

The Amazon rainforest and the right to health of indigenous children

States' obligations regarding deforestation and climate change effects.

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“To us Mother Earth is not only a source of economic riches that give us the maize, which is our life, but she also provides so many other things that the privileged ones of today strive for. The Earth is the root and the source of our culture. She keeps our memories, she receives our ancestors and she, therefore, demands that we honour her and return to her, with tenderness and respect, those goods that she gives us. We have to take care of her so that our children and grandchildren may continue to benefit from her.”

Rigoberta Menchú Tum,
Acceptance and Nobel Lecture, December 10, 1992

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1 Introduction

The term climate change refers to the average rise in the Earth's temperatures. The Intergovernmental Panel on Climate Change (IPCC), a scientific body created to assess the science on global warming, affirms that there is more than 90% certainty that most of the global average warming over the past fifty years is a result of greenhouse gas (GHG) emissions generated by human activities.¹

The IPCC has reported that the GHG emitted from burning fossil fuels is the main cause of climate change². In addition, the body asserted that deforestation is another major contributor to carbon emissions, since forests act as "sinks" that both absorb and store carbon dioxide.³

As a contributor to climate change, deforestation has a detrimental effect in human beings' health and living conditions. Some groups of people are especially vulnerable to these consequences. One clear example is the one of children living in indigenous communities, who are doubly victimized: both by the more serious health risks climate change represents to infants and youngsters, and by the threat which it poses towards the culture and livelihoods of indigenous peoples communities.

In this respect it must be noted that the right to health is among those known as "individual rights" and, as such, it is enshrined in the Universal Declaration of Human Rights⁴. The right to health of indigenous peoples is also affected by the fact that numerous native groups find in forests their sources of food, cultural and religious value, and the territory where they can develop their traditional lifestyle. Here lies the importance that "collective rights", like the right to land ownership, have for indigenous peoples regarding the right to health.⁵

¹ IPCC, 2007, *Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. (Geneva, Switzerland: IPCC) p. 30.

² IPCC, *Climate Change 2007*, p. 72.

³ IPCC, 2007, *Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. (Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA), p. 23-25.

⁴ The United Nations. 1948. *Universal Declaration of Human Rights*. Adopted by the United Nations General Assembly in Paris on 10 December 1948 (General Assembly resolution 217 A) as a common standard of achievements for all peoples and all nations.

⁵ UNEP, Maryka Paquette, "Collective rights, the global commons, and Our Common Home", 8 August 2017, <https://www.undp.org/content/undp/en/home/blog/2017/8/8/Collective-Rights-the-Global-Commons-and-Our-Common-Home.html>

The combination of these aspects make indigenous children a highly representative subject for the analysis of how climate change affects human rights protected under international law. More concretely, this thesis will focus on the connection between forests and right to health of indigenous children living in the Amazon.

The Amazon rainforest is not only the largest of its kind in the South American continent, but in the whole planet (it stretches across 5.5 million square kilometers). The Amazon is home to numerous indigenous groups and contains 10 percent of all biomass on Earth. This means that when deforestation takes place, the vast amounts of carbon that the forest stores are released into the atmosphere as carbon dioxide, contributing significantly to global warming.⁶ Thus, the importance of the Amazon is paramount not only for its inhabitants, but for all of humankind.

In the light of all of the aforementioned, the research question chosen for this thesis is the following:

What are States obligations to protect the Amazon rainforest regarding the right to health of indigenous children, particularly in the context of climate change impacts? What is the standard of care States must uphold in order to achieve the fulfillment of this right?

1.1 Methodology

In order to understand the implications of forests in climate change, this research will first address the scientific background which links these two elements together. Following, a similar analysis will aim to acknowledge the effects which climate change and deforestation have on the health indigenous children of the Amazon.

In Chapter 3, this thesis will seek to identify and analyse the right to health under relevant international law. Due to the fact that the Amazon rainforest is contained in nine national territories, the application of international treaties and norms will be analyzed in relation to those States. These “Amazon States” are: Bolivia, Brazil, Colombia, Ecuador, France (being French Guiana an overseas French territory) Guyana, Peru, Suriname and Venezuela.

⁶ Ragnskofondet, “The Amazon rainforest: the world's most important ecosystem”, accessed 14 December 2020, <https://www.regnskog.no/en/what-we-do/the-amazon>

In this regard, the scope of research will be focused in two main legal terrains: the United Nations (UN) system of human rights, and the Inter-American system of human rights. In both of cases, this thesis will intend to find those relevant provisions concerning the right to health of indigenous children. In addition, the scrutiny of these norms will be contextualized within climate change and the importance of forest conservation.

Finally, State obligations will be addressed in the light of international human rights law, but also contemplating other international norms applicable to the Amazon States.

2 Factual background: Forests, climate change and indigenous children

2.1 Scientific approach: climate change and the importance of preserving forests

The Fifth Assessment Report from the IPCC stated that the last three decades has been successively warmer at the Earth's surface than any preceding decade.⁷ Anthropogenic GHG emissions have increased since the pre-industrial era, driven largely by economic and population growth, and are now higher than ever. This has led to atmospheric concentrations of carbon dioxide, methane and nitrous oxide that are unprecedented in at least the last 800,000 years. Their effects, together with those of other anthropogenic drivers, have been detected throughout the climate system and are extremely likely to have been the dominant cause of the observed warming since the mid-20th century.⁸

If global warming continues with current projections and exceeds 4 degrees by the year 2100, the consequences for humans' health would be dire due to heatwaves, rising ocean levels, proliferation of diseases and malnutrition.⁹ This is why climate change requires urgent legal attention.

The IPCC Special report released in 2018 discusses the solution of limiting global warming to 1.5 degrees above pre-industrial levels. This is done so as to strengthen the global response to the threat of climate change. The risk of increasing food and water shortages will lead to ex-

⁷ IPCC, 2014, *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Geneva, Switzerland: IPCC), SPM 1.1.1.

⁸ IPCC, *Climate Change 2014*, SPM 1.2.1.

⁹ Helen Clark, "A future for the world's children? A WHO–UNICEF–Lancet Commission", *The Lancet* Volume 395, Issue 10224 (2020). DOI: [https://doi.org/10.1016/S0140-6736\(19\)32540-1](https://doi.org/10.1016/S0140-6736(19)32540-1)

tensive suffering in some parts of the world, and particularly poor and vulnerable groups of people will be affected.¹⁰ The reports most stark statement is that we must reduce emissions of greenhouse gases to net zero by the middle of this century to have a reasonable chance of limiting global warming to 1.5° C. Limiting global warming to 1.5 degrees compared with 2 degrees could reduce the number of people vulnerable to poverty and exposed to climate-related risks by up to several hundred million by 2050.¹¹

Impacts associated with biodiversity-related risks, such as more forest fires and the spread of invasive species, are also scientifically proven to be lower at 1.5 degrees. In fact, forests must be protected and preserved in order to reach that temperature target goal. Trees are naturally storing CO₂ in its soil and in its biomass, and deforestation leads to a massive release of CO₂. Therefore, deforestation is one of the most important factors contributing to the GHG effect.

Between 2010 and 2015, 32 million hectares of primary or recovering forest were lost worldwide.¹² In 2020, deforestation in the Brazilian Amazon (which constitutes 60% of the rainforest's entirety) hit the highest numbers since 2008.¹³ In fact, only the Amazon removes between 1 to 2 billion tons of carbon dioxide from the atmosphere a year. This covers 5 percent of all carbon dioxide from human activities.

Today, as a consequence of deforestation and fires, the Amazon alone is rather a source of 500-700 million tons of carbon a year.¹⁴ If deforestation continues at the same rate, we will not only fail to reach the goal on emission reductions below 1.5 degrees. But we will also reach a tipping point for the global climate system, turning rainforests into savannas and in other words, into carbon sources instead of carbon sinks.¹⁵ This will not only make the GHG increase, but it will also change the hydrological cycle with less rain and longer dry seasons all over the world.

Recent analyses show that forests are not only essential to meet the goals which States have committed to under international law, such as the ones established in the Paris Agreement (see Chapter 4.2.1), but are also essential in order to ensure climate stability across global

¹⁰ IPCC, 2018, *Global Warming of 1.5°C. Special Report*, (Geneva, Switzerland: IPCC).

¹¹ IPCC, 2018, *Global Warming of 1.5°C. Special Report*.

¹² IPBES, Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Seventh session. Paris, 29 April–4 May 2019. SPM, A4.

¹³ PRODES Project, “Monitoramento do Desmatamento da Floresta Amazônica Brasileira por Satélite.”, accessed 18 December 2020, <http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes>

¹⁴ C. A. Nobre, G. Sampaio, L. S. Borma, J. C. Castilla-Rubio, J. S. Silva, M. F. Cardoso, “Land-use and climate change risks in the Amazon and the need of a novel sustainable development paradigm.” *PNAS* (2016), DOI: <https://doi.org/10.1073/pnas.1605516113>

¹⁵C.A. Nobre, “Land-use and climate change risks in the Amazon” (2016).

scales.¹⁶ Carlos Nobre is the leading expert on the Amazon rainforest, and he concludes that if we analyze these factors together —deforestation, global warming and the increased vulnerability to forest fires— we will reach a tipping point when we exceed 20 to 25 percent deforestation, which will turn the Amazon into savanna. This will happen in an estimate of 25 to 30 years if we do not follow a clear reverse action path in the next decade.¹⁷

Limiting global warming to 1.5 degrees would require drastic and rapid transitions in land, infrastructure, urban planning and energy. A wide range of adaptation options are available to reduce the risks to natural and managed ecosystems (*i.e.* ecosystem-based adaptation, ecosystem restoration and avoided degradation and deforestation). Forests can improve climate conditions on a local and a global level. It is believed that they contain about 50 % of the world's terrestrial organic carbon stocks, and that forest biomass constitutes about 80 % of terrestrial biomass. Therefore, forests have a crucial role in mitigating climate change as carbon sinks.¹⁸

2.2 Climate change effects on the health of Amazon's indigenous children

Climate change consequences such as water scarcity, air pollution, food insecurity and extreme weather have an even more dramatic impact on children.¹⁹ The opening remarks of a 2015 report from the United Nations International Children's Emergency Fund (UNICEF) regarding children and climate change²⁰ state that “*There may be no greater, growing threat facing the world's children – and their children – than climate change*”²¹.

