITLOS Reports 2011 ("ITLOS Deep Seabed Mining Advisory Opinion"), paras. 116-120.

¹⁸³ Pulp Mills, p. 69, para. 197. See also Report of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities, Yearbook of the International Law Commission, 2001, Vol. II (Part Two), U.N. Doc. A/CN.4/SER.A/2011/Add.1, Commentary to Article 3, p. 154 ("The modalities whereby the State of origin may discharge the obligations of prevention which have been established include, for example, legislative, administrative or other action necessary for enforcing the laws, administrative decisions and policies which the State of origin has adopted.").

¹⁸⁴ See, e.g., Report of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities, *Yearbook of the International Law Commission*, 2001, Vol. II (Part Two), Commentary to Article 3, para. 11 ("[t]he standard of due diligence against which the conduct of the State of origin of [transboundary environmental harm] should be examined is that which is generally considered to be appropriate and proportional to the risk of transboundary harm in the particular instance.").

¹⁸⁵ See, e.g., ITLOS Deep Seabed Mining Advisory Opinion, para. 117 ("The standard of due diligence has to be more severe for the riskier activities.").

- The relevant State's level of <u>development</u>, <u>experience</u> with environmental protection policies and actions, and <u>financial and</u> <u>technical capabilities¹⁸⁶</u>.
- International rules and standards, including the State's <u>other specific</u> <u>obligations</u> under relevant international agreements¹⁸⁷.
- The best available <u>technology</u> and <u>science</u> at the relevant time. "[*R*]easonable efforts" is an evolving concept, which must be assessed in light of technological advancements and scientific developments¹⁸⁸. As such, "measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge"¹⁸⁹.

See, e.g., Report of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities, *Yearbook of the International Law Commission*, 2001, Vol. II (Part Two), Commentary to Article 3, para. 14 ("The economic level of States is one of the factors to be taken into account in determining whether a State has complied with its obligation of due diligence. . . An efficient implementation of the duty of prevention may well require upgrading the input of technology in the activity as well as the allocation of adequate financial and manpower resources").

¹⁸⁷ See, e.g., ITLOS Deep Seabed Mining Advisory Opinion, para. 123 (noting that the "direct obligations" of States under international agreements are "a relevant factor in meeting the due diligence" obligation).

See Gabčikovo-Nagymaros Project (Hungary v. Slovakia), Judgment, (1997) I.C.J. Rep. 7 (hereinafter, "Gabčikovo-Nagymaros Project"), para. 140 ("Owing to new scientific insights and to a growing awareness of the risks for mankind—for present and future generations—of pursuit of [environmental] interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past.").

¹⁸⁹ ITLOS Deep Seabed Mining Advisory Opinion, para. 117. See also Gabčikovo-Nagymaros Project, para. 140.

91. Each of these factors leads to the same conclusion: international law demands that high-emitter States must embrace a fundamental transition away from fossil fuels and towards "*clean*" forms of energy if they are to avoid the catastrophic transboundary harm resulting from current (and increasing) GHG emissions.

92. In order to satisfy their duty of due diligence, high-emitter States must establish the regulations and incentives required to prevent excessive GHG emissions by entities and individuals operating within their territories. First, GHG-emitting activities have a known risk of transboundary harm because they contribute to global net GHG emissions, which are directly responsible for climate change and the serious, worsening effects described above in Section II. Potentially harmful activities take on an increased importance in the context of this unprecedented global crisis. Second, most high-emitters are developed States that have the financial and technical capabilities to incentivize the use of low-emissions technologies, and to impose and enforce the stringent restrictions on GHG emissions required to prevent transboundary harm to other States (and to the international community as a whole). Finally, technological and scientific developments allow high-emitter States both to assess the risk of transboundary harm from specific GHG-emitting activities, and to prevent or mitigate such harms, for example by utilizing clean technologies or renewable energy.

93. For these reasons, Bangladesh has repeatedly called on high-emitter and developed States to "*reduce their carbon emissions drastically*" with the aim of "*keep[ing] global temperature-rise below 1.5* °C"¹⁹⁰. Bangladesh's Special Envoy for Climate Change has further explained that this will require "*tough*

¹⁹⁰ H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, Speech at the 1st Climate Vulnerable Finance Summit (8 July 2021), https://www.v-20.org/wpcontent/uploads/2021/07/HPM-V20-Opening-Speech-1.pdf.

decisions on fossil fuels" in line with the best available science and commitments made under the Paris Agreement¹⁹¹. Indeed, Bangladesh has long called for a global phase-out of fossil fuels, pursuant to which developed States must take immediate action in line with their greater financial and technical capacities, while developing States may act on an extended time line to the best of their capabilities¹⁹².

94. The obligation to prevent transboundary harm also comprises certain procedural requirements, including that the State "*ascertain if there is a risk of significant transboundary harm*" before embarking on an activity, and carry out an environmental impact assessment if there is a risk¹⁹³. Lack of certainty as to whether, and the extent to which, an activity may cause transboundary harm is no excuse; pursuant to the precautionary principle, which is well-established as a

¹⁹¹ M. Hoque, "COP 28: Bangladesh seeks science-based solution to global climate crisis, demands doubling of adaptation funding", *The Business Standard* (12 December 2023), https://www.tbsnews.net/bangladesh/environment/climate-change/cop-28-bangladesh-seeks-science-based-solution-global-climate. *See also* Mr. Abdullah Al Mohsin Chowdhury, Permanent Secretary of the Ministry of Environment, Forest and Climate Change of the People's Republic of Bangladesh, *Statement at the Twenty-fourth session of the Conference of the Parties to UN Framework Convention on Climate Change (COP 24)* (December 2018), https://unfccc.int/sites/default/files/resource/BANGLADESH_cop24cmp14cma1-3.pdf.

¹⁹² See, e.g., H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, 4^{th} Statement at World Future Energy Summit (17)January 2011). https://pmo.portal.gov.bd/sites/default/files/files/pmo.portal.gov.bd/pm_speech/498e9c76_e3 3b_4a08_b496_8a5c06b6644b/Future%20Energy_170111.doc.pdf (calling for nations to work together "to achieve a carbon free world"); "COP28: Saber Chowdhury calls for universal and inclusive financing mechanism", Dhaka Tribune (7 December 2023) https://www.dhakatribune.com/bangladesh/bangladesh-environment/333170/cop28-saberchowdhury-calls-for-universal-and; "Cop: Bangladesh backs fossil fuel phase out", Argus https://www.argusmedia.com/en/news/2517730-cop-Media (10 December 2023), bangladesh-backs-fossil-fuel-phase-out.

¹⁹³ Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica), Judgment, Merits, I.C.J. Reports 2015 ("Certain Activities"), para. 104; Pulp Mills, para. 205. See also Report of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities, Yearbook of the International Law Commission, 2001, Vol. II (Part Two), Commentary to Article 3.

general principle of international environmental law, "[w]here there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation"¹⁹⁴.

95. The procedural aspects of the due diligence obligation also require "*continuous monitoring*" of environmental impacts¹⁹⁵. Judge Cançado Trindade explained in his Separate Opinion in *Pulp Mills* that the obligation to monitor environmental effects can be "*expressly linked*" to the principle of inter-generational equity¹⁹⁶. Pursuant to this principle, "*all members of each generation of human beings, as a species, inherit a natural and cultural patrimony from past generations, both as beneficiaries and as custodians*"¹⁹⁷. In the climate change context, consideration of this principle is especially important, given the existential threat that climate impacts pose to the Earth and its natural resources, which are the common heritage of all mankind, including future generations.

¹⁹⁴ United Nations General Assembly, Report of the United Nations Conference on Environment and Development, A/CONF.151/26 (Vol. I) (12 August 1992), Annex I, Rio Declaration on Environment and Development (hereinafter, "*Rio Declaration*"), Principle 15. *See also* Report of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities, Yearbook of the International Law Commission 2001, Vol. II (Part Two), Commentary to Article 3; UNFCCC, Article 3; Convention on the Protection and Use of Transboundary Watercourses and International Lakes, 1936 U.N.T.S. 269 (17 March 1992), Article 2(5)(a); Convention on Biological Diversity, 1760 U.N.T.S. 79 (5 June 1992), Preamble.

¹⁹⁵ Pulp Mills, para. 205 ("once operations have started and, where necessary, throughout the life of the project, continuous monitoring of its effects on the environment shall be undertaken"). See also Report of the International Law Commission on Prevention of Transboundary Harm from Hazardous Activities, Yearbook of the International Law Commission 2001, Vol. II (Part Two), Commentary to Article 3.

¹⁹⁶ Pulp Mills, Cançado Trindade Separate Opinion, para. 124 ("in approaching the 'continuing obligations' of 'monitoring' in the present Judgment, the Court should have expressly linked this important point to inter-generational equity.").

¹⁹⁷ Goa Guidelines on Intergenerational Equity adopted by the Advisory Committee to the United Nations University Project on "International Law, Common Patrimony and Intergenerational Equity" (15 February 1988); Rio Declaration, Principle 3; UNFCCC, Preamble, Article 3(1).

2. The United Nations Convention on the Law of the Sea

96. UNCLOS (which entered into force in 1994) sets forth a comprehensive ocean governance framework that includes provisions aimed at protecting and conserving the Earth's oceans and seas.

