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INTERNATIONAL COURT OF JUSTICE

**OBLIGATIONS OF STATES IN RESPECT OF CLIMATE CHANGE
(REQUEST FOR ADVISORY OPINION)**

WRITTEN STATEMENT OF THE REPUBLIC OF MADAGASCAR

20 March 2024

[Translation by the Registry]

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I. INTRODUCTION

1. On 29 March 2023, the General Assembly adopted, by consensus, resolution 77/276, by which it requests the International Court of Justice, pursuant to Article 65 of the Court's Statute, to give an advisory opinion 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,

- (a) 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;
- (b) 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:
 - (i) 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?
 - (ii) Peoples and individuals of the present and future generations affected by the adverse effects of climate change?”

The draft resolution containing this request for an advisory opinion was submitted by Vanuatu, on behalf of and co-sponsored by several other States from around the world, including Madagascar.

2. By an Order of 20 April 2023, the Court decided that the United Nations and its Member States are considered likely to be able to furnish information on the questions submitted to the Court for an advisory opinion and that they could do so within the time-limits fixed by the Court. The original time-limit of 20 October 2023 was extended initially until 22 January 2024, by an Order of 4 August 2023, and ultimately until 22 March 2024, by an Order of 15 December 2023.

3. In accordance with those Orders of the Court, and calling for judicial institutions to play a greater role in combating climate change and for international conventions protecting the climate system and other parts of the environment to be better integrated into national legal systems, so as to ensure that the commitments made thereunder are effectively and consistently implemented at the local level, the Republic of Madagascar has the honour and duty to participate in these important and historic advisory proceedings, which could give rise to landmark jurisprudence which is essential for informing the decisions of national courts in the area of environmental and climate law. This participation is especially necessary given that Madagascar is among the States “specially affected by . . . the adverse effects of climate change”, which unquestionably pose a threat to its present and future generations.

4. This written statement addresses three points. The first point is that the Court has the power to exercise its advisory jurisdiction in the case at hand, and there is no reason why it should exercise its discretionary power not to give the advisory opinion requested. The second point concerns the obligations of States in respect of climate change, deriving from their treaty commitments and from

customary rules already established or in the process of crystallization, as set out or reflected in the judicial decisions and writings of public law specialists from various nations. The third point is that States which, by their acts or omissions, have caused significant harm to the climate system, in breach of their international obligations, bear responsibility and are therefore under an obligation to provide adequate reparation to the States and persons affected by this breach.

II. THE COURT MUST EXERCISE ITS JURISDICTION TO GIVE AN ADVISORY OPINION IN THESE PROCEEDINGS

A. The Court has jurisdiction to give the advisory opinion requested

5. The Court's jurisdiction to give an advisory opinion is based on Article 65, paragraph 1, of its Statute, which provides that it "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". In order for the Court to have jurisdiction in the present case, "the advisory opinion [must] be requested by an organ duly authorized to seek it" (condition *ratione personae*) and "it [must] be requested on a legal question"¹ (condition *ratione materiae*).

6. These two preconditions are indisputably met in the case at hand.

First, Article 96, paragraph 1, of the United Nations Charter authorizes the United Nations General Assembly to request an advisory opinion on any legal question. The two questions put to the Court are indeed legal questions. The first question concerns the obligations of States under international law with regard to the protection of the climate system. It requires the interpretation of several sources of international law, some of which are also mentioned in the request. The second question relates to the legal consequences of the failure to comply with the obligations identified. Clearly tied to the first question, the second is also a legal question, framed in terms of law and raising problems of international law.

Furthermore, the General Assembly deals regularly with issues relating to climate change, in particular through its resolutions relating to the protection of the global climate for present and future generations of humankind. The first such resolution was adopted in 1988; in it, the General Assembly already expressed "concern[] that certain human activities could change global climate patterns, threatening present and future generations with potentially severe economic and social consequences"².

7. Accordingly, and given that the two preconditions set out in Article 65 of the Court's Statute and Article 96, paragraph 1, of the United Nations Charter are satisfied, the Court has jurisdiction to give the advisory opinion requested.

B. There are no compelling reasons for the Court to exercise its discretion not to give the advisory opinion requested

8. While the Court has discretion to decide whether to exercise its already established jurisdiction, it is clear from its consistent jurisprudence that only compelling reasons may lead the Court to refuse its

¹ *Application for Review of Judgement No. 273 of the United Nations Administrative Tribunal, Advisory Opinion, I.C.J. Reports 1982*, pp. 333-334, para. 21.

² A/RES/43/53, Protection of global climate for present and future generations of mankind, 6 Dec. 1988, 2nd preambular para. The latest resolution at the time of this submission (A/RES/77/165, Protection of global climate for present and future generations of humankind, 14 Dec. 2022), adopted by consensus, recalls the other resolutions adopted since 1988.

opinion in response to a request falling within its jurisdiction³. Indeed, as the Court has repeatedly noted, its answer to a request for an advisory opinion “represents its participation in the activities of the Organization, and, in principle, should not be refused”⁴.

9. The Republic of Madagascar is of the view that there are no compelling reasons for the Court to exercise its discretion not to give the advisory opinion requested. Moreover, although the Permanent Court of International Justice decided, on a single occasion, not to exercise its jurisdiction⁵, for reasons that in no way apply to the case at hand⁶, the present Court, for its part, has never declined to exercise its advisory jurisdiction.

10. For the sake of completeness, the Republic of Madagascar will nevertheless endeavour to expand briefly on two points which may appear problematic on the surface, but which in reality are not and which therefore do not constitute compelling reasons that could lead the Court to decline to give its advisory opinion in this case.

11. The first point relates to whether advisory proceedings are suitable for the determination of complex and disputed factual issues. The Republic of Madagascar is of the view that the Court has at its disposal a range of information and amply sufficient evidence — including a clear scientific consensus reflected in the reports of the Intergovernmental Panel for Climate Change (IPCC) — enabling it to answer the questions before it with sufficient precision.

12. The second point concerns the question whether it would be more prudent for the Court not to give its opinion on the questions put to it, since other international judicial institutions have been seised of similar questions, so as to avoid any contradiction or confusion between different advisory opinions on similar questions.

The Republic of Madagascar is of the opinion that although the questions before the Court resemble those put to the International Tribunal for the Law of the Sea⁷ and the Inter-American Court of Human Rights⁸, the fact remains that they are not the same. Indeed, the questions addressed to the Court go beyond the interpretation of a single treaty, unlike the questions addressed to the other two institutions mentioned, which are more limited because they refer specifically to the United Nations Convention on the Law of the Sea and the American Convention on Human Rights, respectively. Moreover, only the Court has general jurisdiction to provide the type of assistance required by the

³ *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004 (I)*, p. 156, para. 44; *Accordance with International Law of the Unilateral Declaration of Independence in respect of Kosovo, Advisory Opinion, I.C.J. Reports 2010 (II)*, p. 416, para. 30.

⁴ *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania, First Phase, Advisory Opinion, I.C.J. Reports 1950*, p. 71; *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019 (I)*, p. 113, para. 65.