Generally speaking, the consequences of climate change in children can be perceived as having more direct impacts on their physical well-being or ability to be correctly nourished. Different studies have demonstrated that man-made climate change increase the frequency and severity of heat waves across the globe. Infants and small children are more likely to die or

¹⁶ Woods Hole Research Center, 2017. *Forests and Land Use: Undervalued Assets for Global Climate Stabilization. Policy Brief*, accessed 20 December 2020, <https://globalalliance.me/wp-content/uploads/2017/11/Woods-Hole-Forests-and-Land-Use--Undervalued-Assets-for-Global-Climate-Stabilization.pdf>

¹⁷ Yale Environment 360, “Will Deforestation and Warming Push the Amazon to a Tipping Point?”, September 4 2019, <https://e360.yale.edu/features/will-deforestation-and-warming-push-the-amazon-to-a-tipping-point>

¹⁸ Anja Eikermann, *Forests in International Law. Is there really a need for an International Forest Convention?* (Switzerland: Springer International Publishing, 2015), p.19.

¹⁹ UN Human Rights Council, *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (A/HRC/34/49)*. (New York: UN, 2017), p. 7.

²⁰ UNICEF, 2015, *Unless we act now*. (New York: UNICEF).

²¹ *Ibid*, p. 6.

suffer from a heatstroke due to their inability to regulate their body temperature and control their surrounding environment.²²

Concerning indigenous children, however, these impacts are worsened by the socio-economic consequences of climate change. These socio-economic aspects affect, in turn, indigenous peoples' right to health (as it will be further explained when addressing the “underlying determinants of health” in chapter 3).

Indigenous peoples are among the poorest and most marginalized groups in the world. Although they have the smallest ecological footprints, these communities suffer the most critical consequences of climate change.²³ 70 million indigenous peoples rely on forests to meet their livelihood needs, which include economic, social and cultural activities. Moreover, indigenous communities are essential for the preservation of 22 per cent of the planet's surface and 80 per cent of its biodiversity. For this reason, they play a crucial role in the sustainable management of resources and biodiversity conservation, both key for stopping climate change.²⁴

One of the consequences of climate change is the increase of droughts and water stress due to the rise of temperatures. In 2015, approximately 160 million children worldwide lived in areas of high or extreme high drought severity. This phenomenon reduces the amount of available food for the indigenous communities of the Amazon, since they depend on the rainforest for recollection and hunting. Moreover, it represents a serious issue as children have the need to consume more food per unit of body weight than adults and, therefore, the lack of access to food and water represents a greater threat to them. This is a global problem as it is estimated that by 2030, 7.5 million children will be affected by climate change related nutrition issues.²⁵

Furthermore, groups affected by water scarcity, must rely on unsafe water for consumption which leads to the spread of infectious diseases.²⁶ In this regard, indigenous peoples in the Amazon claim that previously controlled diseases like measles and yellow fever have inexpli-

²² UNICEF, *Unless we act now*, p. 40

²³ UN Economic and Social Council, 2010, *Study on the extent to which climate change policies and projects adhere to the standards set forth in the United Nations Declaration on the Rights of Indigenous Peoples*. (E/C.19/2010/7), para. 11.

²⁴ ILO, 2017, Gender, Equality and Diversity Branch. *Indigenous peoples and climate change: from victims to change agents through decent work*. (Geneva: ILO), Section X.

²⁵ WHO, 2014, *Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s* (Geneva: WHO), pp. 80 and 89.

²⁶ WHO, *Quantitative risk assessment*, p. 22.

cably reappeared in the rainforest, and even indigenous women's menstrual cycles are beginning at an earlier age.²⁷

In 2005 a severe drought struck the Amazon rainforest. Experts link the drought directly with climate change and predict less rain, more frequent droughts, and higher temperatures. Regarding this event, Davi Kopenawa, leader and shaman of the Yanomami indigenous people in Brazil, said: *"The rains come late. The sun behaves in a strange way. The world is ill. The lungs of the sky are polluted. We know it is happening. You cannot go on destroying nature. We will all die, burned and drowned."*²⁸ Prominent scientists forecast that, unless action is taken immediately, 50 to 70 % of the Amazon rainforest will be transformed into savanna in less than 50 years.²⁹

In addition, the combination of an increasingly hot and dry temperatures caused by climate change causes forest fires to be more frequent in the region. Air pollution is predominantly a cause rather than a consequence of climate change. However, studies have shown that climate change can result in droughts which have been linked to an increasing number of wildfires, which often take place in forests. In turn, these wildfires can lead to health threatening levels of air pollution. Due to their small and still developing lungs, exposure to air pollutants through inhalation is particularly harsh for children. They inhale proportionately more polluted air than adults, as their breathing rate is twice as rapid and, generally, they spend more time outdoors engaging physical activity.³⁰

The year 2019 was one of the worst in record for forest fires in the Amazon, which caused many indigenous people to fall sick from inhaling smoke. A woman who is the leader of an indigenous group in the Amazonic region of Rondônia (Brazil) stated: *"The smoke from the fires made many people sick, suffering from strong headaches, eye irritation and respiratory problems. The smoke was terrible. Especially children and the elderly needed to be taken to regional hospitals, which were already full of people from the cities who had also been poisoned."*³¹

²⁷ Mongabay, "Impending Amazon tipping point puts biome and world at risk, scientists warn", 27 January 2020, <https://news.mongabay.com/2020/01/impending-amazon-tipping-point-puts-biome-and-world-at-risk-scientists-warn/>

²⁸ Survival International, "The most inconvenient truth of all. Climate change and Indigenous people" (2009), p. 3, https://assets.survivalinternational.org/documents/132/survival_climate_change_report_english.pdf

²⁹ Mongabay, "Impending Amazon tipping point puts biome and world at risk, scientists warn" (2020).

³⁰ UNICEF, *Unless we act now*, p. 44

³¹ Mongabay, "Green alert: How indigenous people are experiencing climate change in the Amazon", 27 May 2020, <https://news.mongabay.com/2020/05/green-alert-how-indigenous-have-been-experiencing-climate-change-in-the-amazon/>

Although droughts represent the main climate change related challenge currently affecting the Amazon, other consequences of global warming are likely to cause negative impacts as well. Floods and severe storms caused by climate change also translate into multiple hazards for the children living in extremely high flood occurrence zones. These natural disasters can cause immediate risks of death and injury to children, who are physically less able to survive drowning. Furthermore, like droughts, floods compromise safe water supplies (which increases the spread of communicable diseases) and often lead to displacement.³²

A report by the World Wildlife Foundation (WWF) on the state of the Amazon affirms that “local land-cover changes may increase discharge and cause flood events that happen faster and occur earlier in the year than normal”.³³ This means that these human led activities might cause indigenous communities to experience, depending on the season, extreme consequences in both directions: the lack of water, which causes food insecurity and fires; but also by floods, which represents a physical threat.

3 The Human Rights Systems

This chapter will identify those human rights norms which will make possible to the determine States’ obligations regarding the right to health of indigenous children.

The scope of analysis for this research is limited to the extension of the Amazon rainforest and, hence, to the nine national jurisdictions in which the Amazon is located. Therefore, this chapter will address relevant provisions in a number treaties within the UN and Inter-American systems of human rights, since both systems apply the Amazon States. How each specific treaty applies to each State will be additionally referred to.

The sources of international law³⁴ are listed in Article 38 (1) of the Statute of the International Court of Justice (ICJ), to which all of the 9 Amazon States are parties to. The sources are:

³² *Ibid*, p. 30.

³³ WWF, 2015, Macedo, M. and L. Castello, *State of the Amazon: Freshwater Connectivity and Ecosystem Health*, edited by D. Oliveira, C. C. Maretti and S. Charity. (Brasília, Brazil: WWF Living Amazon Initiative), p. 47.

³⁴ Anthea Roberts and Sandesh Sivakumaran, “The theory and reality of the sources of international law”, in *International Law*, 5th Edition, ed. Malcolm Evans (Oxford: Oxford University Press, 2018), pp. 89-90.