97. Article 192 of UNCLOS sets out States Parties' core obligation to "protect and preserve the marine environment". As the International Tribunal on the Law of the Sea ("*ITLOS*") has made clear, Article 192 requires "active measures" to protect and preserve the marine environment, "and by logical implication, entails the negative obligation not to degrade the marine environment"¹⁹⁸. The content of the Article 192 obligation is informed not only by the provisions of UNCLOS, but by "other applicable rules of international law", including "[t]he corpus of international law relating to the environment"¹⁹⁹. In addition to the Convention on Biological Diversity and the Convention on International Trade in Endangered Species of Fauna and Flora—two treaties previously considered by ITLOS as informing the content of Article 192²⁰⁰—the Court may today also consider State commitments embodied in the Paris Agreement to understand the "active measures" States must take to fulfil their duties under Article 192²⁰¹.

98. The key obligation in respect of climate change is set forth in Article 194(1), which provides that States:

Shall take, individually or jointly as appropriate, all measures . . . necessary to prevent, reduce and

¹⁹⁸ South China Sea Arbitration (Philippines v. China), PCA Case No 2013-19, Award on Merits (12 July 2016) (hereinafter, "South China Sea Arbitration"), para. 941.

¹⁹⁹ South China Sea Arbitration, para. 941.

²⁰⁰ South China Sea Arbitration, paras. 945, 956.

²⁰¹ South China Sea Arbitration, para. 941.

control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavor to harmonize their policies in this connection.

The Convention further defines "pollution of the marine environment" as:

the introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities²⁰².

99. The case concerning a *Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law* is currently pending before ITLOS. Bangladesh made the following submissions before ITLOS in that case, and respectfully submits to the Court that:

The definition of "*pollution of the marine environment*" encompasses anthropogenic GHG emissions, which indirectly introduce heat into the marine environment and results, or is at least likely to result, in deleterious effects, including ocean warming and acidification and sea-level rise²⁰³.

²⁰² UNCLOS, Article 1(1)(4).

²⁰³ Written Statement of the People's Republic of Bangladesh, International Tribunal for the Law of the Sea, Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law (16 June 2023) (hereinafter, "*Bangladesh ITLOS Submissions*") paras. 29–34, 49. *See also* paras. 26, 28, above.

- The obligation to "*prevent, reduce and control*" GHG emissions that pollute the marine environment is an obligation of due diligence, which must be interpreted in light of international rules and standards and the best available science²⁰⁴. It is now well-established that these climate impacts are the result of global warming caused by human activities, principally GHG emissions, and that they are already affecting the Earth's oceans and marine life. Further, it is established fact that such impacts will worsen as global average temperature increases, with catastrophic effects if that temperature exceeds 1.5 °C above pre-industrial levels²⁰⁵.
- These scientific insights give substance to the obligations of States Parties to UNCLOS to reduce and control pollution from GHG emissions. In light of the scientific consensus, States Parties to UNCLOS are required to take all necessary measures aimed at limiting the increase in global average temperature to 1.5 °C above pre-industrial levels.

B. The Fundamental Principles and Premises Underlying the International Environmental Law Framework Are Implicated by Climate Change

100. States' obligations under customary international environmental law and UNCLOS do not stand in isolation. To the contrary, the fundamental principles and premises that underpin the environmental protection framework also give rise to closely interrelated norms and obligations in respect of human rights, the rights of future generations, and international cooperation.

²⁰⁴ Bangladesh ITLOS Submissions, paras. 36-37, 39.

²⁰⁵ Bangladesh ITLOS Submissions, paras. 43-44.

101. As set out in further detail below, these principles, norms and obligations are especially important in the climate change context: *first*, States' existing human rights obligations take on particular relevance where climate impacts adversely affect human health and the exercise of fundamental human rights (**Section 1**). *Second*, the principle of inter-generational equity—which is well-established under international environmental law—is applicable in the climate context, since climate change is not constrained by temporal limits but will continue to impact future generations (**Section 2**). *Finally*, global collective action, including inter-State cooperation on the basis of the well-established principle of Common But Differentiated Responsibilities, is needed to address the climate crisis (**Section 3**).

102. Recognition that these closely-related principles, norms and obligations apply in the climate context and inform States' obligations in that regard is important to ensuring a consistent, integrated approach to the existing international law framework. The Court's advisory opinion plays an essential role in this respect. By clarifying States' obligations in respect of climate change—and that these obligations are drawn from well-established principles and premises of international environmental and human rights law—the Court can prevent fragmentation and the inconsistent application of inter-related rules in the climate context.

1. Climate change adversely affects human health and well-being and the exercise of fundamental human rights

103. Resolution 77/276 refers to a number of international human rights instruments to frame the questions presented to the Court, namely: the International Covenant on Civil and Political Rights; the International Covenant on Economic, Social and Cultural Rights; and the rights recognized in the Universal Declaration of Human Rights. There is good reason for the link drawn

in the Request between climate change and international human rights law. Anthropogenic climate change poses an immediate and urgent threat to the exercise of fundamental human rights, including the rights to life, to health, to food and water, and to a healthy environment²⁰⁶. These threats are both direct—in cases where climate effects such as severe storms and flooding cause loss of life or adversely affect health—and indirect, for example where slow-onset climate effects such as sea-level rise lead to other social and economic impacts that impede the exercise of rights.

104. This intersectionality is well-established in the environmental context, having been explicitly recognized as early as the 1972 Stockholm Declaration of the United Nations Conference on the Human Environment ("*Stockholm Declaration*"), adopted following the landmark first world conference on the environment, and consistently recognized in the decades since. The Preamble to the Stockholm Declaration provides:

Both aspects of a man's environment, the natural and the man-made, are <u>essential to his well-being and to the</u> <u>enjoyment of basic human rights</u>—even the right to life itself.

²⁰⁶ Climate change poses a potential threat to the exercise of *all* economic, social, and cultural rights, including for example the rights to property, to the enjoyment of just and favourable work conditions, and to take part in cultural life. *See, e.g.*, Universal Declaration of Human Rights, U.N. Doc. 217 A (III) (10 December 1948) (hereinafter "*UDHR*"), Articles 17, 23, 27; International Covenant on Economic, Social and Cultural Rights, 993 U.N.T.S. 3 (16 December 1966) (hereinafter "*ICESCR*"), Articles 7, 15; International Covenant on Civil and Political Rights, 999 U.N.T.S. 171 (16 December 1966) (hereinafter, "*ICCPR*"), Article 27. This section focuses on certain fundamental rights—the realization of which is a necessary prerequisite for the enjoyment of other rights—which are most directly threatened by the adverse effects of climate change.

The protection and improvement of the human environment is a major issue which <u>affects the well-being of peoples and</u> <u>economic development throughout the world</u>; it is the urgent desire of the peoples of the whole world and the duty of all Governments. . . To defend and improve the human environment for present and future generations has become an <u>imperative goal for mankind</u>.

<u>International co-operation</u> is also needed in order to raise resources to support the developing countries in carrying out their responsibilities in this field²⁰⁷.

105. In light of the close connection between human health and well-being and the environment, States' obligations under international human rights law are relevant in the climate context. In particular, under international law, States are subject to a shared responsibility to promote and encourage respect for human rights within the framework of international cooperation, with a view to achieving the full realization of fundamental human rights on a global scale ²⁰⁸, and must refrain from conduct that would impede another State's ability to protect and

²⁰⁷ Declaration of the United Nations Conference on the Human Environment (1972), Preamble. See also United Nations General Assembly, Resolution 2994 (XXVII), U.N. Doc. A/RES/2994(XXVII) (15 December 1972), Preamble (noting with satisfaction the report of the United Nations Conference on the Human Environment and drawing the attention of Governments to the Declaration of the United Nations Conference on the Human Environment).

See, e.g., World Summit Outcome Document 2005, U.N. Doc. A/RES/60/1, para. 121 ("all States, regardless of their political, economic and cultural systems, have the duty to promote and protect all human rights and fundamental freedoms"); United Nations General Assembly, *Enhancement of international cooperation in the field of human rights*, U.N. Doc. A/C.3/78/L.37 (30 October 2023) (recognizing "that the promotion and protection of human rights should be based on the principle of cooperation and genuine dialogue and aimed at strengthening the capacity of Member States to comply with their human rights obligations for the benefit of all human beings" and underlining that States must "look beyond mutual interests in order to advance the general interest"); ICECSR, Articles 2, 11, 23.

ensure the rights of its population²⁰⁹. This includes the obligation to regulate certain activities of entities within a State's control in order to avoid transboundary environmental harms that could affect the exercise of human rights in another State's territory²¹⁰.

See, e.g., United Nations Committee on Economic, Social and Cultural Rights, General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant), U.N. Doc. E/C.12/2002/11 (20 January 2003), para. 31 ("To comply with their international obligations in relation to the right to water, States parties have to respect the enjoyment of the right in other countries. International cooperation requires States parties to refrain from actions that interfere, directly or indirectly, with the enjoyment of the right to water in other countries. Any activities undertaken within the State party's jurisdiction should not deprive another country of the ability to realize the right to water for persons in its jurisdiction"); Inter-American Court of Human Rights, State obligations in relation to the environment in the context of the protection and guarantee of the rights to life and to personal integrity, OC-23/17, Advisory Opinion (15 November 2017).