⁵ *Status of Eastern Carelia, Advisory Opinion, 1923, P.C.I.J., Series B, No. 5*.

⁶ *Western Sahara, Advisory Opinion, I.C.J. Reports 1975*, pp. 23-24, para. 30: “lack of competence of the League to deal with a dispute involving non-member States which refused its intervention was a decisive reason for the Court’s declining to give an answer”. In the case at hand, however, all the States concerned are parties to the United Nations Charter and the Statute of the Court, and the resolution in question was adopted by consensus.

⁷ Case No. 31, Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law (Request for Advisory Opinion submitted to the Tribunal), 12 Dec. 2022, https://www.itlos.org/fileadmin/itlos/documents/cases/31/Request_for_Advisory_Opinion_COSIS_12.12.22.pdf.

⁸ Request for an advisory opinion on the Climate Emergency and Human Rights submitted to the Inter-American Court of Human Rights by the Republic of Colombia and the Republic of Chile, 9 Jan. 2023 https://www.corteidh.or.cr/docs/opiniones/soc_1_2023_en.pdf.

General Assembly, as reflected in the scope of the questions, which is not limited to the interpretation of a single treaty or branch of international law.

Finally, the entities that requested the other two advisory opinions consider those proceedings to be clearly different from the present proceedings before the Court, as demonstrated by the fact that the Commission of Small Island States on Climate Change and International Law (COSIS) requested and was authorized by the Court to participate in these proceedings, and Chile and Colombia co-sponsored the General Assembly resolution requesting the advisory opinion of the Court.

13. In light of the foregoing, the Republic of Madagascar is of the view that the Court has advisory jurisdiction and should exercise it in the present case.

C. The questions submitted to the Court are clear and should not be reformulated

14. Question (a) asks the Court to identify and clarify 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”. The obligations to be identified and clarified by the Court are those relating to specific conduct, namely “anthropogenic emissions of greenhouse gases”.

15. The concept of a greenhouse gas is clearly understood by scientists and can be defined as a gas which is naturally occurring (water vapour) or of anthropogenic origin (linked to human activities) and which absorbs and re-emits part of the sun’s rays (infrared radiation), phenomena resulting in the greenhouse effect. The main greenhouse gases (GHGs) linked to human activities are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and fluorinated gases: hydrofluorocarbon (HFC), perfluorocarbon (PFC), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). Emissions of these gases are weighted by their global warming potential (GWP) and expressed in terms of total CO₂ equivalent emissions. The six greenhouse gases (GHGs) monitored under the Kyoto Protocol are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulphur hexafluoride (SF₆), hydro[fluoro]carbons (HFCs) and perfluorocarbons (PFCs)⁹.

16. The fifth preambular paragraph of resolution 77/276 confirms that question (a) concerns the obligations that govern “the conduct of States” “over time” “in relation to activities that contribute to climate change and its adverse effects”. Thus, the activities to which the term “anthropogenic” refers can include those of States themselves or those of third parties under the jurisdiction or control of a State, as long as the “conduct of States” is “in relation to” those activities.

17. In light of the preamble and the chapeau of the operative part of resolution 77/276, there is no doubt that the General Assembly needs the Court to thoroughly examine the relevant obligations arising from a vast body of treaties and other sources of general international law. Certain legal instruments are specifically mentioned in the preamble and the chapeau of the operative part, but that list is not exhaustive, as confirmed by the words “[h]aving particular regard” in the chapeau.

18. In this regard, the answer to question (a) lays the groundwork for the answer to the crux of the question put to the Court in question (b), regarding the “legal consequences”, under the obligations in question, that arise from conduct that interferes with the climate system and the environment in general. As specified in question (b), such conduct consists in the “acts and omissions” of individual States or groups of States, responsible for the cumulative emissions of greenhouse gases which have

⁹ See <https://www.insee.fr/fr/metadonnees/definition/c1855>.

“caused significant harm to the climate system and other parts of the environment”, under the terms of question (b), or, as stated in the fifth preambular paragraph, which “contribute to climate change and its adverse effects”.

19. The Court is thus asked to determine the “legal consequences” of such conduct, in the light of the obligations identified and clarified in response to question (a). This determination must be made “with respect to” the two categories of victims of climate injustice identified in subparagraphs (i) and (ii) of question (b).

20. The Republic of Madagascar respectfully asserts that these questions are specific, clear and unambiguous and that the Court should not reformulate them. The noteworthy adoption of resolution 77/276 by consensus, and the fact that the clarity of the wording of the questions is not in dispute, clearly suggest that this wording was fully understood by and acceptable to all.

21. Moreover, none of the reasons for which the Court has previously reformulated or restrictively interpreted some of the questions put to it has been invoked in the present case¹⁰. Only in exceptional circumstances would the Court be required to reformulate a question submitted to it for an advisory opinion, more specifically if the question prevents the Court from giving a reply “based on law”¹¹.

22. Finally, it cannot be claimed in good faith that the specific formulation of a resolution which was co-sponsored by no fewer than 132 States at the time it was submitted, and which was subsequently adopted by consensus by the Member States in the General Assembly, does not accurately reflect what the General Assembly needs the Court to clarify.

III. UNDER CONTEMPORARY INTERNATIONAL LAW, STATES HAVE LEGAL OBLIGATIONS TO ENSURE THE PROTECTION OF THE CLIMATE SYSTEM AND OTHER PARTS OF THE ENVIRONMENT FROM ANTHROPOGENIC EMISSIONS OF GREENHOUSE GASES

23. Before presenting the obligations of States to ensure the protection of the climate system and other parts of the environment from greenhouse gas emissions, it should be recalled that the protection of the climate system has become one of the major concerns of the international community. As the Court itself stated in its Advisory Opinion on the *Legality of the Threat or Use of Nuclear Weapons*, “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”¹².

¹⁰ The basic rule was recalled by the Court in its Advisory Opinion on the *Chagos Archipelago*:

“The Court recalls that it may depart from the language of the question put to it where the question is not adequately formulated (*Interpretation of the Greco-Turkish Agreement of 1 December 1926 (Final Protocol, Article IV)*, Advisory Opinion, 1928, P.C.I.J., Series B, No. 16) or does not reflect the ‘legal questions really in issue’ (*Interpretation of the Agreement of 25 March 1951 between the WHO and Egypt*, Advisory Opinion, I.C.J. Reports 1980, p. 89, para. 35). Similarly, where the question asked is ambiguous or vague, the Court may clarify it before giving its opinion (*Application for Review of Judgement No. 273 of the United Nations Administrative Tribunal*, Advisory Opinion, I.C.J. Reports 1982, p. 348, para. 46).”

¹¹ *Western Sahara*, Advisory Opinion, ICJ Reports 1975, p. 18, para. 15.

¹² *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, I.C.J. Reports 1996, p. 241, para. 29.