- a. *international conventions, whether general or particular, establishing rules expressly recognized by the contesting states;*
- b. *international custom, as evidence of a general practice accepted as law;*
- c. *the general principles of law recognized by civilized nations;*
- d. *[...] judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.*³⁵

Most of the provisions in this chapter belong to the first category in the list above, since they are treaties. As such, States have an obligation under international law to act accordingly with the norms therein. This is stated in Article 26 of the 1969 Vienna Convention on the Law of Treaties (VCLT): “*Pacta Sunt Servanda*”: *Every treaty in force is binding upon the parties to it and must be performed by them in good faith.*”³⁶

3.1 The right to health in the United Nations system of human rights

The right to health was expressly addressed within the UN System of Human Rights since its very beginnings. The 1948 Universal Declaration of Human Rights (UDHR) states in Article 25.1 that “*everyone has the right to a standard of living adequate for the health of himself and of his family, including food, clothing, housing and medical care and necessary social services.*”³⁷

The Declaration was signed by eight of the nine Amazon States, with the exception of Suriname (which did not join the UN until 1975). As a declaration, the UDHR is not legally binding, but its contents have been further developed in many international human rights treaties, both at the UN and the regional level. In addition, many of the Declaration’s provisions have been incorporated into customary international law, which makes it binding to all states. This has been confirmed by states in intergovernmental and diplomatic settings, in arguments submitted to judicial tribunals, by the actions of intergovernmental organizations, and in the writings of legal scholars.³⁸

Previously, it has been addressed some of the ways in which deforestation and climate change impact Amazon indigenous communities’ economic, social and cultural activities which, in

³⁵ United Nations, *Statute of the International Court of Justice*, 18 April 1946, Article 38 (1).

³⁶ United Nations, *Vienna Convention on the Law of Treaties*, 23 May 1969, Art. 26.

³⁷ United Nations, *The Universal Declaration of Human Rights*, 10 December 1948.

³⁸ Hurst Hannum, “The Status of the Universal Declaration of Human Rights in National and International Law”, *25 Ga. J. Int’l & Comp. L.* 287 (1996), p. 289.

turn, affect the right to health due to the interdependency with other second generation rights³⁹.

The notion of the right to health as deeply interconnected and determined by other rights has been further accompanied by the development in the United Nations human rights system. In this regard, this section will further examine those provisions regarding the right to health which impose duties on States as a result of deforestation and climate change. More concretely, the research will focus on those obligations applicable to indigenous children within some of the nine core international human rights treaties⁴⁰.

The nine countries where the Amazon rainforest is located have an almost unanimous rate of ratification of major human right treaties (each sub-section will specify the applicability of the treaties to each State). Nevertheless, the Amazon region (along with the rest of Latin America) remains the most socially unequal region of the world. Indigenous peoples are amongst the most affected groups by exclusion and poverty, which hampers development and the enjoyment of human rights.⁴¹

3.2 The right to the highest attainable standard of health

Some aspects regarding forests have great impact regarding the way in which they affect the right to health of indigenous children. However, these aspects are not very easy to link to the right to health due to the fact that their impact is rather indirect. Therefore, in order to establish this connection, it is necessary to address the concept of the right to the highest attainable standard of health.

The term was first articulated at the international level in 1946 in the Constitution of the World Health Organization (WHO). One paragraph in the Preamble declared as a basic principle: *“The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or*

³⁹ Economic, social and cultural rights are often referred as 2nd generation rights, while rights of civil and political nature are commonly called 1st generation rights.

⁴⁰ UN Office of the High Commissioner for Human Rights (OHCHR), *The Core International Human Rights Treaties*, (Geneva: UN, 2014).

⁴¹ OHCHR, “Human Rights Programme for Latin America and the Caribbean region (2008-2009)”, accessed 9 December 2020, <https://www.ohchr.org/EN/Countries/LACRegion/Pages/LACRegionProgramme0809.aspx>

*social condition.*⁴² Eventually, numerous legally binding international human rights treaties codified the right to the highest attainable standard of health.⁴³

3.2.1 International Covenant on Economic, Social and Cultural Rights (ICESCR)

All of the nine Amazon States have signed and ratified⁴⁴ the International Covenant on Economic, Social and Cultural Rights (ICESCR)⁴⁵ and thus, are obliged by the provisions therein. In its Article 12, the ICESCR recognizes the “right of everyone to the enjoyment of the highest attainable standard of physical and mental health”. Additionally, in order to “achieve the full realization of this right”, it urges States to take the necessary steps towards the healthy development of the child and the improvement of the environment.

The Committee on Economic, Social and Cultural Rights (CESCR), the body responsible for monitoring the ICESCR, has further elaborated in Article 12 in its *General Comment No. 14: The Right to the Highest Attainable Standard of Health*. The Committee referred to the “underlying determinants of health”, which include: food and nutrition, housing, access to safe and potable water and adequate sanitation, safe and healthy working conditions, and a healthy environment. Therefore, clarifying that the right to health embraces a wide range of socio-economic factors that promote conditions in which people can lead a healthy life⁴⁶, and it is not limited to its most common association to the access to health care and hospital facilities⁴⁷. This reinforced the idea of the right to health as closely interlinked with other second generation rights.

Climate change is affecting the Amazon rainforest and, hence, it is also having negative consequences on many indigenous groups’ main source of food, water and an important cultural element of their identity. Therefore, it can be affirmed that climate change effects are impacting the underlying determinants of health of this groups.

⁴² UN General Assembly, *Entry into force of the constitution of the World Health Organization*, (A/RES/131), 17 November 1947.

⁴³ UN Economic and Social Council, 2003, *Report of the Special Rapporteur on the Right of Everyone to the Enjoyment of Physical and Mental Health* (E/CN.4/2003/58), para. 10.

⁴⁴ OHCHR, “Status of Ratification”, accessed 9 January 2021, <https://indicators.ohchr.org>

⁴⁵ The Covenant was adopted by the United Nations General Assembly in its resolution 2200A (XXI) of 16 December 1966. It entered into force in 1976 and by 1 December 2007 had been ratified by 157 States.

⁴⁶ UN Committee on Economic, Social and Cultural Rights (CESCR), 2000, *General Comment No. 14: The Right to the Highest Attainable Standard of Health (Art. 12 of the Covenant)* (E/C.12/2000/4), para. 11.

⁴⁷ OHCHR, 2008 *Fact Sheet No. 31, The Right to Health*, p. 3.

In the Comment, the Committee also provides an explanation of the normative content of Article 12 of the Covenant. It signals that definition of the right to health can be found in Article 12 (1), while Article 12 (2) examples are non-exhaustive examples of States parties' obligations.⁴⁸

Furthermore, General Comment N° 14 states that Article 12 (2) (b), regarding the right to a healthy natural and workplace environments, includes an obligation to take preventive measures “to the exposure (...) to detrimental environmental conditions that directly or indirectly impact upon human health.”⁴⁹ Due to the fact that they are under aged, indigenous children should not be reached by this provision (although it is known that in many indigenous communities, children contribute daily with daily tasks in agriculture and farming). However, the threat that deforestation poses on indigenous communities' ability to find resources, as part of their economic activities, could affect their livelihoods; therefore, indirectly affecting the children who also depend on those resources to survive.

It has been previously mentioned the fact that droughts and floods caused by deforestation compromise safe water supplies and, in turn, this increases the spread of communicable diseases. As a result, failing to address this issue could entail a State violating the obligation under Article 12 (2) (c) of the ICESCR of parties to guarantee the right to “the prevention, treatment and control of epidemic, endemic, occupational and other diseases.”

General Comment No 14 also alluded to indigenous communities. The CESCR noted that in these groups, the health of the individual is often linked to the health of the society as a collective dimension. Therefore, the Committee considers detrimental for the health of indigenous peoples development-related activities that lead to their displacement against their will from their traditional territories and environment. This denies them their sources of nutrition and breaking their symbiotic relationship with their land.⁵⁰ In this respect, it is not hard to link this CESCR's concern with the fact that, as a result of the increasing temperatures, rainforest fires in the Amazon threatening indigenous peoples with displacement from their original settlements.⁵¹

Children rights are expressly addressed in Article 12 (2) (a), concerning “*the healthy development of the child*”. The CESCR did not elaborate specifically on children in General Com-

⁴⁸ CESCR, *General Comment No 14*, para. 7

⁴⁹ *Ibid*, para. 15.

⁵⁰ *Ibid*, para. 27.

⁵¹ Greenmatters, “The Amazon Fires Are Destroying Indigenous People's Homes”, 18 August 2020, <https://www.greenmatters.com/p/amazon-rainforest-fires-indigenous-tribes>

ment No 14, most likely leaving this task to the Committee on the Rights of the Child, which will be analyzed more in depth in the following section. Nevertheless, it can be inferred that not addressing climate change effects in the Amazon would necessarily imply not complying with this provision; since effects which climate change have more serious consequences on children (as evidenced in Chapter 2).

3.2.2 Convention on the Right of the Child (CRC)

The 1989 Convention on the Rights of the Child (CRC) is also binding for all of the nine Amazon States, since they all have signed and ratified the treaty.⁵² The CRC defines a child as “every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier”.⁵³ National legislation in a majority of countries in the world, including those of the nine Amazon States, uphold the 18 years of age as the threshold of adulthood.

In 2013, just like the CESCR had done 12 years earlier with the ICESCR, the Committee on the Rights of the Child (CommRC) elaborated General Comment N° 15 illustrating the content of the concept “the highest attainable standard of health” in the Convention on the Rights of the Child (CRC). In this case, their analysis was focused on Article 24 of that instrument.

Comparably with the CESCR, this body also perceives the right to health in the CRC as an inclusive and interdependent right. In this regard, the CommRC states that “a holistic approach to health places the realization of children’s right to health within the broader framework of international human rights obligations”⁵⁴.

Reaffirming the interdependence of rights, the Committee also added that “the realization of the right to health is indispensable for the enjoyment of all the other rights in the CRC”⁵⁵ and that “achieving children’s right to health is dependent on the realization of many other rights outlined in the Convention”⁵⁶. It also recalls that in the Constitution of the WHO States have

⁵² UN OHCHR, Status of Ratification.

