**Questionnaire**

The Special Rapporteur invites and welcomes your answers to the following questions:

1. Please provide examples of ways in which declining biodiversity and degraded ecosystems are already having adverse impacts on human rights. Adversely affected rights could include, among others, the rights to life, health, water, food, culture, non-discrimination, a safe, clean, healthy and sustainable environment, and Indigenous rights.

2. To protect a wide range of human rights, what are the specific obligations of States and responsibilities of businesses in terms of addressing the main direct drivers of harm to biodiversity and ecosystems (e.g. land conversion, loss and degradation of habitat, climate change, overexploitation, pollution, invasive species) and the indirect drivers (unsustainable production and consumption, rapid human population growth, trade, conflict and inequality)?

3. Please provide specific examples of constitutional provisions, legislation, regulations, policies, programs or other measures that employ a rights-based approach to prevent, reduce, or eliminate harm to biodiversity and ecosystems or to restore and rehabilitate biodiversity and ecosystems.

4. If your State is one of the 156 UN Member States that recognizes the right to a safe, clean, healthy and sustainable environment,[[1]](#footnote-1) has this right contributed to protecting, conserving and restoring biodiversity and healthy ecosystems? If so, how? If not, why not?

5. Please provide specific examples of good practices in preventing, reducing, or eliminating harm to biodiversity and ecosystems, or restoring and rehabilitating biodiversity and ecosystems. These examples may occur at the international, national, sub-national, or local level. Where possible, please provide evidence related to the implementation, enforcement, and effectiveness of the good practices (e.g. measurable outcomes such as increases in terrestrial and marine protected areas, increases in Indigenous and Community Conserved Areas, declining rates of deforestation and poaching, or progress in the recovery of species that were previously threatened or endangered).

6. Please identify specific gaps, challenges and barriers that your government, business, or organization has faced in attempting to employ a rights-based approach to preventing, reducing, or eliminating harm to biodiversity and ecosystems.

7. Please specify ways in which additional protection is provided (or should be provided) for populations who may be particularly vulnerable to declining biodiversity and degraded ecosystems (e.g. women, children, persons living in poverty, members of Indigenous peoples and local communities, older persons, persons with disabilities, ethnic, racial or other minorities and displaced persons). How can these populations be empowered to protect and restore declining biodiversity and degraded ecosystems?

8. How do you safeguard the rights of individuals and communities working on biodiversity issues (potentially identified as environmental human rights defenders or land defenders)? What efforts has your Government made to create a safe environment for them to freely exercise their rights without fear of violence, intimidation, or reprisal?

9. There is substantial evidence that consumption in high-income States is adversely affecting biodiversity and ecosystems in low and middle-income States. What are ways in which high-income States should assist low-income States in responding to biodiversity loss and ecosystem degradation, while simultaneously contributing to sustainable development in those low-income States?

10. For businesses, what policies or practices are in place to ensure that your activities, products, and services across the entire supply chain (extraction/sourcing, manufacturing, distribution, sale, and end-of life management) minimize biodiversity loss and ecosystem degradation and meet human rights standards, especially those articulated in the Guiding Principles on Business and Human Rights?

**Healthy Ecosystems and Human Rights: Sustaining the Foundations of Life**

1)

In dry regions such as the Brazilian semiarid region, there is already a reality of the lack of water and with little water we have low water quality. As diseases derived from water such as dengue, the Zika virus, Chikungunha are already installed as endemic and with an increasing number of patients per year, since they become something "normal". Due to the lack of access to water and sanitation, people get sick according to the research data by Silva *et al[[2]](#footnote-2)*. In this case, we have a direct relationship between the right to life, health, water, sanitation, a safe, clean, healthy and sustainable environment. Regions far from large urban centers are a major concern for the lack of access to basic services for human dignity. In the case of a semiarid region that occupies almost the entire northeastern region of Brazil and northern Minas Gerais State, we have about 11 million inhabitants who live in the rural area and have almost no access to sanitation solutions, constituting a population group that is absent vulnerable diseases related to poor hygiene due to lack of basic sanitation[[3]](#footnote-3). This causes serious damage, such as soil pollution and surface and groundwater sources. In addition, it is important to say that the transmission of SARS-COV-2 (Covid 19) is part of the tests that have not yet been the subject of several studies, having already been found or detected in waste viruses and tests from several countries and in Brazil, being even more essential water treatment and sewage as a preventive measure. It is not too much to remember that, as urban pollution, cities and metropolitan regions, it is also vulnerable to the lack of care with biodiversity and water and the final disposal of waste through the collected sewage network, in addition to soil and water contamination and the waterproofing by irregular constructions and also by occupying risk areas[[4]](#footnote-4).