A. The context of the emergence, in international law, of obligations to protect the climate system and other parts of the environment

24. The call for environmental restoration emerged as early as the 1960s as a result of the “unprecedented disturbances” generated by technological and economic development. “It was in the most developed societies and amongst their most affluent classes that this call would originate, because the disturbances were already clearly perceptible at that time, and risked becoming unbearable in the future if they continued to increase.”¹³

25. The pertinence of this call for action subsequently inspired States to adopt treaties on protecting the atmosphere and the climate, supplemented by successive protocols and amendments. These included, but were not limited to, the Geneva Convention on Long-Range Transboundary Air Pollution of 13 November 1979, followed by several protocols; the 1985 Vienna Convention and the 1987 Montreal Protocol on the gases depleting the stratospheric ozone layer, which were amended several times to enhance their effectiveness; and the United Nations Framework Convention on Climate Change (UNFCCC) of 9 May 1992, followed by the Kyoto Protocol of 11 December 1997, setting out certain obligations of principle, and the Paris Agreement of 12 December 2015, whose main objective is to limit global warming to 1.5°C. Concern about the global climate system has now extended beyond the bounds of environmental law and permeated other branches of international law, notably the law of the sea, international human rights law, international humanitarian law and international migration law.

26. The climate change from which these legal instruments seek to provide protection is defined as “a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods”¹⁴.

27. In 1988, in the first of its resolutions on the protection of the global climate system, the General Assembly “[r]ecognize[d] that climate change is a common concern of mankind, since climate is an essential condition which sustains life on earth”¹⁵. For their part, the States that adopted the UNFCCC in 1992 recognized that climate change was already a problem, which was remarkable at a time when there was less scientific evidence of the effects of global warming than there is now. The Convention thus bound States parties to act in the interest of human safety, despite that scientific uncertainty, by providing for precise objectives and corresponding obligations, which will be addressed in the next two sections of this written statement.

28. Given the scientific certainty that has been established to date, as set out in the reports of the IPCC, this obligation to act in the interest of humanity must be further strengthened, in line with the UNFCCC’s objective “to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system” (Article 2).

For example, it has been recalled that the concentration of CO₂ in the atmosphere increased from 280 ppm in 1950 to 360 ppm in 2000 and 440 ppm in 2013, compared with the danger threshold of 550 ppm, which would cause a temperature increase of 5°C and an irreversible change in the climate. Consequently, if the community of States wishes to stay below 450 ppm, a level which will be reached quickly on account of emissions from newly industrialized countries, it is necessary to immediately

¹³ J.-P. Beurrier, *Droit international de l’environnement*, Pedone, 2017, p. 18 [translation by the Registry].

¹⁴ Art. 1, para. 2, United Nations Framework Convention on Climate Change (UNFCCC), adopted on 9 May 1992, entered into force on 21 Mar. 1994 with near-universal adherence (197 countries), and ratified by Madagascar on 2 June 1999.

¹⁵ A/RES/43/53, Protection of global climate for present and future generations of mankind, 6 Dec. 1988, para. 1.

reduce global emissions at a rate of 1.5 per cent per year, in accordance with the main objective of the Paris Agreement.

Similarly, 29 billion tonnes of greenhouse gases have been emitted into the atmosphere every year since 2006. In 2015, 32 billion tonnes were emitted, yet the Earth's soil can absorb only 13 billion tonnes a year, the remainder being dissolved in the oceans. If nothing is done to cut emissions, they will exceed 40 billion tonnes a year before 2030, as a result of the combination of emissions from developed and developing countries, and thus obviously surpass the danger threshold. Beyond that, it will no longer be possible to limit climate change, since existing changes will be irreversible (temperatures, winds, instability, rising sea levels, droughts, floods)¹⁶.

29. It is therefore of the utmost urgency for the international community to act to protect the climate, and, to that end, the definition of the obligations of States in respect of climate change by the principal judicial organ of the United Nations is of paramount importance.

30. The large number of co-sponsors of the resolution requesting this advisory opinion, and its adoption by consensus, indicate that States have a shared sense of responsibility for taking action on climate change, by seeking clarification regarding their obligations in this respect and the legal consequences of failing to perform them. Thus, in their statements before and after the adoption of resolution 77/276, many representatives of member States stressed the importance of tackling climate change and the need for urgent and ambitious action to limit global warming in order to prevent "climate hell", at a time when, as the Secretary-General has rightly noted, we "have never been better equipped to solve the climate crisis"¹⁷.

31. In this context, the evolution of international law has given rise to obligations for States in respect of climate change which the Court is asked to define and clarify on the basis of relevant sources and legal principles, which are not confined to those mentioned in the General Assembly's request. The Court is therefore invited to answer the questions before it in the light of the entire corpus of international law. For question (a), this includes obligations under international conventions ratified by States, international custom, general principles of law recognized by all States, and joint declarations by States on climate change, which are expressions of intent "capable of producing similar effects to those of legal rules"¹⁸.

32. In the light of the jurisprudence and literature, these obligations can be divided into three broad categories, which, while rather arbitrary, are useful for the purposes of the presentation of this written statement: obligations to protect the environment (B), obligations relating specifically to global warming, among which a distinction can be drawn between obligations to mitigate and obligations to adapt (C), and obligations under international human rights law (D).

B. Obligations to protect the environment

33. The disruption of the climate system is both the consequence of the release of anthropogenic greenhouse gases into the atmosphere — which itself constitutes atmospheric pollution which States have the obligation to prevent, reduce or control in accordance with Guideline 3 of the Draft Guidelines

¹⁶ J.-P. Beurier, *op. cit.*, p. 310, fn. 10.

¹⁷ See Official Record of the 64th plenary meeting of the General Assembly regarding the adoption of the resolution requesting the advisory opinion, A/77/PV.64, 29 Mar. 2023.

¹⁸ C. Dominicé, "La société internationale à la recherche de son équilibre. Cours general de droit international public", *Recueil des cours de l'Académie de La Haye*, Vol. 370, 2014, p. 120 [translation by the Registry].

on the Protection of the Atmosphere adopted by the International Law Commission (ILC) in 2021¹⁹ — and the cause of cascading damage to all parts of the environment, be it the oceans, fauna, flora, biodiversity or, more generally, the framework within which human beings exercise their rights under international human rights law.

34. Yet customary international law, as expressed by Principle 21 of the 1972 Stockholm Declaration and reaffirmed by Principle 2 of the 1992 Rio Declaration, places an obligation on all States “to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction”.

35. The International Court of Justice itself has repeatedly acknowledged that

“[t]he existence of the general obligation of States to ensure that activities within their jurisdiction and control respect the environment of other States or of areas beyond national control is now part of the corpus of international law relating to the environment”²⁰.

36. Consequently, all States have an obligation to ensure that greenhouse gas emissions from activities carried out within their jurisdiction or by entities or persons within their control do not directly or indirectly cause damage to the environment of other States by disrupting the climate system.

37. This obligation is all the more pressing because the science is conclusive: all greenhouse gas emissions exacerbate the disruption of the climate system. It takes the form of an obligation to prevent significant damage to the environment, which in this instance translates into an obligation for each State to take all necessary measures on greenhouse gas emissions to prevent, reduce or control the disruption of the climate system which those emissions cause.