⁵³ UN, *Convention on the Rights of the Child*, 20 November 1989, Art. 1.

⁵⁴ UN Committee on the Rights of the Child (CRC), 2013, *General comment No. 15 on the right of the child to the enjoyment of the highest attainable standard of health (Art. 24) (CRC/C/GC/15)*, para. 2.

⁵⁵ *Ibid.*, para. 7.

⁵⁶ *Ibid.*

agreed to health as being “a state of complete physical, mental and social well-being, and not merely the absence of a disease or infirmity”.⁵⁷

However, towards the end of their analysis, the CommRC’s approach is more comprehensive than the one provided by the CESRC. Probably, due to the fact that it was published more recently, the CommCR’s general comment explicitly acknowledges the impact of climate change in children’s health and their cultural practices⁵⁸. This last aspect being of great importance for children belonging to indigenous communities.

Moreover, Article 2 of the Convention is especially important for indigenous children because it sets the obligation for States to take all appropriate measures to ensure that the child is protected against all forms of discrimination. The CommRC also takes special consideration on these disadvantaged groups of children and recommends States to identify and address these vulnerabilities when promoting regulation and policies towards the fulfillment of their right to health.⁵⁹ Since there exists vast evidence which accounts to the fact that native groups are considerably more affected than others by forests degradation, it could be understood as a violation of this provision if State parties did not act towards protecting forests.

The right to health of the child is, of course, deeply related to the right to life, which it is established in Article 6 of the CRC which highlights the obligation of State parties to ensure to the maximum extent possible the survival, growth and development of the child, including the physical, mental, moral, spiritual and social dimensions of their development.⁶⁰

Among the key determinants for the realization of children’s health are nutrition and development, which also depend on the realization of the mother’s right to health⁶¹. The social vulnerability of indigenous women as a consequence of climate change pose a threat to the mother’s health and, thereupon, on her child. On these grounds, it is important to mention that under Article 24, paragraph 2 (a) States parties to the CRC have an obligation to reduce infant and child mortality.

⁵⁷ *Ibid*, para. 4.

⁵⁸ *Ibid*, para. 5.

⁵⁹ *Ibid*, para. 11.

⁶⁰ *Ibid*, para. 16.

⁶¹ UN Committee on the Elimination of Discrimination against Women (CEDAW), 1999, *General Recommendation No. 24 on women and health, Official Records of the General Assembly, Fifty-fourth Session, Supplement No. 38 (A/54/38/Rev.1)*, chap. I, sect. A.

But perhaps, the most relevant obligation concerning deforestation, climate change and the right to health of indigenous children is contained in paragraph 2 (c) of Article 24. It incorporates the obligation of States to take appropriate measures:

“[...]to combat disease and malnutrition, including within the framework of primary health care, through, inter alia, the application of readily available technology and through the provision of adequate nutritious foods and clean drinking-water, taking into consideration the dangers and risks of environmental pollution.”

Regarding this last Article, the CommRC asserts that States should provide access for children to nutritionally adequate and culturally appropriate and safe food⁶², as well as to clean drinking water⁶³. In indigenous communities, this two elements depend greatly of the condition of the surrounding natural environment, including forests.

Deforestation caused by private actors would also require State intervention. As the body explains, States’ obligation goes further and they must additionally regulate and monitor the environmental impact of business activities that may compromise children’s right to health.⁶⁴ Furthermore, the Committee urges parties to address climate change in their interventions as it is “one of the biggest threats to children’s health and exacerbates health disparities”.⁶⁵

The special vulnerability of indigenous children’s health has additionally been addressed by the CommCR in General Comment No 11: “Indigenous children and their rights under the Convention”:

“The Committee urges States parties to take special measures to ensure that indigenous children are not discriminated against enjoying the highest attainable standard of health. The Committee is concerned over the high rates of mortality among indigenous children and notes that States parties have a positive duty to ensure that indigenous children have equal access to health services and to combat malnutrition as well as infant, child and maternal mortality.”⁶⁶

⁶² CRC, *General comment No. 15 (2013) on the right of the child to the enjoyment of the highest attainable standard of health (art. 24)*, para. 43

⁶³ *Ibid*, para 48.

⁶⁴ *Ibid*, para 49.

⁶⁵ *Ibid*, para 48,

⁶⁶ CRC, *General comment No. 11 (2009): Indigenous children and their rights under the Convention*, para. 50.

3.2.2.1 *Communication to the Committee on the Rights of the Child in the case of Sacchi et al. vs. Argentina, et al.*

Since the adoption of a Protocol on a communications procedure⁶⁷ in 2011, the CommRC allows individual children to submit individual complaints regarding specific violations to their rights under the CRC.

This was the case in 2019, when 16 children from 12 different countries, which included climate activist Greta Thunberg, presented a petition against five countries (Argentina, Brazil, France, Germany and Turkey) as a result of these States ratification of the Protocol on a communications procedure.

Since the petitioners backgrounds are (probably intentionally) so diverse, their arguments regarding the effects of climate change are quite overarching. It is therefore, no surprise that the Communication contains numerous elements mentioned in this research. These include the provisions regarding the right to health, the threats to the cultural practices of indigenous communities⁶⁸ and assertions detailing how wildfires caused by global warming have worsened the petitioners' health (*e.g.* as a result of smoke and a deteriorating asthma) and livelihoods.⁶⁹

In addition, the petitioners underline the obligations under Paris Agreement (see Chapter 4.2.1), particularly those regarding the respondent's commitments to reduce emissions. Brazil is specially targeted due to recent increase of deforestation and record rainforest loss in the Amazon.⁷⁰ All of these arguments are repeatedly reinforced by the scientific evidence provided in the IPCC reports.

3.2.3 Indigenous peoples treaties

International law does not provide a singularly authoritative definition of indigenous peoples.⁷¹ Nonetheless, there exist certain criteria that help define these groups. A study form

⁶⁷ Optional Protocol to the Convention on the Rights of the Child on a communication procedure. Signed: 19 December 2011. Into force: 14 April 2014.

⁶⁸ The right to culture is protected under Article 30 of the CRC.

⁶⁹ United Nations, *Communication to the Committee on the Rights of the Child in the case of Sacchi et al. vs. Argentina, et al.*, 23 September 2019, paras. 102-106.

⁷⁰ *Ibid*, paras. 220-221.

⁷¹ OHCHR, 2013 *Fact Sheet No. 9, Rev. 2, Indigenous Peoples and the United Nations Human Rights System*, p. 2.

1987 by José R. Martínez Cobo⁷² highlighted that some typical characteristics of indigenous populations were: “historical continuity with pre-invasion and/or pre-colonial societies that developed on their territories; distinctiveness; non-dominance; and a determination to preserve, develop and transmit to future generations their ancestral territories and identity as peoples in accordance with their own cultural patterns, social institutions and legal system”

The United Nations Permanent Forum on Indigenous People has additionally indicated that indigenous peoples also have a strong link to territories and surrounding natural resources; distinct social, economic or political systems; and distinct language, culture and beliefs.⁷³ This is an important remark considering the link between health and the land, and its resources. The notion has been reinforced by the fact that other treaties and regional jurisprudence have also embraced this view.

The 1989 International Labor Organization (ILO) Convention N° 169⁷⁴, also referred as the Indigenous and Tribal Peoples Convention, has been ratified by six of the nice Amazon states. The exceptions are Guyana, Suriname and French Guiana (since France is not party to the Convention). The highest attainable standard of physical and mental health is also guaranteed in this instrument⁷⁵. It must be noted that, even when this treaty is not part of the core UN human rights treaties, ILO N° 169 is legally binding.⁷⁶

As acknowledged by the CESCR’s General Comment N°14, working conditions are among the underlying determinants of health. It has also been previously established the indirect consequences that a healthy working environment has on children’s enjoyment of health living in those communities. Once again, the working conditions are of course applied to the adults providing food and resources for children.

In this regard, ILO N°169 addresses indigenous people’s working conditions in Article 22.3, where it is stated that the economic environment, social and cultural conditions and practical needs of the peoples concerned must be taking into consideration by States when applying work training programmes⁷⁷. Forests could also be interpreted to be protected under Article

⁷² UN Special Rapporteur of the Sub-Commission on Prevention of Discrimination and Protection of Minorities.

⁷³ OHCHR, *Indigenous Peoples and the United Nations Human Rights System*, p. 2

⁷⁴ Earlier ILO Convention N° 107, called “Indigenous and Tribal Populations”, from 1957 was automatically denounced by most Latin American countries as a direct consequence of the ratification of the more up-to-date ILO N° 169.

⁷⁵ International Labour Organization (ILO), Convention N°169, *Indigenous and Tribal Peoples Convention*, 27 June 1989, Art. 25 (1).

⁷⁶ Accordingly with ICJ Statute, Art. 38 (1) (a).

⁷⁷ ILO, Convention N°169, art. 22 (3).

23.1, as they are one of indigenous peoples' main source of food and, hence, a key factor to indigenous children's nutrition. The provision indicates that:

*"(...) community-based industries, and subsistence economy and traditional activities of the peoples concerned, such as hunting, fishing, trapping and gathering, shall be recognised as important factors in the maintenance of their cultures and in their economic self-reliance and development. Governments shall, with the participation of these people and whenever appropriate, ensure that these activities are strengthened and promoted."*⁷⁸

At the time of the adoption of the United Nations Declaration on the Right of Indigenous Peoples (UNDRIP)⁷⁹ by the United Nations General Assembly in 2007, all of the Amazon States voted in favor. The only exception was Colombia, who abstained, but later endorsed the Declaration.⁸⁰

Although the UNDRIP is not binding, it can be of great utility to determine a customary rule, which, as such, would have binding status. Both state practice and *opinio juris* (the belief of a determined state practice to be followed out of a sense of legal obligation) are elements of custom. Being considered a "soft law instrument, due to its non-binding status, the UNDRIP could help determine a State's *opinio juris*."⁸¹

Regarding the right to health and indigenous children, Article 21 of the UNDRIP recognizes that:

"[...] 1. Indigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, (...) health (...).