²¹⁰ See, e.g., Inter-American Court of Human Rights, State obligations in relation to the environment in the context of the protection and guarantee of the rights to life and to personal integrity, OC-23/17, Advisory Opinion (15 November 2017), paras. 102-03, 104(h), 119; African Commission on Human Rights, General Comment No. 3 on the African Charter on Human and Peoples' Rights: The Right to Life (Article 4) (18 November 2015), para. 14; United Nations Human Rights Committee, Yassin et al. v. Canada, Communication No. 2285/2103 (26 July 2017), para. 6.5; United Nations Committee on Economic, Social and Cultural Rights, General Comment No 24 on State Obligations under the ICESCR in the Context of Business Activities (23 June 2017), para. 26; United Nations Committee on the Rights of the Child, General Comment No. 16 on State Obligations Regarding the Impact of the Business Sector on Children's Rights (17 April 2013), para. 43; United Nations Human Rights Committee, Munaf v. Romania, Communication No. 1539/2006 (31 July 2009), para. 14.2. Notably, a substantial body of national and regional legislation, agreements, and pledges-including, for example, the United Nations Guiding Principles on Business and Human Rights-acknowledge the role of corporations and other business enterprises in contributing to human rights impacts, as well as their responsibilities to prevent and address such impacts. The United Nations Working group on the issue of human rights and transnational corporations and other business enterprises has confirmed that these responsibilities extend to climate impacts: "The obligations of States under the Guiding Principles [on Business and Human Rights] to protect against human rights impacts arising from business activities includes the duty to protect against foreseeable impacts related to climate change" and "[t]he responsibilities of business enterprises under the Guiding Principles to respect human rights and not to cause, contribute to or be directly linked to human rights impacts arising from business activities, include the responsibility to act in regard to actual and potential impacts related to climate change." United Nations Working Group on the issue of human rights and transnational corporations and other business

106. These obligations are implicated where high-emitter States' GHG emissions contribute to significant climate impacts that are adversely affecting the exercise of human rights in LDCs and climate-vulnerable States²¹¹. Bangladesh in particular has suffered, and continues to suffer, severe climate impacts that directly impede its ability to protect, respect, and fulfil the rights of its population. These impacts are particularly severe for women, girls, the disabled and other vulnerable groups within its population. For example, Bangladesh faces funding shortages and other difficulties in implementing necessary climate adaptation measures that would fully protect the physical well-being of its population in the face of severe flooding, extreme weather events, and the salination of fresh water and soil. As one of the lowest-GHG emitters, Bangladesh is among the least culpable for these climate impacts, which are largely the result of developed States' historical and continued emissions²¹².

107. As set out below, due to the failure of high-emitter States to implement sufficient climate mitigation measures, Bangladesh has been prevented from protecting and ensuring the rights of its population to life, health, and a healthy environment, along with associated rights to water and food (**Section a**). The conduct of high-emitter States also directly impedes the right of Bangladesh's

enterprises, Information Note on Climate Change and the Guiding Principles on Business and Human Rights (June 2023), https://www.ohchr.org/sites/default/files/documents/issues/business/workinggroupbusiness/In formation-Note-Climate-Change-and-UNGPs.pdf.

²¹¹ See, e.g., ICESCR, Article 2(1); UDHR, Preamble, Article 22; UN Charter, Articles 1(3), 56; Convention on the Rights of the Child, 1577 U.N.T.S. 3 (20 November 1989) (hereinafter, "CRC"), Article 4; Convention on the Rights of Persons with Disabilities, 2515 U.N.T.S. 3 (13 December 2006) (hereinafter, "CRPD"), Article 32; Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations (A/RES/2625(XXV), p. 123; Committee on Economic, Social and Cultural Rights, General Comment No. 3: The Nature of States Parties' Obligations, U.N. Doc. E/1991/23 (14 December 1990), paras. 13-14.

²¹² *See* paras. 72-75, above.

population to sustainable development (Section b) and the right to self-determination (Section c).

(a) The rights to life, health, and a healthy environment, including associated rights to water and food

108. It is a universally recognized norm of customary international law that "[*e*]very human being has the inherent right to life"²¹³. Effective protection of the right to life is a necessary prerequisite for the enjoyment of all other human rights, making it the "supreme right" under international law²¹⁴. At its core, the right to life protects all human beings from the arbitrary deprivation of life, and requires accountability when such deprivations occur²¹⁵. It also entails a positive aspect, pursuant to which States must protect and ensure the various subsidiary rights that

²¹³ ICCPR, Article 6(1); UDHR, Article 3; International Convention on the Elimination of All Forms of Racial Discrimination, 660 U.N.T.S. 195 (7 March 1966) (hereinafter, "*CERD*"), Article 5(b); CRC, Article 6(1); International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families, 2220 U.N.T.S. 3 (18 December 1990), Article 9; CRPD, Article 10; Convention for the Protection of Human Rights and Fundamental Freedoms, 4 November 1950, Council of Europe Treaty Series 005 (hereinafter, "*ECHR*"), Article 2(1); American Convention on Human Rights "Pact of San José, Costa Rica", 22 November 1969, 1144 U.N.T.S. 123 (hereinafter, "*ACHR*"), Article 4.

²¹⁴ UN Human Rights Committee, General Comment No. 36 on Article 6: Right to Life, U.N. Doc. CCPR/C/GC/36 (3 September 2019), para. 2; ICCPR, Articles 4(2), 6(1); African Commission on Human and Peoples' Rights, General Comment No. 3 on the African Charter on Human and Peoples' Rights: The Right to Life (Article 4) (18 November 2015), para. 5; Inter-American Commission on Human Rights, Victims of the Tugboat '13 de Marzo' v. Cuba, Case 11.436, Report No. 47/96, Judgment (16 October 1996), para. 79; European Court of Human Rights, Al-Saadoon and Mufdhi v. UK, App. No. 61498/08, Judgment (2 March 2010), para. 95; Inter-American Court of Human Rights, Myrna Mack-Chang v. Guatemala, (ser. C) No. 101, Judgment, Merits, Reparations and Costs (25 November 2003), para. 153.

²¹⁵ ICCPR, Articles 4(2), 6(1); ECHR, Article 2(1); African Charter on Human and Peoples' Rights, 1520 U.N.T.S. 217 (21 October 1986), Article 4; Arab Charter on Human Rights (15 September 1994), Article 5; United Nations Human Rights Committee, *General Comment No. 36 on Article 6, of the International Covenant on Civil and Political Rights, on the right to life*, U.N. Doc. CCPR/C/GC/36 (30 October 2018), paras. 2, 68.

contribute to a life with dignity and an adequate standard of living, such as the right to adequate housing and the right to sufficient food and nutrition²¹⁶.

109. The related right to the highest attainable standard of health is likewise widely acknowledged as a fundamental human right²¹⁷. Like the right to an adequate standard of living, it is generally understood as encompassing a wide range of health determinants, including access to food and nutrition and to safe and potable water²¹⁸.

110. It is also closely linked to the health of the environment itself. As the Court recognized in the *Nuclear Weapons AO*, "the environment is not an abstraction but represents the living space, the quality of life and the very health of human beings, including generations unborn"²¹⁹. This relationship provides the basis for international recognition of the right of all persons to a clean, healthy and sustainable environment²²⁰. In Resolution 76/300, the United Nations General

²¹⁶ Chris Maina Peter, "Promotion of Standard of Living", Max Planck Encyclopedias of International Law (April 2009), paras. 4-5; UDHR, Article 25(1); ICESCR, Article 11(1); CRC, Article 27; Convention on the Elimination of All Forms of Discrimination against Women, 18 December 1979, 1249 U.N.T.S. 13 ("*CEDAW*"), Article 14.2; CRPD, Article 28(1).

²¹⁷ UDHR, Article 25(1); ICESCR, Art 12; CEDAW, Articles 12, 14(2); United Nations Economic Commission for Europe, Protocol on Water and Health to the 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (17 June 1999), Articles 1, 4, 5; CRPD, Article 25; CRC, Articles 24(2), 27(3); American Declaration of the Rights and Duties of Man, U.N. Doc. E/CN.4/122 (10 June 1948), Article XI.

²¹⁸ UN Committee on Economic, Social and Cultural Rights, General Comment No. 14: The Right to the Highest Attainable Standard of Health (Article 12 of the Covenant), U.N. Doc. E/C.12/2000/4 (11 August 2000), paras. 4, 33.

²¹⁹ Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, [1996] I.C.J. Rep. 296, para. 29.

²²⁰ Stockholm Declaration, Principle 1; Rio Declaration, Principle 1; African Charter, Article 24; United Nations Human Rights Committee, *Resolution on the human right to a clean, healthy and sustainable environment*, U.N. Doc. A/HRC/RES/48/13 (18 October 2021); United Nations General Assembly, Resolution 45/94, *The Need to Ensure a Healthy Environment for the Well-being of Individuals*, U.N. Doc. A/RES/45/94 (14 December 1990); Special

Assembly affirmed "the importance of a clean, healthy and sustainable environment for the enjoyment of human rights" and formally "recognize[d] the right to clean, healthy and sustainable environment as a human right". The right to a healthy environment comprises several elements that are inextricably linked with the right to health, including the ability to breathe clean air, to access clean water and sustainable food, to a safe climate, and to healthy ecosystems and biodiversity²²¹.

111. Prime Minister H.E. Sheikh Hasina has previously called attention to the impacts of climate change on the rights to life and health, particularly in developing States: "*[e]very year, 4.5 million people die as a direct impact of climate change and use of carbon. Loss of life due to climate change is almost exclusively among the lower-income countries.*"²²² Bangladesh is no exception. As described above in Section II.B.1, cyclones, storm surges and severe flooding caused or exacerbated by climate change have resulted in injuries and deaths²²³. In addition, rising temperatures and extreme precipitation events have created ideal conditions for the spread of disease, and thousands of people in Bangladesh have died from health conditions that are caused or exacerbated by climate change²²⁴.