C. Obligations specifically aimed at combating global warming

1. Obligations of mitigation

38. Since the above-cited resolution 43/53 of 1988, the General Assembly has regularly addressed the question of the protection of the climate for present and future generations. Its successive resolutions²¹ have, on the one hand, gradually extended and clarified the objective of mitigating the effects of climate change and, on the other, drawn attention to the efforts already made and those still needed in order to achieve that goal.

39. The original source of the obligations of mitigation incumbent on States is Article 2 of the UNFCCC, whose objective is to:

“achieve . . . stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally

¹⁹ Text adopted by the International Law Commission (ILC) at its 7[6]th session, in 2021, and submitted to the General Assembly as part of its report on its work at that session, A/76/10, para. 39.

²⁰ *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996*, pp. 241-242, para. 29.

²¹ See documents received from the United Nations Secretariat, Part V: Protection of the climate system and other parts of the environment, (A): General Assembly resolutions on Protection of global climate for present and future generations.

to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner”.

The reduction of emissions is thus intended to form a core part of States’ mitigation obligations, requiring States to adopt national policies and communicate them at the multilateral level, and provide support for developing countries.

40. The Kyoto Protocol²² served to articulate these obligations and give them binding effect. Indeed, it obliges industrialized countries to reduce and limit their greenhouse gas emissions according to a quota on their allowed emissions, referred to as the “assigned amount”. The commitments of States in this respect concern two periods, the five-year period between 2008 and 2012 and the eight-year period between 2013 and 2020.

41. The Protocol provides that industrialized countries must reduce their overall greenhouse gas emissions during the period between 2008 and 2012 by 5.2 per cent on average compared with 1990 levels. During the 2013-2020 commitment period, a seventh greenhouse gas, NF₃, was added, and the overall reduction target was 18 per cent, also compared with 1990 levels²³.

42. Taking into account the successive efforts that have been made, as well as expert opinions on the matter, the Paris Agreement adopted at COP21 in 2015 established an objective and time frame for mitigation. It aims to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels” and to pursue “efforts to limit the temperature increase to 1.5°C above pre-industrial levels”, which would “significantly reduce the risks and impacts of climate change” (Article 2). This provision should be read in the light of Article 4, which provides for parties to “aim to reach global peaking of greenhouse gas emissions as soon as possible”, to establish the nationally determined contributions (NDCs) that they intend to achieve, and to “pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions”. The Paris Agreement obliges signatory countries to prepare, communicate and maintain NDCs with a view to reducing their greenhouse gas emissions, and provides for a periodic process to assess the collective progress made by countries in implementing their NDCs and achieving the Agreement’s objectives, including the global stocktake (GST)²⁴.

43. Specifically, mitigation obligations include, but are not limited to, facilitating energy efficiency, protecting and enhancing carbon sinks, promoting sustainable agriculture and forestry, facilitating renewable energy sources, utilizing environmentally sound technologies, implementing tax measures and structural reforms in the sectors concerned, limiting or reducing greenhouse gases in the transport sector, and managing waste²⁵.

44. With regard to these undertakings, in its above-cited resolution 77/165, the General Assembly reaffirms the temperature goal established by the Paris Agreement (paragraph 5). It welcomes the submission of NDCs (paragraph 6), notes with concern that the NDCs presented by the parties to the Paris Agreement are not sufficient (paragraph 7), and recalls that countries are requested to revisit and strengthen the targets in their NDCs (paragraph 8).

²² See <https://unfccc.int/sites/default/files/resource/docs/cop3/107a01.pdf>.

²³ https://unfccc.int/files/kyoto_protocol/application/pdf/kp_doha_amendment_english.pdf.

²⁴ See the website dedicated to the global stocktake of efforts to combat climate change, <https://unfccc.int/fr/node/627059>.

²⁵ IPCC (2014), pp. 28, 30 and 109 *et seq.*

45. Accordingly, States and the international community as a whole must provide support for the conversion of developing countries' NDCs into a series of financially viable projects capable of attracting large-scale private sector investment. This could involve private investment stimulated by government policies aimed at risk reduction, as well as enhanced tax policies promoting the inflow of private climate finance.

46. States are also required to take proactive measures to prevent, reduce and control greenhouse gas emissions, by protecting and restoring the environment within their respective national borders. These measures must include, in particular, legislation to reduce fossil fuels and promote the energy transition, with a view to tripling the capacity of renewable energies globally and doubling the global average annual rate of energy efficiency improvements by 2030.

47. In this regard, the Republic of Madagascar has identified two obligations which are inextricably linked. The first is an obligation of means, since States must make every effort to achieve the goal of holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature to 1.5°C above pre-industrial levels. The second obligation, closely tied to the first, is for States to establish the NDCs that they intend to achieve in order to reach that goal. This is an obligation of result.

48. It remains for the Court to determine how wide a margin of discretion States have in this respect, in particular by making a pronouncement on the level of effectiveness and temporal scope of the NDCs envisaged, as well as on their limits — for example, the fact that any measures contemplated must respect the public's rights with regard to equity and non-discrimination. The Court is invited to make clear that the more urgent and serious the situation, as is the case here, the more limited States' margin of discretion must be.

49. Similarly, the Court must recall that the efforts to be made depend on the capability of each State. Indeed, as the International Tribunal for the Law of the Sea has noted, the requirements for complying with an obligation may be stricter for developed States than for developing States²⁶. In this regard, the principle of common but differentiated responsibilities is generally accepted. According to Article 3, paragraph 1, of the UNFCCC,

“[t]he Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”

50. The next paragraph provides that

“[t]he specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration”.

²⁶ *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area*, Advisory Opinion, 1 Feb. 2011, ITLOS Reports 2011, p. 54, para. 161.

51. Thus, references to the climate obligations of States are made with the understanding that developed and developing countries are to be treated differently. Only then will the solutions be in keeping with the climatic and socio-economic realities of the countries most vulnerable to climate change.

52. Finally, the obligations of States in respect of climate change fall squarely under international environmental law and must therefore take account of its inherent principles, such as solidarity and intra- and intergenerational justice²⁷. Thus, in light of the differential treatment referred to above, obligations such as ensuring the transfer of technology and providing technical assistance and financial aid to developing countries are appropriate and should be included among the obligations incumbent on countries which bear a greater responsibility in respect of climate change.

2. Obligations of adaptation

53. The IPCC defines adaptation as measures or initiatives that reduce the sensitivity of natural and human systems to the effects of climate change. Adaptation measures have less of an impact than mitigation measures on the effects of climate change. Nevertheless, they form a core part of the responsibility of States²⁸. Climate adaptation options include, but are not limited to, disaster prevention, insurance schemes, the strengthening of citizen participation and political engagement, early warning systems, shelters, rainwater and wastewater management, dikes and embankments, desalination, and financial incentives²⁹. The development of national adaptation plans pursuant to the UNFCCC is another State obligation arising from the effects of climate change and relating specifically to adaptation.

54. The establishment in 2007 of the Adaptation Fund³⁰, whose aim is to finance concrete adaptation projects and programmes in developing countries, confirms that States have an obligation to adapt to climate change, as the Fund's contributors are comprised of States. The Glasgow Climate Pact³¹, which was adopted at COP26, called for the doubling of the finance provided to developing countries for adaptation and resilience.