2. States shall take effective measures and, where appropriate, special measures to ensure continuing improvement of their economic and social conditions. Particular attention shall be paid to the rights and special needs of indigenous elders, women, youth, children and persons with disabilities. [...]"

⁷⁸ *Ibid*, Art. 23 (1).

⁷⁹ The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) was adopted by the General Assembly on 13 September 2007.

⁸⁰ UN Human Rights Council, "Colombia's support for UN Declaration on Indigenous Peoples welcomed", 24 April 2009, <https://www.unhcr.org/news/briefing/2009/4/49f1bc356/colombias-support-un-declaration-indigenous-people-welcomed.html>

⁸¹ Roberts and Sivakumaran (2018), p. 92.

Moreover, Article 23 underscores that indigenous peoples have the right to be actively involved in developing and determining programmes in a wide range of factors affecting them, including health. The importance given to this certain degree of autonomy of indigenous groups to manage their natural resources is reinforced by the provisions in the subsequent article. There it is asserted that they have the right to maintain their health practices, which include conserving their vital medicinal plants, animals and minerals.⁸²

However, the second paragraph of Article 24 in the UNDRIP states, equivalently to the ICESCR and the CRC, that indigenous individuals have the right to the highest attainable standard of physical and mental health. This provision further establishes the obligation for States to take the necessary steps to achieve the full realization of this right.⁸³

3.2.4 The right to health and International Environmental Law

The early conception established in the Universal Declaration of Human Rights (UDHR)⁸⁴, and the following developments in the UN human rights treaties, suggest that the right to health is a broad concept and there exists evident and inevitable interlinkages with other human rights. Moreover, when the right to health is affected due to deforestation and climate change, provisions in international environmental law should also be considered.

The core of this research lays in how the right to health is affected as a result of deforestation and climate change. Therefore, it is appropriate to address those provisions under international environmental law which refer to the right to health. Although there are other binding international environmental law instruments, the following references belong to two diplomatic conference declarations that, as such, are not formally binding.

The first international conference on the human environment, the 1972 Stockholm Conference established one of the first linkages between environmental protection, human rights and health. During the concluding session, it was proclaimed that:

Man is both creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth... Both aspects of man's environment, the natural and the man-made, are essen-

⁸² UNDRIP, art. 24.

⁸³ *Ibid.*

⁸⁴ See Chapter 3.1.

*tial to his well-being and to the enjoyment of basic human rights even the right to life itself.*⁸⁵

This notion was also established in Principle 1 of the Stockholm Declaration, which states that:

*“Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being.”*⁸⁶

Under the auspices of the WHO, Professor Dinah Shelton⁸⁷ has elaborated on how these correlation between human rights and the environment developed since Stockholm.⁸⁸ In her document she identifies three rights-based approaches⁸⁹:

A first, which understands environmental protection as a pre-condition to the enjoyment of internationally-guaranteed human rights, especially the right to life and health. This is probably the closest to the one made in the Stockholm Declaration and it considers that “human rights cannot be secured in a degraded or polluted environment. The fundamental right of life is threatened by soil degradation and deforestation (...)”⁹⁰

The second-rights based-approach can be identified in the 1992 Rio Declaration on Environment and Development is the one which views environmental protection as an essential element of human rights. This view links human rights and the protection of the environment mainly in procedural terms. Principle 10 of the Rio Declaration⁹¹ states that “environmental issues are best handled with participation of all concerned citizens, at the relevant level”. Furthermore, it emphasized the importance of access to information, public participation and access to effective and administrative proceedings.

⁸⁵ United Nations, *Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration)*, 16 June 1972.

⁸⁶ *Ibid.*

⁸⁷ Professor of Law, Notre Dame London Law Centre, London.

⁸⁸ WHO, 2002, *A Background Paper for the World Health Organization, Health and Human Rights Working Paper Series No 1.*

⁸⁹ UNICEF defines a right-based approach as: “*a conceptual framework for the process of human development that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights*”.

⁹⁰ UNEP, Statement by Klaus Toepfer, Executive Director of the United Nations Environment Programme, at the 57th Session of the Commission on Human Rights in 2004.

⁹¹ Declaration of the United Nations Conference on Environment and Development (Rio Declaration), 22 December 1992.

And finally, a third approach makes reference a new independent substantive human right: the right to a safe and healthy environment. This notion understands the links between environment, human right and health as indivisible and inseparable. Examples of this approach are currently found mainly in national and regional law, such as the Protocol of San Salvador to American Convention of Human rights, which this analysis will further refer to.⁹²

3.2.4.1 *The right to health in International Climate Change Law*

The duty for States to actively protect health from climate change consequences was expressed (although not with clearly binding wording) early in the 1992 UNCCC:

“Adverse effects of climate change” means changes in the physical environment or biota resulting from climate change which have significant deleterious effects... on human health and welfare⁹³ ... The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects.⁹⁴

Furthermore, in 2016, more than a decade after Professor Sheldon’s work was finished, the Paris Agreement entered into force within the United Nations Framework Convention on Climate Change (UNFCCC). This treaty went further and explicitly recognized the nexus between human rights and climate change. The wording in the following paragraph of the Paris Agreement’s Preamble provides unequivocal evidence of the current awareness of the linkage between climate change and the right to health of indigenous peoples, including children:

“(...) Acknowledging that climate change is a common concern of humankind, Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity (...)⁹⁵”

⁹² See Chapter 3.3.

⁹³ UNFCCC, Art. 1 (1).

⁹⁴ *Ibid*, Art. 3 (3).

⁹⁵ Paris Agreement, Preamble.

The content of the preamble is integral to this Agreement and must be considered when interpreting any provision.⁹⁶ The preamble cannot create new legal obligations in itself yet, this remains of little significance as the preamble refers to existing human rights obligations that Parties have already entered into. Therefore, the preamble is important as it sets the method of interpretation for the entire Agreement so as to ensure harmonization of international implementation.

3.3 The right to health in the Inter-American system of human rights

This section will address the obligations of the Amazon States under the regional scope. In this regard, the analysis will focus on the provisions established in the 1948 American Convention of Human Rights (ACHR)⁹⁷ and the 1969 Additional Protocol to the ACHR on Human Rights in the Area of Economic, Social and Cultural Rights (“Protocol of San Salvador”).

Both instruments were adopted within framework of the Organization of American States (OAS) and their compliance is overseen by the Inter-American Commission on Human Rights (IACHR) and the Inter-American Court of Human Rights (IACtHR). The Amazon States are all parties to both the ACHR and the San Salvador Protocol with the exceptions of Guyana, French Guinea (France is not party), and Venezuela (who denounced the Convention in 2012).

3.3.1 Legal status of Indigenous Children in the Inter-American System

3.3.1.1 Definition of children under the Inter-American System

Although there exist multiple references to children rights, there is no standard definition of the child within the Inter-American System. Nevertheless, the IACtHR and the IACHR have resolved that the definition of the child that must be applied is the one provided in Article 1 of the CRC.⁹⁸

⁹⁶ VCLT (1969), Art. 3(1): “*A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.*”

⁹⁷ American Convention on Human Rights, Organization of American States, 22 November 1969.

⁹⁸ IACHR, “The Rights of the Child in the Inter-American Human Rights System”, Second Edition, Chapter 1, para. 32, accessed 11 November 2020, http://www.cidh.oas.org/countryrep/Infancia2eng/Infancia2Cap1.eng.htm#_ftnref13

In this regard, the IACtHR affirmed in its Advisory Opinion 17 on the Legal Status of the Human Rights of the Child that: “(...) *taking into account international norms and the criterion upheld by the Court in other cases, “child” refers to any person who has not yet turned 18 years of age*”; and repeated this definition in the case of *Bulacio* against Argentina.⁹⁹ In addition, the Court specified in Advisory Opinion 17 that the term child covers boys, girls and adolescents.¹⁰⁰

3.3.1.2 *Indigenous Peoples legal personality under the Inter-American System*

Article 3 of the ACHR states that “every person has a right to recognition as a person before the law”. This means that children are, of course, included in this category. However, this recognition is especially important for an indigenous community due to the fact that it allows them to bring legal or administrative actions before State domestic courts in the name of that group.¹⁰¹

In the *Yakye Axa Indigenous Community v. Paraguay* case, the IACtHR established that “the juridical personality (...) is the legal mechanism that confers on [indigenous peoples] the necessary status to enjoy certain fundamental rights, as for example the rights to communal property and to demand protection each time they are vulnerable.”¹⁰² Precisely this example also addresses an important factor, such as communal property, being land a crucial underlying determinant of health for indigenous communities.

Moreover, in 2016 the OAS adopted the American Declaration on the Rights of Indigenous Peoples (ADRIP). Although the Declaration is not legally binding, it sets the rules for the treatment of indigenous peoples and individuals; and in many provisions, the Declaration recalls customary international law elements which are binding. According to the Indian Law Resource Center, this instrument can be used to guide countries’ laws, policies, and practices focused on indigenous peoples and to interpret other relevant international laws.¹⁰³

⁹⁹ IACtHR, *Case of Bulacio v. Argentina*. Judgment of September 18, 2003. Series C No. 100, para. 133.