Rapporteur Fatma Zohra Ksentini, *Report on Human Rights and the Environment*, U.N. Doc. E/CN.4/Sub.2/1994/9 (6 July 1994), p. 11; United Nations Committee on Economic, Social and Cultural Rights, *General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)*, U.N. Doc. E/C.12/2000/4, 11 August 2000, paras. 4, 11, 15-16, 36.

²²¹ United Nations General Assembly, Resolution 76/300, *The human right to a clean, healthy and sustainable environment*, U.N. Doc. A/RES/76/300 (1 August 2022), paras. 16, 19.

²²² "Bangladesh Prime Minister Sheikh Hasina's Remarks on Climate Change", Asia Society (27 September 2012), https://asiasociety.org/new-york/bangladeshi-prime-minister-sheikhhasinas-remarks-climate-change.

²²³ *See* paras. 49-52, above.

²²⁴ *See* paras. 61-62, above.

112. Climate events have also impeded Bangladesh's ability to protect and ensure the rights of its population to a healthy environment and to access sustainable food and clean water, through no fault of its own²²⁵. Prime Minister H.E. Sheikh Hasina and Patrick Verkooijen, CEO of the Global Center on Adaptation, have highlighted the disparities in impacts suffered by those in developing States, including Bangladesh, while developed States refuse to act:

The climate breakdown will not wait while leaders equivocate. It is already unleashing typhoons and floods on communities, and spreading hunger through crop failures and drought. Only a tiny fraction of climate funding reaches the people battling the worst effects of climate change—they are without the resources needed to protect themselves and their livelihoods, leaving them more vulnerable. Climate injustice is being exacerbated.²²⁶

113. In Bangladesh, as noted above, food staples such as rice have become less available and more expensive as a result of the destruction of agricultural land in low-lying coastal areas, and freshwater sources across the country are at risk of salination due to encroaching seawater²²⁷. Other key ecosystems have also been impacted, resulting in an overall loss of biodiversity; for example, the Sundarbans forest, the largest remaining area of mangroves in the world, is considered particularly vulnerable to sea-level rise²²⁸.

²²⁵ *See* paras. 51, 60-62, above.

²²⁶ H.E. Sheikh Hasina and P. Verkooijen, "Let's Put People Back at the Heart of Climate Action: Opinion", *Newsweek* (30 November 2023), https://www.newsweek.com/lets-putpeople-back-heart-climate-action-opinion-1848438.

²²⁷ See paras. 48, 51, 60-62, above.

²²⁸ 2024 ICCCAD Report, p. 19.

114. Bangladesh has expended significant resources to prevent its population from physical harm and to stymie disease and the loss of healthy ecosystems, but these efforts have proven difficult in the face of severe and worsening climate impacts and limited funding. In the words of H.E. Dr. A. K. Abdul Momen, former Foreign Minister of Bangladesh: "We need to remember that there is a limit of adaptive capacities, in particular by the vulnerable countries... Moreover, climate financing remains severely under resourced."²²⁹

115. As noted above, high-emitter States are largely responsible for the climate impacts suffered in Bangladesh, and thus for Bangladesh's difficulties in ensuring the rights of its population to life and an adequate standard of living, to health, and to a healthy environment. The conduct of these States—in particular, the failure to exercise due diligence to prevent harmful GHG emissions (including by entities within their control), or to meet their obligations under UNCLOS or the Paris Agreement—directly impedes the exercise of human rights in Bangladesh and contravenes States' obligations under international law to promote and encourage respect for human rights and to refrain from interfering with Bangladesh's efforts to protect and ensure the human rights of its population.

(b) The right to sustainable development

116. The right of every person to development was formally recognized by the United Nations General Assembly in Resolution 41/128 adopting the Declaration on the right to development, which states that:

> The right to development is an inalienable human right by virtue of which every human person and all peoples are

²²⁹ H.E. Dr. A. K. Abdul Momen, former Minister of Foreign Affairs of Bangladesh, Statements at the International Dialogue on Migration (2021), https://thecvf.org/ourvoice/statements/chair/statement-by-honble-foreign-minister-of-bangladesh-at-theinternational-dialogue-on-migration-idm-2021/.

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 realized²³⁰.

As the Declaration recognizes, the full realization of the right to 117. development requires States to create and maintain the conditions favorable to the enjoyment of civil, economic, social, cultural and political rights. An enabling environment for the full enjoyment of the right to development and other related human rights will involve measures to balance economic development against the need to protect and improve the health of the environment, which, as set out above, is crucial to human health and well-being. As the Court explained in Gabčíkovo-Nagymaros Project, "[t]his need to reconcile economic development with protection of the environment is apply expressed in the concept of sustainable development", which requires States to consider the environmental effects of development projects²³¹. This requirement does not constrain the exercise of the right to development where it is needed to ensure fundamental human rights and freedoms. To the contrary, sustainable development has been described as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs"²³². Inherent to this concept is the idea that developing States must be able to meet their essential needs, including by

 ²³⁰ United Nations Declaration on the Right to Development, U.N. Doc. 41/128 (4 December 1986) (hereinafter, "*Declaration on the Right to Development*"), Article 1.

²³¹ Gabcikovo-Nagymaros Project (Hungary v. Slovakia), Judgment, I.C.J. Reports 1997, p. 7, para. 140.

²³² Report of the World Commission on Environment and Development: Our Common Future (1987), para. 27.

receiving their "fair share" of the resources required to sustain economic growth²³³.

118. The obligation to create the conditions necessary for sustainable development is not limited to the persons within a State's jurisdiction, but instead requires international cooperation to promote sustainable development globally. Indeed, the Declaration on the right to development explicitly recognizes that States "*have the <u>duty to co-operate with each other</u> in ensuring development and eliminating obstacles to development*"²³⁴. Among other factors, this includes international cooperation and assistance in "*areas of concern*" for developing States, specifically: "*technology transfer, access to essential medicines, debt sustainability, development aid, international trade, and policy space in decision making*"²³⁵. In addition, States must take care "*to adopt development measures that [do] not have adverse extraterritorial impact on the right to development of those outside their jurisdiction*"²³⁶.

119. Bangladesh's efforts to promote sustainable development within the country have been hindered by the need to divert funds away from crucial development programs to climate adaptation²³⁷. Extreme floods, storm surges,

²³³ Report of the World Commission on Environment and Development: Our Common Future (1987), para. 28.

²³⁴ Declaration on the Right to Development, Article. 3.

²³⁵ United Nations Office of the High Commissioner on Human Rights, "The Right to Development at a glance", https://www.un.org/en/events/righttodevelopment/pdf/rtd_at_a_glance.pdf.

²³⁶ United Nations Office of the High Commissioner of Human Rights, Statement of Mihir Kanade (Member of the Expert Mechanism on the Right to Development), "Committee on Economic, Social and Cultural Rights Holds Day of General Discussion on Sustainable Development and Economic, Social and Cultural Rights", https://www.ohchr.org/en/news/2023/02/committee-economic-social-and-cultural-rights-holds-day-general-discussion-sustainable.

²³⁷ *See* paras. 76-78, above.

rising sea levels and the salination of freshwater sources also threaten economic development necessary to ensure fundamental human rights by impeding agriculture and fishing, industries that employ a significant portion of Bangladesh's population²³⁸. Developed States are required to cooperate with Bangladesh to remove these impediments to sustainable development and to otherwise promote such development, including by fulfilling their commitments to provide climate financing and technology transfer. As Bangladesh has repeatedly highlighted in international fora, "[t]he adverse effects of climate change pose serious threats to the security and economic prosperity of our present and future generations. Urgent, bold and ambitious collective actions are needed to address those threats"²³⁹.

(c) The right to self-determination

120. The right to self-determination broadly encompasses the right of all peoples and nations "freely to determine, without external interference, their political status and to pursue their economic, social and cultural development"²⁴⁰ as well as the right "to permanent sovereignty over their natural wealth and resources", meaning that "in no case may a people be deprived of its own means of subsistence"²⁴¹.

²³⁸ *See* para. 60, above.

²³⁹ H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, Address at the Seventy-eighth session of the United Nations General Assembly, 10th plenary meeting, U.N. Doc. A/78/PV.10 (22 September 2023).

²⁴⁰ Declaration on Principles of International Law concerning Friendly Relations and Cooperation among States in accordance with the Charter of the United Nations, U.N. Doc. A/RES/2624(XXV) (24 October 1970), p. 123. See also ICCPR, Article 1 ("All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development"); ICESCR, Article 1 (same).

²⁴¹ ICCPR, Article 1; ICESCR, Art. 1(2). *See also* UN General Assembly Resolution 1803 (XVII), *Permanent Sovereignty over Natural Resources* (14 December 1962); UN Human

121. The Court has identified the right of all peoples to self-determination as "one of the essential principles of contemporary international law"²⁴², and has further explained that respect for the right to self-determination is an obligation erga omnes, such that "all States have a legal interest" in protecting that right²⁴³. The Court has also referenced each State's "duty to <u>promote</u>, through joint and separate action, realization of the principle of equal rights and self-determination of peoples", as set out the Declaration on the Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations²⁴⁴.

122. Severe climate undermined impacts have the right to self-determination in Bangladesh in a number of ways. They undermine Bangladesh's freedom to determine its own economic, social and cultural development, including, as described above, by forcing Bangladesh to divert funds away from sustainable development goals to climate adaptation. The destruction of agricultural lands and other sources of livelihood due to sea-level rise and flooding also hampers economic development and deprives Bangladesh of means of subsistence. Bangladesh's enjoyment of the right to permanent sovereignty over its natural resources is also impeded by climate impacts. For example, a number of the country's natural assets, including mangroves, forest ecosystems and wetlands, are under threat due to rising temperatures, sea-level rise, extreme weather events, and increased salinization²⁴⁵.