2)

States, based on the experience that the pandemic has left us, need to develop plans to prevent, mitigate and combat the effects of disasters like these. What we see in Brazil, for example, is an absence of disaster prevention plans of all kinds, especially sanitary ones like the Corona Virus. It is necessary to draft laws that establish environmental obligations in the field of sanitation, forcing companies to reuse their waste, the water used in production, especially companies in the agricultural sector using sustainable methods of reusing water and waste. Thus, we need to act on 5 fronts in order to create resilient spaces:

1. The establishment of disaster prevention plans resulting from damage to biodiversity and ecosystems by the States, using as a principle the systemic integration between the various sectors, especially water, sanitation, health, urban drainage, environment, urban cleaning, among others;
2. It is essential to review environmental laws by the Legislatives in the countries, implementing rules that establish obligations regarding the care of surface and groundwater, prioritizing urban environmental planning and actions on river basins, requiring the installation of rainwater catchment systems in homes, companies, shops, public spaces; urban intervention planning based on less soil impermeability, allowing the absorption of water and avoiding disasters with soil movement, must also be carried out;
3. Monitoring of our water sources, whether surface or underground, as well as the sewer network, must be mandatory, tracking possible contamination and helping to anticipate outbreaks of known and unknown diseases;
4. It is mandatory to use georeferencing tools for the detailed mapping of spaces, helping the planning and prevention of environmental and ecosystem damage[[5]](#footnote-5).

3)

1) Article 225 of the Brazilian Federal Constitution provides that: Everyone has the right to an ecologically balanced environment, a common use of the people and essential to a healthy quality of life, imposing on the Public Power and the community the duty to defend it and preserve it for present and future generations. §1 In order to ensure the effectiveness of this right, it is incumbent upon the Public Power: I - to preserve and restore essential ecological processes and to provide ecological management of species and ecosystems; II - preserve the diversity and integrity of the country's genetic heritage and supervise entities dedicated to the research and manipulation of genetic material; III - define, in all Federation units, territorial spaces and their components to be specially protected, alteration and suppression being permitted only through law, any use that compromises the integrity of the attributes that justify their protection being prohibited; IV - require, in accordance with the law, for the installation of a work or activity potentially causing significant degradation of the environment, a previous study of environmental impact, which will be publicized; V - control the production, commercialization and use of techniques, methods and substances that pose a risk to life, quality of life and the environment; VI - promoting environmental education at all levels of education and public awareness for the preservation of the environment; VII - protect fauna and flora, prohibited, in accordance with the law, practices that put their ecological function at risk, cause the extinction of species or subject animals to cruelty. § 2 Those who exploit mineral resources are obliged to recover the degraded environment, according to the technical solution required by the competent public agency, in accordance with the law. § 3 Conducts and activities considered harmful to the environment will subject violators, individuals or legal entities, to criminal and administrative sanctions, regardless of the obligation to repair the damage caused;

2) Bill 411/2011: Establishes mechanisms to encourage the installation of systems for the collection, storage and use of rainwater and the reuse of wastewater in public and private buildings;

3) Bill 324/2015: Institutes mandatory for new constructions, residential, commercial, industrial, public or private, the inclusion in the technical project of the work of item referring to the capture of rainwater and its non-potable reuse and other measures;

4) Bill 154/2009: Authorizes the Executive Branch to create the National Water Reuse Fund (FUNREÁGUA).