¹⁰⁰ IACtHR, *Juridical Condition and Human Rights of the Child*. Advisory Opinion OC-17/02 of August 28, 2002. Series A No. 17, note 45.

¹⁰¹ Jo M. Pasqualucci, “The Evolution of International Indigenous Rights in the Inter-American Human Rights System”, *Human Rights Law Review*, Volume 6, Issue 2, p. 294 (2006), <https://doi.org/10.1093/hrlr/ngl004>

¹⁰² *Ibid*, p. 294-295.

¹⁰³ Indian Law Resource Center, 2017, *The American Declaration on the Rights of Indigenous People: Background Materials and Strategies for Implementation*, (Washington DC: ILRC) p. 1.

The ADRIP establishes that self-identification as indigenous peoples is a fundamental criterion for determining to whom the Declaration applies. In this respect, Article I (2) sets the obligation for States to “*respect the right to such self-identification as indigenous, whether individually or collectively, in keeping with the practices and institutions of each indigenous people.*”¹⁰⁴

More specifically, regarding the juridical personality of these groups, the ADRIP determines that: “*States shall recognize fully the juridical personality of indigenous peoples, respecting indigenous forms of organization and promoting the full exercise of the rights recognized in this Declaration.*”¹⁰⁵

3.3.2 The right to health of indigenous children in the Inter-American system

Multiple references to the right to health are made in the different instruments which constitute the Inter-American System of Human Rights. Among them, the American Declaration on the Rights and Duties of Man, which acts a framework for the entire system, and constitutes customary law (this has a particular importance for the case of those countries who have still not ratified the ACHR), states in its Article XI that:

*“Every person has the right to the preservation of his health through sanitary and social measures relating to food, clothing, housing and medical care, to the extent permitted by public and community resources.”*¹⁰⁶

The American States have further codified the right to health in the Protocol of San Salvador. Article 10 of the Protocol presents provisions, among which there can be found some relevant to indigenous children’s health in relation to the protection of forests:

The right to the highest attainable standard of health is contained in Article 10.1: “*Everyone shall have the right to health, understood to mean the enjoyment of the highest level of physical, mental and social well-being*”. Subsequently, Article 10.2 alluded to the responsibility of States to adopt measures to ensure two that some conditions are met. Two of these conditions are closely related to the previously mentioned effects of forest degradation on health, and the

¹⁰⁴ Organization of American States (OAS), *American Declaration on the Rights of Indigenous Peoples (ADRIP)*, 15 June 2016, art. I (2).

¹⁰⁵ OAS, ADRIP, Art. IX.

¹⁰⁶ Inter-American Commission on Human Rights (IACHR), *American Declaration of the Rights and Duties of Man*, 2 May 1948, Art. XI.

precarious social situation of indigenous children: “the prevention and treatment of endemic, occupational and other diseases¹⁰⁷, and the “satisfaction of the health needs of the highest risk groups and of those whose poverty makes them the most vulnerable”.¹⁰⁸

3.3.2.1 *The Progressive Realization of the Right to Health in the Inter-American System*

The progressive realization of the right to health is both a general obligation of States under the ICESCR and part of the obligation to fulfil¹⁰⁹ human rights. The ACHR contains this duty in Article 26, which is the only one in the Convention conforming the chapter o economic, social and cultural rights, and calls upon State parties to “to adopt measures, both internally and through international cooperation (...) with a view to achieving progressively, by legislation or other appropriate means, the full realization of the rights (...)”.

The Protocol of San Salvador is the main instrument on economic, social and cultural rights in the Inter-American System. Similarly to the ICESCR, the Protocol sets the obligation to adopt measures for the purpose of achieving progressively the full realization of rights, while acknowledging the different resources available among the State parties.¹¹⁰

To this end, under Article 19, the Protocol also sets a commitment for States Parties to submit periodic reports on the progressive measures they have taken to ensure due respect for the rights established in the instrument. This article has special importance since it establishes an indicator for the rights protected in the instrument. Human rights indicators are data related to certain institutional or normative developments that are related to human right standards.¹¹¹ On this regard, Paul Hunt, a former UN Special Rapporteur on the right to health, affirms that an indicator relating to the right to health “derives from, reflects and is designed to monitor the realization of specific right to health norms, usually with a view to holding a duty bearer [in this case, the States Parties to the Protocol of San Salvador] to account”¹¹²

¹⁰⁷ Organization of American States (OAS), *Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights ("Protocol of San Salvador")*, 16 November 1999, A-52, Art 10 (2) (d).

¹⁰⁸ *Ibid*, Art. 10 (2) (f).

¹⁰⁹ See Chapter 4.2.

¹¹⁰ Protocol of San Salvador, Art.1.

¹¹¹ Olivier De Schutter, *International Human Rights Law*. (Cambridge: Cambridge University Press, 2014) p. 544.

¹¹² De Schutter, *International Human Rights Law*, p. 445.

3.3.2.2 Underlying determinants of Health in the Inter-American System

The Protocol of San Salvador additionally guarantees the enjoyment of both the right to food and the right to culture. Which constitute two important underlying determinants in the fulfilment of the right to health mentioned by the CESCR in its General Comment N° 14.

Article 12 of the Protocol states that “[e]veryone has the right to adequate nutrition which guarantees the possibility of enjoying the highest level of physical, emotional and intellectual development”¹¹³ and that “States Parties (...) agree to promote greater international cooperation in support of the relevant national policies.”¹¹⁴ Therefore, it can be argued that the protection of forests is once again comprehended by the Inter-American system on the basis that they are a key source of food for indigenous communities.

The Protocol further establishes the right to the benefits of culture. *Inter alia*, it guarantees the right of everyone to take part in the cultural life of their community.¹¹⁵ A report from the Food and Agricultural Organization of the United Nations (FAO) affirmed that “the local and indigenous peoples relate to the forests socially, economically, politically and spiritually. If the forest is destroyed, the cultures of the local people die. Local people cannot be isolated from the forests because their isolation from the forests is a critical step, not only towards the destruction of their identity and survival as peoples, but also towards the destruction of the forest itself.”¹¹⁶

Hence, forests are not only a fundamental element in indigenous peoples’ health but, in turn, forests preservation rely deeply on their management by indigenous communities. Concerning specifically the Amazon forest, a very recent study¹¹⁷ showed that in territories where indigenous peoples have full property rights there exists a significant decrease in deforestation.

¹¹³ Protocol of San Salvador, art. 12 (1).

¹¹⁴ *Ibid*, art. 12 (2).

¹¹⁵ *Ibid*, art. 14 (1).

¹¹⁶ Food and Agriculture Organization (FAO), Saway, Victorino L., “Indigenous Cultures and Forest Management”, accessed 14 November 2020, <http://www.fao.org/3/XII/0841-A2.htm#fn1>

¹¹⁷ Kathryn Baragwanath, Ella Bayi. “Collective property rights reduce deforestation in the Brazilian Amazon”, *Proceedings of the National Academy of Sciences*, 117 (34) 20495 20502 (2020), <https://doi.org/10.1073/pnas.1917874117>

The right to property is embodied in Article 21 of the ACHR and it comprehends, regarding indigenous peoples, the communal ownership of their lands. In this respect, in the 2001 case of the Mayagna (Sumo) Awas Tingni Community v. Nicaragua, the IACtHR affirmed that:

*Among indigenous [people] there is a community tradition that relates to a communal form of collective ownership of the land, in the sense that its possession is not centered on an individual, but rather on the group and its community. Indigenous people, due to their very existence, have the right to live freely on their own territories; the close relationship that indigenous people have with the land should be recognized and understood as the very foundation of their cultures, their spiritual life, their integrity, and their economic survival.*¹¹⁸

The interlinkage between rights is also present in here when referring to the underlying determinants of the right to health in the Inter-American system. This was exemplified by the Court in the merits of the 2005 case of the *Yakye Axa Indigenous Community v. Paraguay*. In this case, the Court explained that the right to property protects not only the connection of the indigenous communities to their territories, but also “the natural resources these territories contain that are connected to their culture, as well as the intangible elements derived from them.”¹¹⁹

3.3.3 The right to a healthy environment

Another aspect which is necessary to analyze in order to determine States obligations regarding the right to health is the right to a healthy environment. In this regard, the CESCR affirmed in its general comment No. 14 (2000), that “*the right to health embraces a wide range of socioeconomic factors that promote conditions in which people can lead a healthy life, and extends to the underlying determinants of health, such as... a healthy environment*”¹²⁰.

Similarly, in his first report in 2012, John H. Knox, the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment; emphasized that human rights and the environment are interdependent. A safe, clean, healthy and sustainable environment is necessary for the full enjoyment of a vast range

¹¹⁸ IACtHR, *Case of the Mayagna (Sumo) Awas Tingni Community v. Nicaragua*, paras. 148, 149 and 151.

¹¹⁹ IACtHR, *Case of the Yakye Axa Indigenous Community v. Paraguay*, para. 137.

¹²⁰ CESCR, General Comment No. 14 (2000), para. 4.

of human rights, including the rights to life, health, food, water and development.¹²¹ Therefore, addressing the right to a healthy environment is also important while analyzing the right to health.