55. Given the clear gap between adaptation needs and opportunities³², caused primarily by a lack of funding, the Republic of Madagascar considers that clarification of the obligations relating to adaptation in the Court's advisory opinion would provide a basis for greater engagement of States.

56. Under the UNFCCC and the Paris Agreement, and in light of the foregoing discussion, there are three types of obligations relating to adaptation. The first requires taking action to adapt, which usually involves planning and implementation in the form of national adaptation plans and programmes of action. The second type entails the provision of financial and technological support for adaptation, which requires States to provide financial assistance and share technologies with a view to helping

²⁷ A. Gosseries, "Les théories de la justice intergénérationnelle", in *Raison Publique*, Vol.8 (2008), <http://hdl.handle.net/2078.1/125934>.

²⁸ See IPCC (2014), p. 18.

²⁹ IPCC (2014), pp. 28, 30 and 109 *et seq.*

³⁰ See <https://www.adaptation-fund.org/>.

³¹ See https://unfccc.int/sites/default/files/resource/cma3_auv_2_cover%2520decision.pdf.

³² See Adaptation Gap Report 2020, UNEP 2021.

vulnerable countries enhance their adaptive capacity and resilience. The last type implies a duty of co-operation³³.

57. In implementing these obligations of adaptation, and in accordance with the operative principles of the climate change régime as set out in Article 3 of the UNFCCC, the precautionary principle must be applied. Thus, States are obliged to take preventive action to avoid serious or irreversible harm, and to condemn inaction based solely on uncertainty.

D. Obligations based on international human rights law

58. The Republic of Madagascar would note in particular the obligation to respect the right of peoples to self-determination, the obligation to ensure the right to health and a healthy environment, and other obligations relating to human rights threatened by climate change.

1. The obligation of States not to deprive a people of its means of subsistence, in compliance with its right to self-determination

59. The right to self-determination of all peoples, which is both customary and treaty-based³⁴ and respect for which is an obligation *erga omnes*³⁵, implies the right of a people not to be deprived of its own means of subsistence. However, the effects of climate change pose a threat to people's means of subsistence, lives, lifestyles and survival. Indeed, in the short and long terms, climate change causes problems associated with the loss of territory and the unsuitability of certain land for agriculture. Faced with food insecurity and losses of property, some marginalized populations are forced to leave their homes and are thus deprived of their natural and usual territories.

60. The Republic of Madagascar asks the Court to make clear that States remain under an obligation to respect the rights to self-determination of peoples threatened by the adverse effects of climate change.

2. The obligation of States to respect the right to health and the right to a clean, healthy and sustainable environment

61. Numerous scientific studies have proven the adverse effects of climate change on human health, especially for the most vulnerable. In light of this, the right to health (guaranteed in Article 25 of the Universal Declaration of Human Rights and Article 12 of the International Covenant on Economic, Social and Cultural Rights) and the right to a clean, healthy and sustainable environment must be respected.

62. The right to a clean, healthy and sustainable environment was first enshrined at the global level in resolution 48/13 of the Human Rights Council, which was adopted on 8 October 2021. That

³³ L. Nishimura, "Adaptation obligations and adaptive mobility", www.fmreview.org/sites/default/files/FMRdownloads/en/climate-crisis/nishimura.pdf.

³⁴ See Art. 1 of the United Nations Charter; common Art. 1 of the International Covenant on Civil and Political Rights and of the International Covenant on Economic, Social and Cultural Rights; Art. 3 of the United Nations Declaration on the Rights of Indigenous Peoples.

³⁵ *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019*, p. 139, para. 180; *East Timor (Portugal v. Australia), Judgment, I.C.J. Reports 1995*, p. 102, para. 29; *Barcelona Traction, Light and Power Company, Limited (Belgium v. Spain), Second Phase, Judgment, I.C.J. Reports 1970*, p. 41, para. 66, p. 32, para. 33.

resolution should serve as a catalyst for the right in question to be universally recognized in constitutions, legislation and regional human rights treaties, and should accelerate action to address the global environmental crisis³⁶. International recognition of this right was endorsed by the General Assembly in its resolution 76/300, adopted on 28 July 2022, in which the Assembly “[r]ecognize[d] the right to a clean, healthy and sustainable environment as a human right” and “[a]ffirm[ed] that the promotion of [this] right . . . requires the full implementation of the multilateral environmental agreements under the principles of international environmental law” (paragraphs 1 and 3). The connection between international environmental law and international human rights law is clearly established by the General Assembly in that resolution.

63. In addition, the protection of the right to a healthy environment can only be achieved through recognition of climate justice³⁷, acceptance of the principle of equity³⁸ and promotion of the concept of “common concern of humanity”³⁹.

64. The Republic of Madagascar invites the Court to clarify the obligations of States in this respect on the basis of the connections between their human rights commitments and their commitments under multilateral environmental agreements.

3. Other obligations

65. Beyond environmental rights, other rights affected by climate change include the right to life, the right to property and the right to be free from racial discrimination. Reserving its observations on the obligations of States to respect these rights relating to climate change for future phases of these advisory proceedings, the Republic of Madagascar requests the Court to reiterate the obligations of States in this respect, in the light of the scientific evidence of the impact of global warming on the rights in question.

66. Finally, States also have climate change obligations which fall outside the scope of international environmental law and international human rights law. These include:

- the prohibition of military or any hostile use of environmental modification techniques, including any technique for changing — through the deliberate manipulation of natural processes — the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space⁴⁰;
- the prohibition to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment⁴¹; and

³⁶ A/HRC/49/53, Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, 12 Jan. 2022, paras. 2.

³⁷ Paris Agreement, preamble, para. 13.

³⁸ See A. Michelot, *Équité et environnement*, Larcier, 2012, pp. 355-376.

³⁹ P. Gérard, F. Ost and M. Van de Kerchove, *Images et usages de la nature en droit*, Brussels, Presses universitaires Saint-Louis, 2019, pp. 165-206.

⁴⁰ Geneva Convention of 10 Dec. 1976.

⁴¹ Additional Protocol I to the Geneva Conventions of 12 Aug. 1949, 8 June 1977, Art. 35, para. 3, and Art. 55.

- the responsibility of all States to protect, preserve and enhance the environment for present and future generations; States must endeavour to establish their own environmental and developmental policies in conformity with that responsibility⁴².

**IV. STATES THAT HAVE CAUSED SIGNIFICANT HARM TO THE CLIMATE SYSTEM,
IN BREACH OF THEIR INTERNATIONAL OBLIGATIONS, MUST MAKE FAIR AND
ADEQUATE REPARATION TO THE STATES INJURED BY THAT BREACH**

67. The question relating to the “legal consequences” of States that breach their obligations in respect of climate change falls under the law of State responsibility for internationally wrongful acts. The engagement of this responsibility is based on the existence of an internationally wrongful act and, once the responsibility of a State is established, that State is required to make reparation for the harm resulting from the act in question. It is therefore appropriate first to consider the significant harm mentioned in the question put to the Court (A), before examining the two legal consequences of the internationally wrongful acts giving rise to the harm, in this case the obligation to cease those acts and offer a guarantee of non-repetition (B), and the obligation to make reparation for the harm (C).