Rights Committee, General Comment No. 12: Article 1 (Right to Self-determination), The Right to Self-determination of Peoples, U.N. Doc. CRPD/C/GC/1 (13 March 1984), para 5.

²⁴⁴ *Ibid*.

²⁴² Case Concerning East Timor (Portugal v. Australia), Judgment of 30 June 1995, para. 29.

Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, [2019] I.C.J. Rep. 95 (25 February 2019), para. 180.

²⁴⁵ *See* paras. 51, 55, 113, 119, 122, above.

123. States are obliged to promote the right to self-determination in Bangladesh by taking steps to mitigate these climate impacts, including by meeting their other obligations to prevent transboundary harm from GHG emissions and to curb GHG emissions in accordance with UNCLOS and the Paris Agreement, and by meeting climate financing commitments. States' failure to take these necessary steps to address their own GHG emissions or to fulfill their commitments to assist with climate adaptation directly impede the exercise of the right to self-determination in Bangladesh.

2. The Principle of Inter-Generational Equity Informs States' Climate Change Obligations

124. In the environmental law context, inter-generational equity is a well-established general principle, reflected in the United Nations General Assembly's resolutions, the Convention on Biological Diversity, the Rio Declaration, the Maastricht Principles on The Human Rights of Future Generations, and the Court's jurisprudence²⁴⁶. It requires each generation to use its environmental heritage "*in such a manner that it can be passed on to future generations in no worse condition than it was received from past generations*"²⁴⁷.

²⁴⁶ United Nations General Assembly, Resolution 76/300, *The human right to a clean, healthy and sustainable environment*, U.N. Doc. A/RES/76/300 (1 August 2022), para. 17; Convention on Biological Diversity, Preamble ("Determined to conserve and sustainably use biological diversity for the benefit of present and future generations"), Article 2 (defining "sustainable use" as maintaining the potential of biological diversity "to meet the needs and aspirations of present and future generations"); Rio Declaration, Principle 3 ("The right to development must be fulfilled so as to equitably meet the developmental and environmental needs of present and future generations"); "Maastricht Principles on The Human Rights of Future Generations (3 February 2023), Principle 8(a) ("During their time on Earth, each generation must act as trustees of the Earth for future generations. This trusteeship must be carried out in harmony with all living beings and Nature."), Principle 6(e) ("Future generations must be free from intergenerational discrimination. This discrimination includes but is not limited to: (i) The waste, destruction, or unsustainable use of resources essential to human life".); *Pulp Mills*, Cançado Trindade Separate Opinion, para. 124.

²⁴⁷ Pulp Mills, Cançado Trindade Separate Opinion, paras. 120, 122 ("Nowadays, in 2010, it can hardly be doubted that the acknowledgment of inter-generational equity forms part of

The principle is generally understood to be comprised of three main concepts, which inform States' other obligations under international law: *first*, conserving the diversity of natural resources for future generations²⁴⁸; *second*, ensuring the quality of the environment is comparable between generations²⁴⁹; and *third*, non-discriminatory access among generations to the Earth and its resources²⁵⁰. Children around the world have invoked the principle of inter-generational equity to argue that States have failed to take sufficient action on climate change, and thereby violated human rights obligations including the right to life²⁵¹.

conventional wisdom in international environmental law"); *Whaling in the Antarctic (Australia v. Japan: New Zealand intervening)* ("*Whaling in the Antarctic*"), [2014] I.C.J. Rep., Cançado Trindade Separate Opinion, para. 47 ("[I]nter-generational equity marks presence nowadays in a wide range of instruments of international environmental law, and indeed of contemporary public international law").

See, e.g., United Nations General Assembly, The human right to a clean, healthy and sustainable environment, U.N. Doc. A/RES/76/300 (1 August 2022), para. 17; United Nations, "Biodiversity—our strongest natural defense against climate change", https://www.un.org/en/climatechange/science/climate-issues/biodiversity; Convention on Biological Diversity, 1760 U.N.T.S. 79 (5 June 1992); Maastricht Principles on The Human Rights of Future Generations (3 February 2023), Principle 7(c) ("To meet their obligations to future generations, States must necessarily impose reasonable restrictions on activities that undermine the rights of future generations, including the unsustainable use of natural resources and the destruction of Nature.").

See, e.g., Paris Agreement, Preamble; Maastricht Principles on The Human Rights of Future Generations (3 February 2023), Principle 8(a) ("During their time on Earth, each generation must act as trustees of the Earth for future generations. This trusteeship must be carried out in harmony with all living beings and Nature."), Principle 6(e) ("Future generations must be free from intergenerational discrimination. This discrimination includes but is not limited to: (i) The waste, destruction, or unsustainable use of resources essential to human life".).

See, e.g., ICESCR, Article 25 (recognizing the "inherent right of all peoples to enjoy and utilize fully and freely their natural wealth and resources"), Report of the United Nations High Commissioner for Human Rights on land and human rights, U.N. Doc. E/2014/86 (11 July 2014), para. 23 ("The principles of non-discrimination and equality are fundamental to the exercise and enjoyment of human rights, including those relating to access to, use of and control over land").

²⁵¹ European Court of Human Rights, *Duarte Agostinho and Others v. Portugal and 32 Other States*, App. No. 39371/20, Complaint (2 September 2020), para. 8 (six Portuguese youth plaintiffs emphasized their generation stands to experience the worst effects of climate change in a proceeding alleging violations of their right to life due to the climate crisis);

125. Extensive and widely endorsed climate science has shown that limiting global warming to 1.5 °C above pre-industrial temperatures is the only way that future generations will have the *possibility* of enjoying comparable diversity, quality, and access to the environment ²⁵². There is scientific consensus that even if States are successful in slowing emissions to stay well within the 1.5 °C limit, future generations in the most vulnerable countries will continue to bear the brunt of climate impacts, for which neither their generation nor their State is responsible ²⁵³. Indeed, the IPCC has concluded that "*children aged ten or younger in the year 2020 are projected to experience a nearly four-fold increase in extreme events under 1.5°C of global warming by 2100, and a five-fold increase under 3°C warming"*²⁵⁴.

126. Enhanced mechanisms for climate adaptation such as financing are required to address the needs of future generations in the most affected States, including Bangladesh. In accordance with the principle of inter-generational

- ²⁵² See Section II.A.2, above.
- ²⁵³ *See* paras. II.A, above.

European Court of Human Rights, *Greenpeace Nordic and Others v. Norway*, App. No. 34069/21, Petition (26 November 2020), para. 45 (six Norwegian plaintiffs argued the State must do its fair share to safeguard intergenerational rights in a case alleging violations of the right to life and privacy due to the State's failure to address the risk of the climate crisis); *State v. Mont*, First Judicial Dist. Court, 409 Mont. 557 (2022), paras. 100-39 (sixteen youth argued Montana's failure to consider climate change when approving fossil fuel projects was unconstitutional; the Court's recognized that "[c]limate change harms children and specifically the youth plaintiffs"); Verfassungsgerichtshof [VfGH] [Constitutional Court], *Children of Austria v. Austria*, Complaint (21 February 2023) (a group of Austrian children alleged the Austrian Federal Climate Protection Act violated rights of children in light of its failure to stipulate emissions reduction targets after 2020); Indonesian National Human Rights Commission, *Indonesian Youths and others v. Indonesia*, Complaint (14 July 2022) (Indonesian youth, among other claimants, alleged the Indonesian government violated its human rights obligations to children and other vulnerable groups by contributing to climate change and failing to take necessary action to minimize climate risks).

²⁵⁴ "FAQ 3: How will climate change affect the lives of today's children tomorrow, if no immediate action is taken?", *IPCC*, https://www.ipcc.ch/report/ar6/wg2/about/frequently-asked-questions/keyfaq3/.

equity, these needs provide context for States' other environmental and human rights law obligations.

3. States Must Cooperate to Address Climate Change, in Accordance with the Principle of Common But Differentiated Responsibilities

127. Outside the climate context, the international community has long recognized the relevance of a general duty to cooperate to address the risk of transboundary environmental harms²⁵⁵. As the Court explained in the context of international watercourses, it is only "by co-operating that the States concerned can jointly manage the risks of damage to the environment that might be created by the plans initiated by one or other of them"²⁵⁶. In practice, the obligation to cooperate operates to prevent unilateral conduct by one State that could harm

²⁵⁵ See e.g., Stockholm Declaration, Principle 24 ("International matters concerning the protection and improvement of the environment should be handled in a co-operative spirit by all countries, big and small, on an equal footing. Co-operation through multilateral or bilateral arrangements or other appropriate means is essential to effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres, in such a way that due account is taken of the sovereignty and interests of all States."); Rio Declaration, Principle 7 ("States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystems"); United Nations Charter, Article 2(3) ("The Purposes of the United Nations are . . . To achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion[.]"). See also UNFCCC, Article 3(5) ("The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change."); Paris Agreement, Preamble, Articles 7-8 ("Parties recognize the importance of support for and international cooperation on adaptation efforts and the importance of taking into account the needs of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change."); Kyoto Protocol to the UNFCCC, 2303 U.N.T.S. 162 (11 December 1997), Articles 2(1)(b) ("Each Party . . . shall: . . . Cooperate with other such Parties to enhance the individual and combined effectiveness of their policies and measures . . .").