For the Amazon States, the right to a healthy environment has a special importance regionally. South America has proven to have some of the most progressive legislations concerning the environment, both in the national and regional sphere. Some Amazon States have recently shown that there exists a growing tendency to acknowledge nature as an entity of with rights of its own. This is, for example, enshrined in the recent constitutions of Ecuador¹²² and Bolivia¹²³, as well as in a 2017 ruling by the Colombian Supreme Court regarding the Amazon forest.¹²⁴ Shortly after that domestic ruling, in Advisory Opinion 23/17¹²⁵ coincidentally requested by Colombia, the IACtHR took a similar stand to the one by that country's highest court and recognized that forests, *inter alia*, constitute protected juridical interests in themselves.¹²⁶

In line with this advanced legislation and jurisprudence, the Inter-American system, under the Protocol of San Salvador, constitutes the right to a healthy environment as a right of its own guaranteed in Article 11. This provision states that “everyone shall have the right to live in a healthy environment”¹²⁷ and that “parties shall promote the protection, preservation, and improvement of the environment”¹²⁸.

3.3.3.1 IACtHR: Advisory Opinion 23/17 (requested by Colombia)

It was also in Advisory Opinion 23/17 (also referred as “on the environment and human rights”) that the IACtHR had one of the first opportunities to further explain the States’ obligations emerging from the need to protect the environment under the American Convention.¹²⁹ The interrelationship between human rights and the environment were the basis of the Court’s opinion. While addressing this issue, the judges did not limit themselves to observe

¹²¹ UN Human Rights Council, 2012, *Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox (A/HRC/22/43)*.

¹²² Constitution of the Republic of Ecuador (2008), art. 71

¹²³ Political Constitution of the Plurinational State of Bolivia (2009), Preamble.

¹²⁴ See sub-section 4.3.1.2.

¹²⁵ IACtHR, Advisory Opinion (OC-23/17) of November 15, 2017 requested by the Republic of Colombia.

¹²⁶ *Ibid*, para. 62-63.

¹²⁷ ACHR, Art. 11 (1).

¹²⁸ *Ibid*, Art. 11 (2).

¹²⁹ Environmental Law Alliance Worldwide (ELAW), “Summary of Advisory Opinion (OC-23/17)”, accessed 16 November 2020, https://www.elaw.org/IACHR_CO2317

documents of the Organization of American States; but additionally made reference to other regional human rights bodies (the European Court of Human Rights and the African Commission on Human and Peoples Rights) and the UN Special Rapporteur on human rights and the environment.¹³⁰

The Court affirmed that the right to a healthy environment is a fundamental human right. The judges added that degradation of the environment, including the negative effects of climate change, affects the enjoyment not only of the right to a healthy environment, but other human rights¹³¹ (such as health). Moreover, it was explained that the protection of the environment is, in fact, critical for the enjoyment of other human rights:

“This Court has recognized the existence of an undeniable relationship between the protection of the environment and the fulfillment of other human rights, in that environmental degradation and the adverse effects of climate change affect the effective enjoyment of human rights. Likewise, the preamble of the [Protocol of San Salvador] highlights the close relationship between the validity of economic, social and cultural rights - which include the right to a healthy environment - and that of civil and political rights, and indicates that the different categories of rights constitute an indissoluble whole that is based in the recognition of human dignity, for which there is permanent protection and advancement with the objective of achieving their full validity, without ever being able to justify the violation of some [rights] for the sake of fulfilling others (...)”¹³²

The Court, therefore, reaffirmed the principle of human rights interference and indivisibility as done in the case of *Lagos del Campo vs. Peru*¹³³, where it used the principle to adjudicate on socio-economic rights).¹³⁴

When addressing the climate change impacts and the enjoyment of human rights in the regional context, the IACtHR relied on the positions of the Inter-American Commission and the General Assembly of the OAS. The latter having recognized “the close relationship between

¹³⁰ *Ibid.*

¹³¹ *Ibid.*

¹³² Advisory Opinion (OC-23/17), para. 47

¹³³ IACtHR, *Case of Lagos del Campo vs. Peru* (2017), para. 141.

¹³⁴ EJIL: Talk! Giovanni Vega-Barbosa and Lorraine Abogaye, “Human Rights and the Protection of the Environment: The Advisory Opinion of the Inter-American Court of Human Rights”, 16 February 2018, <https://www.ejiltalk.org/human-rights-and-the-protection-of-the-environment-the-advisory-opinion-of-the-inter-american-court-of-human-rights/>

the protection of the environment and human rights” and also emphasizing that “climate change produces adverse effects on the enjoyment of human rights”¹³⁵

In the same manner, the Court cited the UN Human Rights Council’s affirmation that “all human rights are vulnerable to environmental degradation, in that the full enjoyment of all human rights depends on a supportive environment”¹³⁶ and that “climate change has very diverse repercussions on the effective enjoyment of human rights, like the right to (...) health”¹³⁷.

Furthermore, the fact that Court explained that the human right to a healthy environment entails both an individual and a collective right has a significant meaning for indigenous communities. While doing so, the Court mentioned that the right to a healthy environment is also owed to future generations:

*“The human right to a healthy environment has been understood as a right with individual as well as collective connotations. In its collective dimension, the right to a healthy environment constitutes a universal interest, which is owed to present as well as future generations. Having said that, the right to a healthy environment also has an individual dimension, in that its violation can have direct or indirect repercussions on people due to its nexus with other rights, such as the right to health [...] Environmental degradation can cause irreparable harms to human beings, for which reason a healthy environment is a fundamental right for the existence of humanity.”*¹³⁸

This approach by the IACtHR suggests, in a rather explicit way, that a claim regarding the right to health of indigenous children would be supported by the precedent established by this Advisory Opinion.

Moreover, one of the most consequential aspects of the Opinion is that, until then, the right to a healthy environment recognized in Article 11 of the Protocol of San Salvador was not enforceable through individual petitions. The Court established the grounds for this by considering that the right to a healthy environment is in fact enforceable under the aforementioned Article 26 of the ACHR on progressive development.¹³⁹ As a result, this new justiciability standard appears to have enabled new types of claims in the Inter-American system.

¹³⁵ *Ibid*, para 49.

¹³⁶ *Ibid*, para 54.

¹³⁷ *Ibid*.

¹³⁸ *Ibid*, para 55.

¹³⁹ *Ibid*.

3.3.3.2 IACtHR: *Case of Indigenous Communities Members of the Lhaka Honhat Association v. Argentina*

The new interpretation grounds set in Advisory Opinion 23/17 had almost immediate consequences. On February of 2020, for the first time in a contentious case, the IACtHR analyzed the right to a healthy environment. In addition, the Court examined the progressive development of indigenous community property rights, cultural identity, adequate food and water in the light of the Article 26 of the ACHR. These four rights were considered admissible to be examined interdependently and their specificity was based in relation to indigenous peoples.¹⁴⁰

The case holds particular importance for the research question posed by this thesis, due to the fact that the *Lhaka Honhat* community was affected by illegal logging performed by a group of settlers not belonging to an indigenous group. This particular dispute does not deal specifically with climate change, but the Court did address the detrimental effects which deforestation had on the indigenous peoples' environmental rights, as well as on the traditional ways of obtaining food.

The judges concluded that Argentina had violated the aforementioned rights of the *Lhaka Honhat* indigenous groups. In order to establish reparation, the Court ordered the State to take measures for the recovery of the groups' forest resources, to reconstitute their adequate access to food and water, and to maintain their indigenous culture. Therefore, the decision also set focus on the underlying determinants of health.

Following the interpretation given by the Court on Advisory Opinion 23/17, the tribunal expanded the understanding of Article 26, which requires States Parties to actively adopt measures to achieve their full realization.¹⁴¹

¹⁴⁰ IACtHR, *Case of the Indigenous Communities of the Lhaka Honhat Association (Our Land) v. Argentina* (2020), Official Summary issued by the Court.

¹⁴¹ Maria Antonia Tigre, "Inter-American Court of Human Rights Recognizes the Right to a Healthy Environment." ASIL Insights, 24 (14) (2020), https://www.asil.org/insights/volume/24/issue/14/inter-american-court-human-rights-recognizes-right-healthy-environment#_edn14

4 Identification of Amazon States' obligations regarding the right to health of indigenous children

Dinah Shelton and Ariel Gould emphasize on the dual nature of human rights law: it is not enough to codify and proclaim rights, but it is also necessary to identify the duty holders and their obligations.¹⁴² In this case, this latter task involves the obligations of Amazon States regarding the linkage between the Amazon rainforest and the aforementioned international law provisions concerning right to health of indigenous children.

State obligations can be divided into positive and negative ones. The essence of negative obligations requires states not to interfere in the exercise of rights. Meanwhile, positive obligations adds to this the duty to protect the right from infringement by third parties, in other words, States have a duty to act and take affirmative steps to ensure the protection of rights.¹⁴³

Another key classification is the “tripartite typology” of States obligations. This distribution has been a conceptual breakthrough since the mid 1980’s. At that time Asbjorn Eide, as the Rapporteur to the then UN Sub-Commission on Prevention of Discrimination and Protection of Minorities, wrote his report on *The Right to Adequate Food as a Human Right*. His division distinguished between the obligation of States to respect, protect and fulfil human rights.¹⁴⁴ This tripartite typology of State’s obligations is widely used in the UN system of human rights, as well as in regional systems. Additionally, it has been perceived as allowing a concretization of economic, social and cultural rights, thus encouraging their justiciability.¹⁴⁵

Nevertheless, both categorizations can be easily combined: the duty to respect requires States to refrain from interfering directly or indirectly with the enjoyment of economic social and cultural rights¹⁴⁶ and, thus, it is a negative obligation.¹⁴⁷ States’ duties to protect and fulfil are, on the other hand, positive obligations. The first one requires states to protect individuals and groups from human rights abuses by others, and the latter imply states to take positive action to facilitate the enjoyment of human rights.¹⁴⁸ Moreover, the positive obligations will be the key to determine the standard of care which States must uphold to ensure the right to health.