**A. The significant harm to the climate system resulting from breaches
of the obligations of States in respect of climate change**

68. Since 1850, each of the four most recent decades has been successively warmer than all the previous decades. The average global surface temperature in the first two decades of the twenty-first century (2001-2020) was 0.99°C higher than it was between 1850 and 1900. Between 2011 and 2020, the global surface temperature was 1.09°C higher than it was between 1850 and 1900, with larger increases over land (1.59°C) than over the ocean (0.88°C). The estimated increase in global surface temperature since the Fifth Assessment Report of the IPCC (AR5) is principally due to further warming since the period between 2003 and 2012 (+0.19°C). Additionally, methodological advances and new datasets have contributed to a forecast adjustment of around 0.1°C compared with the updated warming estimate published in the Sixth Assessment Report of the IPCC (AR6) (adapted from IPCC, 2021⁴³).

69. For Madagascar in particular, the adverse effects of global warming are as follows:

- Between 2001 and 2020, Madagascar lost 4.13 million hectares of tree cover, equivalent to a 24 per cent decrease in tree cover since 2000, and to 2.02 gigatonnes of CO₂. An unprecedented peak loss of almost 510,000 hectares was recorded in 2017 (Global Forest Watch, 2021).
- Thirty-five per cent of the population is experiencing severe food insecurity (National Adaptation Plan, 2021), requiring Madagascar to import more than 300,000 tonnes of rice on average [per year] between 2010 and 2019 (USDA, Index Mundi 2022). Since the farming and production systems are rainfed, both agriculture and livestock farming are strongly dependent on climatic variations.
- The country is also experiencing climate-induced migration, which, in turn, is one of the recognized causes of the problems of deforestation and the degradation of natural resources. The populations of the far south have fled this drought-affected region en masse for other regions, in particular the south-west and the north-west, which are among the areas most affected by deforestation⁴⁴.

⁴² Charter of Economic Rights and Duties of States, Ann. to General Assembly resolution 3281 (XXIX), 12 Dec. 1974, Art. 30.

⁴³ IPCC, 2021, data updated in the Sixth Assessment Report of the IPCC.

⁴⁴ D. Andriantsoa, “Migration climatique : les gens du Sud fuient le Kere”, *L’Express de Madagascar*, 13 Jan. 2021.

70. With regard to the climate, Madagascar is experiencing the following trends⁴⁵:

- Across its territory, a temperature increase was observed during the period between 1961 and 2017: in particular, minimum and maximum temperatures increased by 0.04°C and 0.05°C respectively each year.
- Annual precipitation is falling, in particular in the east and south-east of the island. Although this downward trend remains weak, there is a marked increase in the annual variation in precipitation. The most notable dips are observed at the end of the dry season and the beginning of the rainy season.
- Maximum temperatures are showing an upward trend of 0.23°C per decade. During the hot, rainy season, the increase has been 0.20°C per decade. During the winter, maximum temperatures have risen by 0.25°C per decade.
- The sea temperature in the western basin of the Indian Ocean, which includes the Mozambique Channel, increased by 0.60°C between 1950 and 2009.
- No definite trend is yet evident as regards the frequency and intensity of tropical cyclones in the southern Indian Ocean region around Madagascar.
- The sea level around the island increased by 1.57 mm/year between 1993 and 2017, which, though lower than the global average of 2.87 mm/year, remains worrying.

71. The climate scenarios for Madagascar⁴⁶ indicate that the changes will intensify depending on the time frames considered and the extent of global radiative forcing. Here are the established trends:

- a generalized increase in temperature, more pronounced in the west and south as far as the western edge of the Highlands, and in the south-west;
- a more marked increase in rainfall on the western side, alongside a more pronounced drop in rainfall in the Highlands, extending towards the far south-east;
- a 46 per cent increase in cyclone intensity by 2100, together with a northward shift in cyclone path; and
- an increase in the sea level of 0.28 to 0.48 m by 2100.

72. The Court is invited to refer to the two documents annexed to this written statement, which relate to the risks posed by climate change in Madagascar — by sector and by region (Annex 1), and by hazard and by sector (Annex 2) — which have a high probability of occurring.

⁴⁵ See Sixth Assessment Report of the IPCC.

⁴⁶ These projections were established using the resources of Phase 5 of the Coupled Model Intercomparison Project (CMIP5) and the Fifth Assessment Report of the IPCC.

B. States which have caused significant harm to the climate system must cease the wrongful acts giving rise to that harm

73. In international law, the first legal consequence of an internationally wrongful act is the obligation to cease that act and offer a guarantee of non-repetition. Pursuant to Article 30 of the ILC's Articles on Responsibility of States for Internationally Wrongful Acts⁴⁷,

“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.”

74. States which, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment, are thus under an obligation to cease that harmful conduct. They are also bound to perform the obligation breached, in accordance with Article 29 of the ILC Articles on State Responsibility.

C. States which have caused significant harm to the climate system bear responsibility and have an obligation to make fair and adequate reparation

1. Reparation depending on the primary obligation breached and in accordance with agreements on the environment

75. What constitutes adequate reparation essentially depends on the content of the primary obligation identified to have been breached. In particular, as regards mitigation measures, a State which establishes NDCs but fails to achieve them bears responsibility.

76. Further, generally speaking, as mentioned above, breaches of State obligations in respect of climate change give rise to violations of other human rights obligations, notably the right to a clean, healthy and sustainable environment; the right to life; the right to health; the right to privacy; and the right to property.

77. Thus, adequate reparation must be made for each breach. Moreover, making reparation for one breach does not relieve the responsible State of its obligation to make reparation for other breaches.

78. As regards adaptation measures, a State which breaches its obligations in that respect bears international responsibility, and what constitutes adequate reparation varies depending on the actual harm caused, in accordance with the régime of State responsibility for internationally wrongful acts, which will be discussed below.

79. One clarification is necessary at this stage, however: the Paris Agreement and the Kyoto Protocol sought to address procedures for non-compliance with State obligations.

⁴⁷ ILC, Articles on Responsibility of States for Internationally Wrongful Acts, Ann. to General Assembly resolution 56/83, hereinafter “ILC Articles on State Responsibility”.

80. Decision -/CP.27 -/CMA.4, entitled “Funding arrangements for responding to loss and damage associated with the adverse effects of climate change, including a focus on addressing loss and damage”, acknowledges

“the urgent and immediate need for new, additional, predictable and adequate financial resources to assist developing countries that are particularly vulnerable to the adverse effects of climate change in responding to economic and non-economic loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, especially in the context of ongoing and ex post (including rehabilitation, recovery and reconstruction) action”.

The emphasis is on new funding arrangements. Hence the creation of a fund for responding to loss and damage.

However, the adoption of this decision was accompanied by a note of caution, stressing that the creation of a fund did not imply recognition of international responsibility. Similarly, the mechanism established by Article 15 of the Paris Agreement “function[s] in a manner that is transparent, non-adversarial and non-punitive”.