 ²⁵⁶ Dispute over the Status and Use of the Waters of the Silala (Chile v. Bolivia), Judgment,
 [2022] I.C.J. Rep. 614, para. 100 (quoting Pulp Mills, para. 77).

another State or group of States, and thus to equitably balance States' rights and interests in the environment²⁵⁷.

128. The Court previously found that the duty to cooperate entails "*procedural obligations of informing, notifying and negotiating*" with other States²⁵⁸. These procedural elements of the duty to cooperate—namely, to notify and consult—are equally important in the climate context, which depends on international cooperation to avoid potentially catastrophic outcomes ²⁵⁹.

²⁵⁷ See, e.g., The MOX Plant Case (Ireland v. United Kingdom), Provisional Measures, Sep. Op. Wolfrum, [2001] ITLOS 95, 135 ("The duty to cooperate . . . balances the principle of sovereignty of States and thus ensures that community interests are taken into account vis-à-vis individualistic State interests"); Gabčíkovo-Nagymaros Project, para. 78 (recognizing the "right to an equitable and reasonable sharing of the resources of an international watercourse").

²⁵⁸ Pulp Mills, para. 81. See also: Waters of the Silala (Chile v. Bolivia), para. 114 ("[T]he State planning to undertake the activity is required, in conformity with its due diligence obligation, to notify and consult in good faith with the potentially affected State") (quoting Certain Activities, para. 104).

²⁵⁹ See, e.g., United Nations General Assembly Resolution 2995 (XXVII), Co-operation between States in the field of the environment, U.N. Doc. A/RES/2995(XXVII) (15 December 1972), para. 2 ("co-operation between States in the field of the environment . . . will be effectively achieved if official and public knowledge is provided of the technical data relating to the work to be carried out by States within their national jurisdiction, with a view to avoiding significant harm that may occur in the environment of the adjacent area"); Pulp Mills, para 77 ("[I]t is by co-operating that the States concerned can jointly manage the risks of damage to the environment that might be created by the plans initiated by one or other of them, so as to prevent the damage in question"); Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica), Provisional Measures, Order of 22 November 2013, I.C.J. Reports 2013, para. 3 (ordering Costa Rica to "consult with the Secretariat of the Ramsar Convention . . . to find common solutions with Nicaragua" in the context of avoiding irreparable prejudice to wetlands); Rio Declaration, Principle 18 ("States shall immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States"); Convention on the Law of the Non-navigational Uses of International Watercourses, 2999 U.N.T.S. 77 (21 May 1997), Article 12 ("Before a watercourse State implements or permits the implementation of planned measures which may have a significant adverse effect upon other watercourse States, it shall provide those States with timely notification thereof"); Convention on Environmental Impact Assessment in a Transboundary Context, 1989 U.N.T.S. 309 (25 February 1991), Article 3(1) ("For a proposed activity listed in Appendix I that is likely to cause a significant adverse

Notification must be timely in order to provide States with an opportunity for consultations, and parties must enter into consultations in good faith and must take account of each other's legitimate interests with the aim of agreeing on an equitable solution²⁶⁰.

129. What is equitable in a given circumstance may be informed by the concept of Common but Differentiated Responsibilities, which is a core principle of international environmental law establishing that all States are responsible for addressing global environmental problems, but do not share that responsibility equally, based on their differing capabilities and differences in their historical contributions to the environmental problem ²⁶¹. The principle of Common but Differentiated Responsibilities contains additional positive obligations: *all States* must participate meaningfully in international efforts to address global environmental problems by taking affirmative measures to meet their "*common*" responsibility for the environment. As the UNFCCC describes, "*the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in*

transboundary impact, the Party of origin shall, for the purposes of ensuring adequate and effective consultations ... notify any Party which it considers may be an affected Party as early as possible and no later than when informing its own public about that proposed activity").

²⁶⁰ International Law Commission, Draft Articles of Prevention of Transboundary Harm from Hazardous Activities, Yearbook of the International Law Commission Vol. II (2001), Commentary to Articles 8, 9.

²⁶¹ See Rio Declaration, Principle 7 ("In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command"); UNFCCC, Preamble, Article 3(1); Kyoto Protocol, Article 10; Paris Agreement, Articles 2(2), 4(3), 4(19).

accordance with their common but differentiated responsibilities and respective capabilities²⁶².

130. In the climate context, the principle of Common but Differentiated Responsibilities requires taking account of the fact that LDCs and climate-vulnerable States have contributed the least to the climate crisis, and are now suffering the brunt of climate impacts. As Bangladesh's then-Minister of Environment, Forest and Climate Change explained, "[d]eveloped countries must lead the way [on reducing GHG emissions], with developing countries following suit in line with their respective abilities"²⁶³. In particular, Bangladesh has long taken the position that all States must urgently act to phase out fossil fuels, but that "there has to be a differentiation between developed countries and developing countries"²⁶⁴. Indeed, while developed States have been called to give up the use of fossil fuels by 2030, Bangladesh and other developing countries, as well as different development needs²⁶⁵.

131. It also requires developed and high-emitting States to contribute to global climate solutions according to their greater financial and technical

²⁶² UNFCCC, Preamble.

²⁶³ "Cop: Bangladesh backs fossil fuel phase out", *Argus Media* (10 December 2023), https://www.argusmedia.com/en/news/2517730-cop-bangladesh-backs-fossil-fuel-phase-out

²⁶⁴ "Cop: Bangladesh backs fossil fuel phase out", *Argus Media* (10 December 2023), https://www.argusmedia.com/en/news/2517730-cop-bangladesh-backs-fossil-fuel-phase-out.

See "COP28: Saber Chowdhury calls for universal and inclusive financing mechanism", Dhaka Tribune (7 December 2023) https://www.dhakatribune.com/bangladesh/bangladeshenvironment/333170/cop28-saber-chowdhury-calls-for-universal-and ("The UN Secretary-General has called on all developed countries to give up the use of fossil fuels by 2030. For developing countries like us, this time limit will be extended."); "COP28 special interview with Saber Hossain Chowdhury", The Report.live (25 November 2023) (16:04) https://www.youtube.com/watch?v=UQqcciVCk8E ("Bangladesh is now a developing country. We should not be considered the same as the developed ones. Our deadline [to phase out fossil fuels] maybe 2040 because we also have the right to development.").

capacities, including through climate finance and technology transfer. In that regard, Bangladesh has repeatedly called on developed States to "disseminate clean, green, and advanced technology to the most vulnerable developing countries at affordable costs" and to fulfill their financial commitments "with a 50:50 balance between adaptation [and] mitigation"²⁶⁶. For this financing to be meaningful, it must be readily accessible to the States most in need. However, existing global climate funds, including the Global Environment Facility, the Green Climate Fund, and the Climate Investment Funds, enforce strict eligibility criteria that operates to prevent climate-vulnerable States from qualifying for receiving the funds required to implement necessary mitigation and adaptation measures²⁶⁷. Imposing barriers to climate finance in such a way that funds are not allocated according to <u>need</u> runs contrary to the principle of Common but Differentiated Responsibilities and States' obligations to cooperate.

C. The Scientific and International Consensus on Climate Change Informs States' Specific Obligations

132. The principles, norms and obligations described above in Sections IV.A and B converge in the following general obligations of States under international law to:

 Exercise due diligence to prevent transboundary environmental harm, including by adopting and enforcing domestic regulations and measures to ensure that individuals and entities reduce their GHG

²⁶⁶ H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, National Statement at the 26th Session of the Conference of the Parties (COP26) (1 November 2021), https://unfccc.int/documents/309520.

²⁶⁷ Government of the People's Republic of Bangladesh, Ministry of Finance, Finance Division, *Climate Financing for Sustainable Development Budget Report 2023-24*, p. 9, ("Accessing international climate finance is a challenging task; the complicated architecture of international climate finance emerges as a barrier for countries such as Bangladesh.").

emissions, carrying out environmental impact assessments that assess and limit GHG emissions, and monitoring the environmental impacts of a project going forward²⁶⁸;

- Promote and encourage respect for human rights, including by promoting the realization of the rights to sustainable development and self-determination on a global scale, and refrain from measures that would impede other States' ability to protect and ensure the human rights of their populations²⁶⁹;
- Cooperate with other States, including by notifying them of possible environmental harms and engaging in consultations with the aim of agreeing on an equitable solution to address such harms²⁷⁰; and
- Take affirmative measures to meet common environmental responsibilities, including climate finance, knowledge sharing and technology transfer²⁷¹.

133. These general obligations apply equally in the climate context, where they take on particular importance in light of the devastation that has already taken place around the world and the urgent need to prevent further catastrophic harms.

134. The <u>specific concrete steps that States must take to comply with these</u> international law obligations in the climate context are well-recognized by the

²⁶⁸ *See* paras. 90-95, above.

²⁶⁹ *See* paras. 116-123, above.

²⁷⁰ *See* paras. 127-131, above.

²⁷¹ See paras. 129, 131, above.

scientific community and States. They are dictated by an expansive body of accepted climate science representing a global consensus, largely reflected in the work of the IPCC and other scientific bodies, as well as international treaties and resolutions of the United Nations General Assembly. As set out in further detail below, there is scientific and international consensus that States must: take measures to hold the increase in global average temperature to 1.5 °C above pre-industrial levels (**Section 1**); and fulfill their commitments in respect of financing, technology transfer, and other assistance to developing States most impacted by climate change (**Section 2**).