4)

Yes, Brazilian legislation since the 1988 Constitution has been paradigmatic in the performance of the National Justice System. This has been better seen now that we have a government that does not understand the environmental issue based on the principles of environmental precaution and non-retrogression and that is openly modifying norms to a standard that defies the constitutional standard, with great flexibility in environmental legislation. Our Federal Constitution has provided legal certainty and instruments to combat these retrogression attempts, and the Supreme Court has ruled on applying principles such as in dubio pro naturae and polluter pays. The existence of laws and consistent judicial practice can help us to implement changes, even if governments do not want it because of the economy. The Brazilian Supreme Court recently ruled that governments are obliged to follow the guidelines outlined by technique and science[[6]](#footnote-6).

5)

1) The case of monitoring sewage as a way of predicting endemics and verifying the quality of our health, tracking viruses, bacteria and protozoa, as well as monitoring water as a way to better understand our health[[7]](#footnote-7);

2) Implementation of rural sanitation systems, according to the project of the Instituto Nacional do Semiárido[[8]](#footnote-8);

3) Water desalination systems in the Brazilian northeastern semi-arid region, mitigating the effects of climate change and providing access to water for communities far from large centers[[9]](#footnote-9).

6)

1) The biggest barrier we are currently facing is a movement to deny technical and scientific evidence, which has made it difficult to implement the necessary changes to prevent damage to biodiversity and ecosystems;

2) The lack of coordination that seeks to integrate actions that are correlated in a network, with the environment still being treated separately from other sectors that are interdependent such as water, sanitation and health, for example, with a systemic public management being urgent to face an era hypercomplex;

3) We are seeing as the main barrier the public management itself betting on development models already outdated and without a vision of the future that needs to be more sustainable and that there is no more time to lose;

4) Governments, notably the Brazilian, do not present a program for a sustainable future with *smart cities*. How can we have smart cities if we don't even have the basics services like access to water and sanitation and health?

7)

1) I think our biggest problem is in urban centers and in food production using pesticides. Only industry and agriculture, mainly that destined for export, are responsible for the consumption of 70% of the available water[[10]](#footnote-10). Therefore, we need to focus our actions on these activities in order to make them more sustainable. However, consumption needs to change, because through this transformation the demands can undergo a metamorphosis that will certainly benefit the Planet;

2) Implement a disaster prevention program based on safe housing and environmental preservation in cities, as many people have been affected by floods and landslides;

3) Implement a broad Ecological Water Security[[11]](#footnote-11) program focusing on productive sectors, such as industries and agriculture, causing a revolution in this sector;

4) Also to elaborate a great global program of sustainable consumption as something urgent, which would pressure countries like Brazil to change their current environmental matrix with some tied condition;

5) In the face of poverty and lack of everything, or almost everything, how to talk about the environment? It has been a great obstacle to talk about the environment for communities that have almost nothing, that are hungry and thirsty. How to tell them that the house where they are is irregular and can cause damage to nature or even cause its death with flood and landslides if it has nowhere to live? Environmental issues end up not being sensitive to these communities that are already very vulnerable socially without a joint action between a broad program of social assistance, housing and the application of sustainable technologies such as rainwater harvesting, water reuse, soil protection and native vegetation.

8)

1) as a teacher and researcher I try to generate knowledge and disseminate it with my students and the community around the university where I have worked, using training material, didactics, electronic games for young people, in short, a wide range of tools, but I feel that there is a lack of synergy between what I say, the government's actions, what happens in reality and the lives of these people. There is a very large gap;

2) What we have seen in Brazil is what is already known in the world, and the government itself does not hide it, it is an attempt to deny global warming and its effects mainly on the populations that are already more vulnerable, extolling the Brazilian natural wonders that they need be explored. But explored how? That's the problem. There is a decrease in the participation of civil society and environmental organizations, for example, in the Brazilian National Water Resources Council, which was chaired by the Ministry of the Environment and which has now been chaired by the Ministry of Regional Development, a change made by decree Presidential in 2019; in addition to other organizations in which there has been a decline in organized civil society participation. We see this with great concern and as a sign of deconstruction of the little progress we had. Changes in environmental defense bodies such as the Brazilian Environment Institute (IBAMA) and the Chico Mendes Institute for Conservation and Biodiversity (ICMBio).