The Compliance Committee of the Kyoto Protocol, for its part, may decide on actual sanctions in the case of non-compliance by States with their environmental obligations. However, the consequence of non-compliance with such obligations is merely a renewed request to the State concerned to restore compliance.

81. The Republic of Madagascar encourages the development of such mechanisms, which must be effective and must benefit the populations of developing countries. Financial aid must also be commensurate with the local measures envisaged, given that the resources of Madagascar, and of other developing countries, fall far short of the needs identified. By way of example, the estimated cost of the core programmes focusing on the main national priorities set out in the Malagasy Government’s National Adaptation Plan is around US\$250 million.

82. In any event, the existence of a fund does not preclude the implementation, additionally or alternatively, of the régime of State responsibility for internationally wrongful acts.

2. Reparation under the régime of State responsibility for internationally wrongful acts

83. Under international law, “[t]he responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act”⁴⁸. Such reparation takes three forms: restitution, compensation and satisfaction⁴⁹; the appropriate measures for injury resulting from the adverse effects of climate change will now be explored.

(a) Restitution

84. Restitution, which consists in restoring the situation that existed before the wrongful act was committed, can, in the case of climate injury, take the form of a thorough clean-up of polluted or damaged land and rivers, or the restoration of degraded land and ecosystems. It can also involve introducing into the wild equivalent replacements for declining, weakened or damaged components of

⁴⁸ *Ibid.*, Art. 31.

⁴⁹ *Ibid.*, Arts. 35 to 37. The following presentations of these forms of reparation paraphrase those articles.

biodiversity⁵⁰. Restitution may further include a commitment by world leaders to take concrete measures to collectively reduce CO₂ emissions by at least 45 per cent by 2030, compared with 2010 levels, and to “reach net zero by 2050”⁵¹.

85. Finally, restitution for harm suffered as a result of climate change requires the reform of an entire system rooted in the consequences of colonialism and an unjust international economic system.

(b) Compensation

86. The requirement to provide compensation, which covers any financially assessable damage, including loss of profits, can be fulfilled by paying financial compensation to the victims of climate change, and by providing financial and logistical assistance to enable the resettlement in other regions of people who are forced to leave their usual place of residence because of climate change. Compensation can also take the form of ensuring that persons who are internally displaced because of the adverse effects of climate change are able to enjoy their rights, as recognized in the Convention for the Protection and Assistance of Internally Displaced Persons in Africa (2009 Kampala Convention), which is the first international instrument in the world to impose legal obligations on States to provide protection and assistance to displaced persons.

87. In addition, compensation is due for the care of people obliged to leave their homes because of coastal erosion, severe cyclones and other natural disasters caused by global warming. The amount of compensation must cover the expenses incurred by States for providing them with accommodation and assistance.

88. The Republic of Madagascar considers that the achievements of COP27 must serve as guidelines for reparative measures, and that every effort must be made to operationalize the Loss and Damage Fund agreed at that conference, and to ensure that the new pledges made to the Adaptation Fund at COP27, which total more than US\$230 million, are effectively delivered⁵².

89. Along similar lines, compliance with the recommendation of the United Nations Environment Programme (UNEP) to scale up the initial goal of US\$100 billion per year set by the Paris Agreement will be a suitable compensation measure, in particular thanks to the establishment of a new finance goal, the New Collective Quantified Goal on Climate Finance (NCQG)⁵³, which is based on a more precise and evidence-based approach and recommends climate finance of up to US\$300 billion per year by 2030.

90. Effective delivery of the expected pledges to the Loss and Damage Fund, and the transparent and efficient provision of such funding, must also be regarded as part of the reparations owed by States responsible for the effects of climate change to States which are the victims of those effects.

⁵⁰ B. Queffelec and J. Hay, “L’évaluation du préjudice environnemental en droit international”, in A. Cudennec and C. de Cet Bertin (eds.), *Mer et responsabilité*, Paris, Pedone, 2009, pp. 125-126.

⁵¹ “For a livable climate: Net-zero commitments must be backed by credible action”, <https://www.un.org/en/climatechange/net-zero-coalition>.

⁵² <https://unfccc.int/news/cop27-reaches-breakthrough-agreement-on-new-loss-and-damage-fund-for-vulnerable-countries>.

⁵³ https://unfccc.int/NCQG?gad_source=1&gclid=Cj0KCQjwqdvBhCPARIsANrmZhNZmR-v_oI_G01hFIYiADytfDdH-gUOT8YGUQe743EA5lppAaeAV7waAqpsEALw_wcB.

91. For Madagascar, adequate compensation for the adverse effects of climate change on its territory and for present and future generations includes not only access to the funds established by the aforementioned mechanisms, but also humanitarian aid for the loss and damage suffered by the population, as well as additional financial and technical aid to help Madagascar adapt to the consequences of climate change, in particular increasingly long and intense periods of drought.

92. However, such financial support cannot be regarded as reparation if the funds are granted in the form of loans, interest-bearing or not. Donors declared average climate finance of US\$59.5 billion per year in 2017 and 2018. Yet, according to Oxfam, 80 per cent of that sum was allocated in the form of loans, and will therefore need to be repaid. Moreover, only 20.5 per cent of the funding was earmarked for Least Developed Countries and 3 per cent for Small Island Developing States, even though they are very vulnerable to the effects of climate change.

(c) *Satisfaction*

93. As regards satisfaction, which “may consist in an acknowledgement of the breach, an expression of regret, a formal apology or another appropriate modality”, in Madagascar’s view, appropriate satisfaction would consist, for a start, in being recognized as a State which is a victim of climate injustice.

94. It would also involve putting in place more sustainable and viable solutions in developing countries, which are seeing their lands erode and slide slowly into the ocean. Such solutions should include effective transfers of technology to increase resilience to the effects of climate change and to implement solutions adapted to their specific needs.

95. Finally, measures of satisfaction also include anticipating solutions which are fair and respectful of human rights, for present and future populations doomed to be displaced within or beyond national borders as a result of climate change.

V. CONCLUSION

96. In contemporary international law, the obligations of States in respect of climate change have developed over the years as the threat to the climate system has intensified. These obligations derive from the entire corpus of international law, which it is for the Court to identify and clarify.

97. Alongside these obligations, a practice within State-owned and international companies has been established or is crystallizing with regard to forms of reparation for victims of the adverse effects of climate change. Such forms of redress have already been recognized in domestic judicial systems.