1. There is consensus that States must take measures to stay well within the 1.5 °C threshold

As described in Section II.A.1 above, the "cumulative scientific 135. evidence" in respect of climate change is "unequivocal": global warming is caused by human activities, principally through the emissions of GHGs. Climate change has already had a severe deleterious impact on the atmosphere, ocean, cryosphere and biosphere, with corresponding devastating impacts on human populations²⁷²—and such impacts are expected to worsen as temperatures increase, with catastrophic, irreversible effects if the average global temperature exceeds 1.5 °C above pre-industrial levels²⁷³. Indeed, as the IPCC has made clear, States must take all necessary measures to limit the increase in global average temperature to 1.5 °C above pre-industrial levels if we are to avoid climate catastrophe and "secure a liveable and sustainable future for all" 274. Bangladesh's Special Envoy for Climate Change has similarly stressed that "1.5 is

²⁷² *See* paras. 27-29, above.

²⁷³ *See* paras. 31-33, above.

²⁷⁴ IPCC Sixth Assessment Report, pp. 24, 89. *See also* paras. 34-38, above.

not just a target—1.5 is a physical limit that we <u>cannot afford to cross or</u> <u>reach</u>²⁷⁵.

136. The community of States has confirmed the need to stay well within the 1.5 °C threshold. In the Paris Agreement, for example, States Parties recognized that "*limit[ing] the temperature increase to 1.5* °C *above pre-industrial levels*... *would significantly reduce the risks and impacts of climate change*"²⁷⁶, and on that basis States committed to taking specific steps towards meeting this temperature goal, including preparing NDCs and pursuing domestic mitigation measures to meet those contributions. These steps have now crystallized into binding legal obligations for *all* States, because they are the very measures necessary to address climate change in accordance with States' general obligations under customary international law. Indeed, as the United Nations General Assembly has described, both the UNFCCC and Paris Agreement are "*expressions of the determination to address decisively the threat posed by climate change*"²⁷⁷ and thus reflect the efforts needed to limit the global average temperature increase and respond to the adverse effects of climate change.

137. The 1.5 °C limit will be exceeded unless there is a significant reduction of global GHG emissions. In that respect, the IPCC Working Group III has highlighted that a variety of policies are available to State governments to limit GHG emissions by regulating third parties operating in their territories; "*these include regulations and standards, taxes and charges, tradeable permits,*

 ²⁷⁵ "COP28: Saber Hossain Chowdhury speaking at the Bangladeshi pavilion", *The Report.live* (1 December 2023) (01:33) https://www.youtube.com/watch?v=XVklDSn5CLU (emphasis added).

²⁷⁶ Paris Agreement, Article 2(1)(a).

²⁷⁷ United Nations General Assembly Resolution 77/276, Request for an advisory opinion of the International Court of Justice on the obligations of States in respect of climate change, U.N. Doc. A/RES/77/276 (29 March 2023), Preamble.

voluntary agreements . . . informational instruments, subsidies and incentives, research and development and trade and development assistance²⁷⁸.

138. The IPCC has also confirmed that States' current national commitments to reduce GHG emissions are insufficient to stay within the 1.5 °C threshold, and "without a strengthening of policies, emissions are projected to rise, leading to a median global warming of 2.2 °C to 3.5 °C (very likely range) by 2100"279. This reflects a broader consensus on the gaps in current efforts to address climate change, and the specific steps required of States to address those gaps. The United Nations General Assembly, for example, noted with "profound alarm" that GHG emissions continue to rise in spite of the commitments taken under the UNFCCC and Paris Agreement, and urged all parties to "fully *implement them*" in order to mitigate and respond to climate impacts²⁸⁰. During COP 28, States Parties recognized that "the Paris Agreement has driven near-universal climate action" and committed to "accelerating action in this critical decade on the basis of the best available science", and calls on States Parties to contribute to, among other actions, "[t]ransitioning away from fossil *fuels in energy systems*²⁸¹. Bangladesh has likewise voiced its position that *"high* emitting countries must reduce their emissions to contain global warming within

²⁷⁸ Gupta, S., et. al., "Policies, Instruments and Co-operative Arrangements" in *Climate Change* 2007: *Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, p. 747.

²⁷⁹ IPCC Sixth Assessment Report, p. 57.

²⁸⁰ United Nations General Assembly Resolution 77/276, Request for an advisory opinion of the International Court of Justice on the obligations of States in respect of climate change, U.N. Doc. A/RES/77/276 (29 March 2023), Preamble.

²⁸¹ UNFCCC, Outcome of the first global stocktake, Fifth Session, U.N. Doc. FCCC/PA/CMA/2023/L.17 (13 December 2023).

*the 1.5 degree limit to protect our country from the recurrent climate disasters that are striking with increasing scale and frequency*²⁸².

139. In light of the above, and in order to meet their obligations under customary international law, States must therefore:

- Set and enforce GHG emissions reduction targets necessary to stay well within the 1.5 °C limit, including by taking steps to transition away from fossil fuels in energy systems, consistent with the best available science demonstrating that current levels of fossil fuel use already exceed Earth's remaining carbon budget²⁸³;
- Implement and enforce domestic regulations and measures that require entities and individuals within their jurisdiction and control to (*i*) reduce their GHG emissions to a level consistent with staying within the 1.5 °C limit and (*ii*) take reasonable measures (such as environmental impact assessments) to identify GHG emissions from new and existing activities, to take steps to reduce such emissions if inconsistent with staying within the 1.5 °C limit, and to monitor GHG emissions going forward;
- Timely notify States at risk of transboundary harm from GHG emissions and engage in consultations in order to reach an equitable solution, taking account of the historical inequities suffered by LDCs

²⁸² United Nations Press Release, "Government-Development Partners Discussion on Climate Action Priorities Leading Up to -COP28" (12 February 2023), https://bangladesh.un.org/en/218887-government-development-partners-discussion-climateaction-priorities-leading-cop28.

²⁸³ See IPCC, "Summary for Policymakers", Sixth Assessment Synthesis Report (2023) (Dossier No. 78), p. 21.

and climate-vulnerable States who have contributed the least to the climate crisis while disproportionately suffering its impacts; and

 Take any additional steps necessary to address adverse climate impacts likely to affect the exercise of fundamental human rights, for example through adaptation plans or emergency response measures.

2. There is consensus that States must provide financial and other assistance to the most climate-vulnerable States

140. There is also scientific and international consensus that addressing the climate crisis requires, in the words of the United Nations General Assembly, urgently "scaling up action and support, including finance, capacity-building and technology transfer" in support of developing States²⁸⁴. Indeed, such steps are necessary to enhance the "adaptive capacity" of States most at risk of serious climate impacts²⁸⁵ and to enable a global transition to lower GHG emissions²⁸⁶. As the IPCC has confirmed, "[i]nsufficient financing, especially for adaptation, constraints climate action in particular in developing countries"²⁸⁷.

141. As set out above, current commitments to provide finance and technology are insufficient to meet global climate goals, including staying within the 1.5 °C limit. On that basis, Bangladesh has repeatedly called for developed States to increase climate ambition, to fulfill their financial and technology-related commitments, and to work towards operationalizing an adequately resourced Loss

²⁸⁴ United Nations General Assembly Resolution 77/276, Request for an advisory opinion of the International Court of Justice on the obligations of States in respect of climate change, U.N. Doc. A/RES/77/276 (29 March 2023), Preamble.

²⁸⁵ *Ibid*.

²⁸⁶ IPCC Sixth Assessment Report, p. 111.

²⁸⁷ IPCC Sixth Assessment Report, p. 57.

and Damage Fund as agreed under the $UNFCCC^{288}$. It has also proposed the following specific measures in this regard:

- "[D]eveloped countries should disseminate clean, green, and advanced technology to the most vulnerable developing countries at affordable costs."²⁸⁹
- "The issue of loss [and] damage must be addressed, including global sharing of responsibility for climate migrants displaced by sea-level rise, salinity increase, river erosion, floods, and [droughts]"²⁹⁰. Loss

²⁹⁰ *Ibid*.

²⁸⁸ See, e.g., H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, Address at the Seventy-eighth session of the United Nations General Assembly, 10th plenary meeting, A/78/PV.10 (22 September 2023) ("The developed economies must fulfil their \$100-billion commitments . . .We also demand the urgent operationalization of the Loss and Damage Fund"); H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, 79^{th} Annual Session of the UNESCAP (15 May 2023), Statement at the https://erd.portal.gov.bd/sites/default/files/files/erd.portal.gov.bd/press_release/7441a0c8_ade 6_4337_883f_d2d2ef2d67ed/UNESCAP%20HPM's%20Speech%20(1).pdf ("Climatevulnerable developing countries, especially in Asia and the Pacific, require adequate finances to implement their NAP as well as to achieve NDC targets"); Mr. Abdullah Al Mohsin Chowdhury, Permanent Secretary of the Ministry of Environment, Forest and Climate Change of the People's Republic of Bangladesh, Statement at the Twenty-fourth session of the Conference of the Parties to UN Framework Convention on Climate Change (COP 24) (December 2018), https://unfccc.int/sites/default/files/resource/BANGLADESH_cop24cmp14cma1-3.pdf ("In order to undertake climate actions meaningfully, be it adaptation, mitigation, loss and damage or technology transfer, adequacy of resources to that of US\$ 100 billion annually must be

mobilized."); S. Illius, "COP28 kicks off in Dubai: Bangladesh seeks action on climate change," The Business Standard (30 November 2023), https://www.tbsnews.net/bangladesh/cop28-kicks-dubai-bangladesh-seeks-action-climate-change-748862 (reporting Mr. Saber Hossain Chowdhury, then-Special Envoy to the Prime Minister H.E. Sheikh Hasin for Climate Change's statement that "Securing funding is of paramount importance for Bangladesh. We demand operational loss and damage funding that stands as a concrete action, not a mere political statement. If a dedicated fund is established, it must be adequately resourced.").