9)

1) The Amazon Fund was a successful initiative, despite the current government, it could be a model to be followed by other nations creating an environmental protection fund for the establishment of equity by distributing these resources according to the level of responsibility of the most developed nations, Environmental Damage Repair Fund (ENDAREF);

2) I think that the central problem would be water that needs to be considered as a natural cycle that suffered changes caused by humanity and needs to be restored for the common good of life on the Planet by establishing a process of Ecological Water Security, as we have already mentioned here.

10)

1) In the Brazilian case, we have our own legislation that created the National Solid Waste Policy that was not fully implemented in all municipalities. This policy is based on the circular economy in which the chain is responsible for the final destination of its product, as well as public administrations need to have specific places to store this waste that cannot be reused. I think the need now is to make this policy work because the pollution in the seas and rivers is high due to the improper disposal of waste that has already become a transnational issue[[12]](#footnote-12);

2) I participated in a project together with the Ford Foundation about these Guiding Principles on Business and Human Rights and we found that there is still an unresolved problem that involves treating these relationships only as legal, labor and non-environmental relations. It happens that some activities are extremely polluting, as in the case of mining, and communities that already have a high degree of social vulnerability are exposed to underemployment and the harmful effects of exposing their health to unfavorable environmental conditions, since they have few employment options. and income in their regions[[13]](#footnote-13). In this way, the native forest is devastated, the soil is unprotected and polluted as well as water. Thus, we need more supervision and punishment for those who degrade the environment with their activities.

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3. National Semi-Arid Institute. (2014). Panorama Sanitary Sewage for the Brazilian Semiarid. Campina Grande. [↑](#footnote-ref-3)
4. Silva, J. I. A. O. (2020). Ecological Water Security: foundations for a legal concept. Doctoral thesis. Federal University of Paraíba, Brazil. [↑](#footnote-ref-4)
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6. Supremo Tribunal Federal (2020). Law of Unconstitutionality Action, DF. Applicant: Sustainability Network. Brasília, May 21. [↑](#footnote-ref-6)
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8. <https://www.cepal.org/pt-br/publicaciones/45583-investimentos-transformadores-estilo-desenvolvimento-sustentavel-estudos-casos> [↑](#footnote-ref-8)
9. [↑](#footnote-ref-9)
10. Silva, J. I. A. O. (2020). Ecological Water Security: foundations for a legal concept. Doctoral thesis. Federal University of Paraíba, Brazil. [↑](#footnote-ref-10)
11. it is possible to think of an Ecological Water Security as the availability of minimally enough water for all forms of life and which have a quality standard compatible with its use, efforts being made to preserve the hydrographic basins, recognizing and quantifying the ecosystem services, taking taking into account the resilience of urban agglomerations, the preservation of all elements that have a direct relationship with the water cycle and, therefore, with the production of water, take care to reduce soil impermeability, as well as adopting technologies for the rational use of water in agriculture, without the application of pesticides, and in all industrial processes, adopting equity and environmental justice as pillars and applying reuse so that water can be kept as long as possible in the natural cycle and in the urban cycle. (Silva, J. I. A. O. (2020). Ecological Water Security: foundations for a legal concept. Doctoral thesis. Federal University of Paraíba, Brazil, 393). [↑](#footnote-ref-11)
12. Poppe, K. (2018). Crioss-Border transfer of waste from the perspective of ecológica justice: towards international waste management, Doctorate Thesis, Federal University of Santa Catarina. [↑](#footnote-ref-12)
13. [Feitosa, M. L. A. M.](http://lattes.cnpq.br/8980645523068866); Mathis, A. de A.; Zambrano, G.; Henao, M. C. (Org.) (2018). Regulatory policies for transnational companies for human rights violations in latin america: case studies. 1ed.João Pessoa: Editora da UFPB. [↑](#footnote-ref-13)