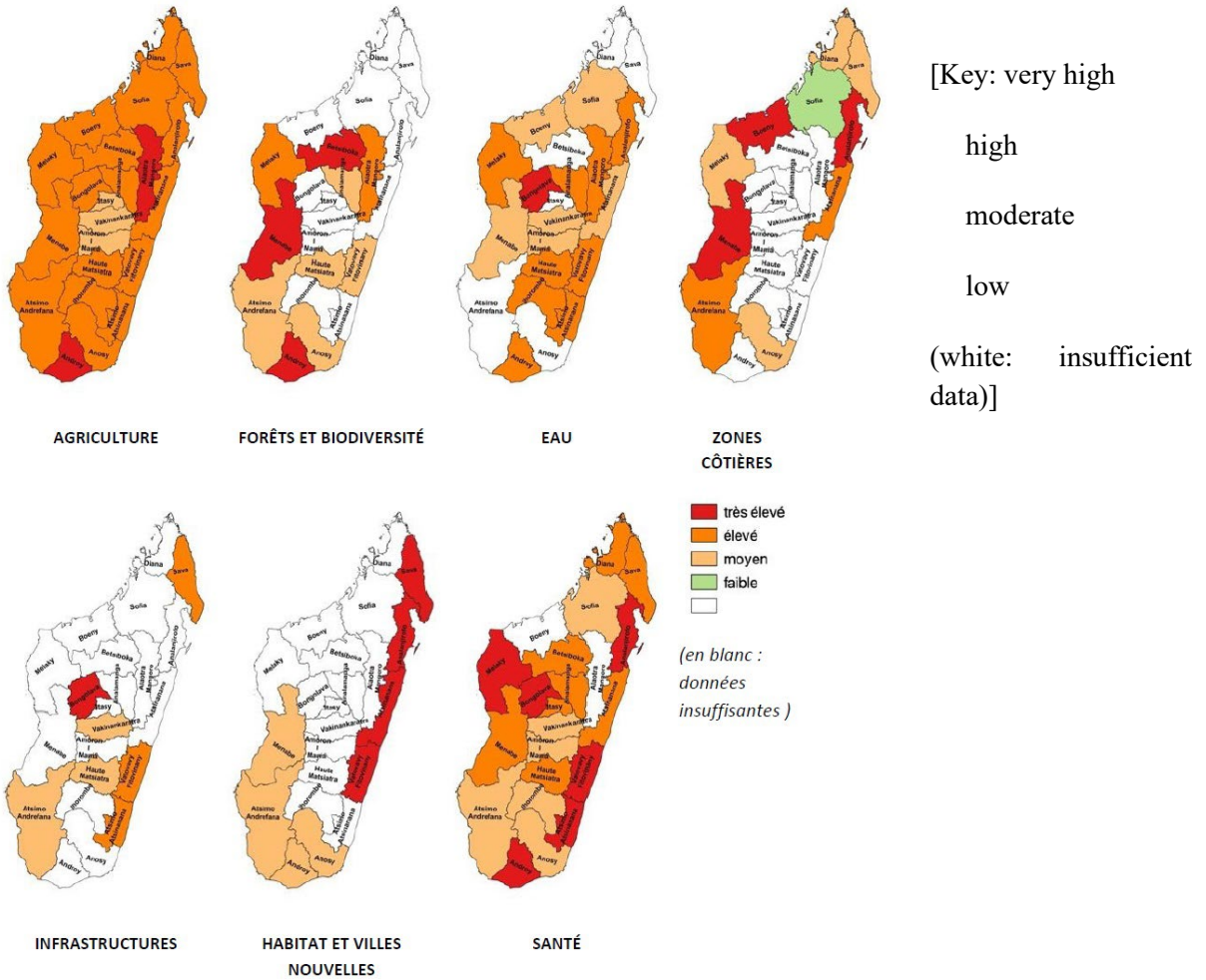
98. The Republic of Madagascar requests the International Court of Justice to follow the lead of domestic courts by making a pronouncement that States which, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment are under an obligation to make reparation to the States and people affected by that harm. In this regard, the Court should specify the forms that such reparation should take, on the basis of State practice and the general principles of law relating to environmental litigation observed by most members of the international community. Indeed, it is a matter of effecting “climate justice” at the international level, as sought by both the collective of current victims of climate change and the coalition of representatives of future generations.

ANNEX 1

LEVEL OF RISK DUE TO CLIMATE CHANGE, BY SECTOR AND REGION

Agriculture — Forests and biodiversity — Water — Coastal areas

Infrastructure — Housing and new towns — Health



ANNEX 2

CLIMATE-RELATED RISKS FOR MADAGASCAR, BY HAZARD AND BY SECTOR

Sector	Climate-related hazard			
	Rising temperatures	Decreasing precipitation	Possibly more intense tropical cyclones	Rising sea levels
Agriculture	<p>Rising temperatures affecting current crop yields;</p> <p>Elevated risks when night-time temperatures rise;</p> <p>Higher evapotranspiration rate, causing reduced soil moisture and increased soil degradation;</p> <p>Increased livestock mortality (cattle in particular).</p>	<p>Increased need for irrigation, especially for rice cultivation.</p>	<p>Damage to crops (sensitive crops in particular) and supply chains.</p>	<p>Seawater intrusion and surface and groundwater salinization in low-altitude coastal agricultural areas, adversely affecting agricultural yields.</p>
Public health	<p>Acute respiratory illnesses;</p> <p>Spread of vector-borne diseases such as malaria;</p> <p>Heat stress in people, causing acclimatization difficulties and aggravating pre-existing medical</p>	<p>Availability of drinking water resources;</p> <p>Water scarcity, affecting sanitation and hygiene;</p> <p>Changes in vector-borne diseases as a result of a shift in the distribution of</p>	<p>Public health following the degradation of water quality and sanitation.</p>	<p>Health risks associated with well drilling in coastal areas (groundwater salinization).</p>

	conditions such as cardiovascular problems.	precipitation between dry and wet periods.		
Water resources	Higher evapotranspiration rate, causing reduced soil moisture and groundwater replenishment; Decrease in run-off and surface water.	Increased need for irrigation, especially for rice cultivation; Reduced drinking water resources, due to a lack of groundwater replenishment.	Damage to water infrastructure caused by cyclones.	Seawater intrusion and surface and groundwater salinization in coastal areas.
Risk and disaster management	Heat stress in people, causing acclimatization difficulties and aggravating pre-existing medical conditions such as cardiovascular problems.	Drought, leading to crop damage, water scarcity and other socio-economic impacts.	Damage to crops, infrastructure, supply chains, services, etc.	Seawater intrusion and surface and groundwater salinization in coastal areas.
Infrastructure	Weakening of structures due to dilatation during extreme heat events.		Degradation of infrastructure; Destruction of infrastructure.	Degradation of infrastructure; Destruction of infrastructure.
Management of coastal areas, biodiversity and forestry	Degradation of biodiversity and ecosystems.	Degradation of biodiversity and ecosystems.	Degradation of coral reefs and coastal marine ecosystems; Increased coastal flooding, affecting coastal ecosystems; Degradation of terrestrial ecosystems.	Seawater intrusion and surface and groundwater salinization in coastal areas, and destruction of salt-intolerant terrestrial coastal habitats.

Fishing	Changes in fish populations and alteration of reproduction cycles.	Longer low-water periods, which disrupt life cycles and lead to [sic]	Higher production costs, due to infrastructure destruction and supply chain disruptions.	
Land use planning	Diminishing arable land and bodies of water.	Diminishing arable land and bodies of water.	Degradation of infrastructure; Degradation of farmland.	Increased soil erosion on littoral fringe.
Housing and new towns	Degradation of housing; Ventilation during heatwaves.	Lower productivity.	Collapsed buildings; Impacts of flooding on infrastructure.	Degradation of infrastructure.