²⁸⁹ H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, National Statement at the 26th Session of the Conference of the Parties (COP26) (1 November 2021), https://unfccc.int/documents/309520.

and damage funds *"should be new and additional without compromising the funding for adaptation needs*"²⁹¹.

- "Developed nations should facilitate the green recovery of the CVF-V20 countries. Dedicated support is required for reducing the cost of capital and encouraging private sector participation."²⁹²
- "Flow of funds must be predictable, balanced, innovative and incremental. Development Partners and International Financial Institutions should adopt a user-friendly process of fund allocation and disbursement. There must be synergies amongst various climate funds."²⁹³
- "Rich nations must help [climate vulnerable] countries by closing the existing financial gaps in protecting [from] climate-induced disasters. Financial support is needed to introduce smart insurance premium subsidies and capitalization of insurance products for [Climate Vulnerable Forum] countries."²⁹⁴

142. During COP 28, States similarly emphasized that "finance, capacity-building and technology transfer are critical enablers of climate

²⁹¹ "Envoys of Denmark, UAE & Egypt meet Environment Minister", *OurtimeBD* (17 March 2023), https://www.ourtimebd.com/beta/envoys-of-denmark-uae-egypt-meet-environment-minister/ (reporting statement by Md. Shahab Uddin, then-Bangladesh Minister of Environment, Forest and Climate Change).

²⁹² H.E. Sheikh Hasina, Prime Minister of the People's Republic of Bangladesh, Speech at the 1st Climate Vulnerable Finance Summit (8 July 2021), https://www.v-20.org/wpcontent/uploads/2021/07/HPM-V20-Opening-Speech-1.pdf.

²⁹³ *Ibid*.

²⁹⁴ *Ibid*.

action^{"295}. To that end, the COP welcomed new financial pledges towards climate mitigation and adaptation, particularly in developing countries, and "*urge[d] developed country Parties to fully deliver, with urgency, on the USD 100 billion per year goal through to 2025*"²⁹⁶.

- 143. Accordingly, States must:
 - Take affirmative measures to close the finance gap between the funds needed to prevent, mitigate, and adapt to climate impacts and the funds that are currently available and accessible, including by:
 - realizing existing financial commitments in support of LDCs and climate-vulnerable States;
 - ensuring that climate finance is readily accessible to the eligible States;
 - increasing financial contributions to meet the climate mitigation and adaptation needs of LDCs and climate-vulnerable States in accordance with the principle of Common But Differentiated Responsibilities; and
 - taking steps to operationalize the Loss and Damage Fund agreed under the UNFCCC;

²⁹⁵ COP, *Outcome of the first global stocktake, Fifth Session*, U.N. Doc. FCCC/PA/CMA/2023/L.17 (13 December 2023), paras. 5, 8.

²⁹⁶ COP, Outcome of the first global stocktake, Fifth Session, U.N. Doc. FCCC/PA/CMA/2023/L.17 (13 December 2023), para. 85.

- Cooperate in support of LDCs and climate-vulnerable States' climate mitigation efforts, including through the exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change; and
- Disseminate clean and green technologies to climate vulnerable States, at affordable costs.

V.

LEGAL CONSEQUENCES FOR STATES VIOLATING THEIR CLIMATE OBLIGATIONS

144. A State or group of States that fails to comply with the obligations set out in Section IV.C will have committed an internationally wrongful act, for which reparation is due²⁹⁷.

145. When it comes to invoking responsibility for such breaches of international law under Article 42 of the Articles on the Responsibility of States for Internationally Wrongful Acts ("*ARSIWA*"), Bangladesh is both an "*injured State*" as well as a "*specially affected*" State²⁹⁸. That there exists harm to multiple other States besides Bangladesh would not prevent invocation of State responsibility under Article 46 of ARSIWA; nor does a plurality of responsible States prevent invocation of responsibility under Article 47 of ARSIWA.

²⁹⁷ International Law Commission, Articles on the Responsibility of States for Internationally Wrongful Acts, Yearbook of the International Law Commission vol. II (2001) (hereinafter, "ARSIWA"), Articles 2, 31.

²⁹⁸ ARSIWA, Article 42; *see* Section II.B, above.

146. The legal consequences for a State's failure to comply with its obligations under international law are well-established. Articles 30 and 31 of ARSIWA provide:

The State responsible for the internationally wrongful act is under an obligation: (a) to cease that act, if it is continuing; (b) to offer appropriate assurances and guarantees of non-repetition, if circumstances so require.

The responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act.

147. In addition to ceasing its wrongful conduct, a State or group of States that breaches its obligations in respect of climate change must make "*[f]ull reparation*" for the resulting injury²⁹⁹. Reparation may take one of several forms:

- <u>Restitution</u>. In some cases, a State's breach of international law may be remedied by re-establishing the situation that existed before the breach. The Court has previously recognized the inherent difficulties of providing restitution for environmental damage, noting that such damage is "*often irreversible*"³⁰⁰. In the climate context, it may be possible to provide restitution for certain harms—for example, by restoring damaged ecosystems or infrastructure.
- <u>Compensation</u>. Where restitution is not possible, a State that has breached its obligations under international law may be required to pay prompt and adequate compensation for any financially assessable

²⁹⁹ ARSIWA, Article 34. See also Factory at Chorzów (Germany v. Poland), Merits, Judgment No. 13, 1928 P.C.I.J. Series A No. 17, 13 September 1928.

³⁰⁰ Gabčíkovo-Nagymaros Project, para. 140; Pulp Mills, para. 185.

damage³⁰¹. As described in Section II.A.1, it is generally possible to measure the effect of a State's GHG emissions, including to determine the extent to which such emissions caused or exacerbated a specific extreme weather event. Accordingly, compensation may be paid for damage caused, for example, to agriculture or infrastructure that has been permanently lost due to climate effects.

Satisfaction. A State that has breached its obligations may also be required to acknowledge its breach, express regret, and make a formal apology or other appropriate form of satisfaction³⁰². In the climate change context, where all States are both responsible for and suffer the impacts of climate change, satisfaction may be owed to the international community of States even where a direct injury cannot be easily measured.

VI.

CONCLUSION

148. Bangladesh considers that, in respect of the first question before the Court concerning "the obligations of States under international law to ensure the protection of the climate system and other parts of the environment from anthropogenic emissions of greenhouse gases for States and for present and future generations", States are obliged to:

 Set and enforce GHG emissions reduction targets necessary to stay well within the 1.5 °C limit, including by taking steps to transition away from fossil fuels in energy systems, consistent with the best

³⁰¹ ARSIWA, Article 36.

³⁰² ARSIWA, Article 37.

available science demonstrating that current levels of fossil fuel use already exceed Earth's remaining carbon budget³⁰³;

- Implement and enforce domestic regulations and measures that require entities and individuals within their jurisdiction and control to (*i*) reduce their GHG emissions to a level consistent with staying within the 1.5 °C limit and (*ii*) take reasonable measures (such as environmental impact assessments) to identify GHG emissions from new and existing activities, to take steps to reduce such emissions if inconsistent with staying within the 1.5 °C limit, and to monitor GHG emissions going forward;
- Timely notify States at risk of transboundary harm from GHG emissions and engage in consultations in order to reach an equitable solution, taking account of the historical inequities suffered by LDCs and climate-vulnerable States who have contributed the least to the climate crisis while disproportionately suffering its impacts;
- Cooperate in support of LDCs and climate-vulnerable States' climate mitigation efforts, including through the exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change;
- Disseminate clean and green technologies to climate vulnerable States, at affordable costs;

 ³⁰³ See IPCC, "Summary for Policymakers", Sixth Assessment Synthesis Report (2023) (Dossier No. 78), p. 21.

- Take affirmative measures to close the finance gap between the funds needed to prevent, mitigate, and adapt to climate impacts and the funds that are currently available and accessible, including by:
 - realizing existing financial commitments in support of Least Developed Countries and climate-vulnerable States;
 - ensuring that climate finance is readily accessible to the eligible States;
 - increasing financial contributions to meet the climate mitigation and adaptation needs of Least Developed Countries and climatevulnerable States in accordance with the principle of Common But Differentiated Responsibilities; and
 - taking steps to operationalize the Loss and Damage Fund agreed under the UNFCCC; and
- Take any additional steps necessary to address adverse climate impacts likely to affect the exercise of fundamental human rights, for example through adaptation plans or emergency response measures.

149. In respect of the second question, concerning "the legal consequences . . . for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, with respect to States, including, in particular, small island developing States, which due to their geographical circumstances and level of development, are injured or specially affected by or are particularly vulnerable to the adverse effects of climate change" and "peoples and individuals of the present and future

generations affected by the adverse effects of climate change", Bangladesh submits that a State in breach of its obligations must:

- Cease its act, if it is continuing;
- Offer appropriate assurances and guarantees of non-repetition; and
- Make full reparation for the injury caused by the internationally wrongful act, either through restitution, compensation or satisfaction.

150. Bangladesh respectfully requests that the Court: (*i*) holds that it has jurisdiction to render the requested advisory opinion; and (*ii*) make the findings at paragraphs 148 and 149 above in respect of the questions posed. Bangladesh reserves the right to supplement its position on the questions posed in the Request in further written and oral submissions in due course.