¹⁴² Dinah Shelton and Ariel Gould, “Positive and Negative Obligations”, *The Oxford Handbook of International Human Rights Law*, ed. Dinah Sheldon (Oxford University Press: Oxford, 2013), p. 562

¹⁴³ *Ibid*, p. 562-563.

¹⁴⁴ De Schutter, p. 280.

¹⁴⁵ *Ibid*, p. 285.

¹⁴⁶ *Ibid*, p. 281.

¹⁴⁷ Sheldon and Gould, p. 566.

¹⁴⁸ *Ibid*.

4.1 Negative obligations

As it has already been established, addressing the negative obligations entails analyzing the obligation to respect. This duty is sufficiently clear in Article 1 (1) of the ACHR: “*The States Parties to this Convention undertake to respect the rights and freedoms recognized herein (...)*”. On the other hand, the way the right to health has been codified within the UN system of human rights, mainly in the ICESCR and the CRC, seems to focus on States’ positive obligations.

Therefore, the bodies monitoring these two Conventions have clarified the obligation to respect in each of their General Comments on the Right to the Highest Attainable Standard of Health. The CRC did it briefly in its General Comment N° 15¹⁴⁹, while referring to the obligations to protect and fulfil as well. However, the CESCR extended its explanation more in General Comment N° 14.

Concerning the right to health in the context of deforestation induced climate change, it can be extracted from the CESCR’s General Comment N° 14 that “States should (...) refrain from unlawfully polluting air, water and soil, e.g. through industrial waste from State-owned facilities (...)”, hence activities such as logging appear to fall under this consideration, as long as it happens under the State control or with its acquiescence.

The Comment also affirms that it would constitute a violation to the obligation to respect “the failure of the State[s] to take into account [their] legal obligations regarding the right to health when entering into bilateral or multilateral agreements with other States, international organizations and other entities”¹⁵⁰. Since Amazon States have committed to set and meet the temperature targets proposed in Paris Agreement (which will be analyzed more in detail in the next section), this means that the destruction of sink reservoirs -such as forests- would entail a violation of this duty. In the same manner, it would be unlawful for States to perform these kind of activities either through a State-owned company, or by enabling private companies to do so by granting them the necessary permits.

In this regard, it must be noted that deforestation is rarely the work of State agents but it is rather private individuals or groups who perform this activity. The Amazon is not the exception. For example, the recent increase of forest degradation in the Brazilian Amazon (which covers 60% of the totality of the rainforest), is linked to the reduction of government controls

¹⁴⁹ CRC, General Comment N° 15, para. 71.

¹⁵⁰ ICESCR, General Comment N° 14, para. 50

over private logging activities.¹⁵¹ This means that, in this case, the Brazilian government's obligation to protect would be more important. Therefore, in order to avoid the detrimental consequences on health as a result of forest degradation in the Amazon rainforest, States seem compelled to take positive actions rather than just refraining to intervene. Consequently, the following analysis of the states' positive obligations will be more extensive, and more significant for this research.

4.2 Positive obligations

The combination of the positive obligations to protect and fulfil can be summarized in an ultimate "obligation to ensure" rights, meaning that the individual should be able to exercise the guarantees a determined right proclaims.¹⁵²

In order to ensure (or comply with their positive obligations) human rights, States' must act with due diligence, which Sheldon defines as "the reasonable measures of prevention that a well-administered government could be expected to exercise under similar circumstances"¹⁵³

In this regard, the concept of due diligence is most commonly associated with economic social and cultural rights (which include the right to health), and it entails that all State Parties to a treaty of this nature must take "all appropriate measures" to "progressively achieve" the rights concerned.¹⁵⁴ This explains why the wording in the ICESCR and the CRC presents this rather positive obligations regarding the rights therein proclaimed. These obligations are typically considered obligations of conduct, not of result.

Within the Inter-American scope, Article 1(1) of the ACHR does not only enshrines the obligation of States to respect the rights in the Convention, but also establishes that they must "ensure to all persons subject to their jurisdiction the free and full exercise of those rights". Moreover, Article 2 requires States "to adopt, in accordance to their constitutional processes and the provisions of this Convention, such legislative or other measures as may be necessary to give effect to those rights".

¹⁵¹ Mongabay. "Brazil drastically reduces controls over suspicious Amazon timber exports", 11 March 2020, <https://news.mongabay.com/2020/03/brazil-drastically-reduces-controls-over-suspicious-amazon-timber-exports/>

¹⁵² Sheldon and Gould, p. 562.

¹⁵³ *Ibid*, p. 577.

¹⁵⁴ International Law Association (ILA), 2014, Study Group on Due Diligence in International Law, First Report, (London, UK: ILA).

Therefore, it can be concluded that the ACHR does not only contain the negative obligation for States to refrain from enacting norms or practices that violate human rights (obligation to respect). But, at the same time, the Convention establishes the positive obligation to set in place reasonable and appropriate measures (obligation to protect) directed towards the fulfilment of human rights (obligation to fulfil).

Laurens Lavrysen¹⁵⁵ explains that the jurisprudence of the IACtHR demonstrates that the measures mentioned in Article 2 of the ACHR can be considered to be instrumental to the effective protection of human rights.¹⁵⁶ According to the Court, this obligation is not bounded to the need to adapt the States domestic constitutions or laws, “but must rather permeate all the legal provisions of a statutory or regulatory nature and translate into the effective enforcement, in practice, of the human rights protection standards.”¹⁵⁷

However, in order to fully establish States’ positive obligations regarding the effects climate change as a result of deforestation on indigenous children’s right to health, some relevant provisions under international climate change law must be addressed. These norms are key to determine the standard of care since they help to determine which measures are reasonable and appropriate to fulfill that positive obligation. More concretely, it is necessary to focus on those provisions which bind States to protect forests aiming to stop climate change.

In this respect, Article 31 (2) (c) of VCLT, concerning the general rule of interpretation of treaties, is key to establish the link between the protection of the Amazon and the protection of the right to health. The article establishes that “there shall be taken into account, together with the context: [...] any relevant rules of international law applicable in the relations between the parties”.¹⁵⁸ Therefore, based on this provision, it is important that all nine Amazon States are parties to the UNFCCC and to the Paris Agreement.

¹⁵⁵ Ph.D. Researcher at the Human Rights Centre of Ghent University.

¹⁵⁶ Laurens Lavrysen, 2014, “Positive Obligations in the Jurisprudence of the Inter-American Court of Human Rights.” Ed. Clara Burbano Herrera and Oswaldo-Rafael Ruiz-Chiriboga. *Inter-american and European Human Rights Journal. Revista Interamericana Y Europea De Derechos Humanos* 7 (1-2), pp. 97.

¹⁵⁷ IACtHR, Case of *Vélez Loor v. Panama* (2010), para. 286.

¹⁵⁸ VCLT, Art. 31(c).

4.2.1 Paris Agreement: Forest protection and National Determined Contributions (NDCs)

The Paris Agreement is the most recent treaty within the UNFCCC and it reserves a special place for forests: Article 5.1 of the Agreement states that “*Parties should take action to conserve and enhance as appropriate, sinks and reservoirs of greenhouse gases as referred to in Article 4, paragraph 1(d), of the Convention including forests*”. The wording of this article appears to be insufficient to create direct obligation for state parties (typically using ‘*should*’ and not ‘*shall*’), and it is rather broad. On the other hand, the word “conserve” would imply an obligation for the Amazon States to protect the rainforest, while it could be also argued the word “enhance” could mean that they would have to expand it.

Nevertheless, the Parties have agreed to the objective of keeping temperatures stable somewhere between 1.5 and well below 2 degrees as established on Article 2.1(a) of the Agreement. According to the IPCC Special Report of 2018 mentioned in Chapter 2.1, one effective way to maintain global temperatures below that strict threshold would be to achieve global neutral (net zero) emissions by 2050 and negative emissions thereafter. This carbon goal can only be achieved by protecting remaining forests as they hold a pivotal role in capturing and stocking carbon.

In addition, Article 4 (1) states that:

“In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible [...], and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases [...] on the basis of equity, and in the context of sustainable development.”

In order to achieve this goal, Article 4 (2) sets the obligation for State Parties to put forward Nationally Determined Contributions (NDCs). Additionally, Article 4 (3) obliges Parties to progressively increase their efforts when presenting their successive NDCs, and in doing so they must reflect their “highest possible ambition”. It must be noted that the use of the word “will” in Article 4 (3) suggests the binding character of the obligations therein: “*Each [...] successive NDC will represent a progression [...] and reflect its highest possible ambition*”.

This article urges the Parties to reduce their GHG emissions “*as soon as possible*”, and consequently creating a new international legal objective to keep under the long-term temperature

goal expressed in Article 2 (1).¹⁵⁹ Since countries have different circumstances, resources and abilities, the agreement was designed in a way that each country defines their own targets and contributions to the universal agreement.¹⁶⁰ These country pledges are the NDCs and they can include measures such as forest protection. Therefore, protecting and conserving such an important carbon sink as the Amazon rainforest would be fundamental for the nine Amazon States in order to comply with their NDCS.

This provision also considers sustainable development and the principle of “equity” which are important aspects to connect with climate justice. This concept entails framing global warming as an ethical and political issue rather than one that is purely environmental or physical and, consequently, it has a paramount importance for vulnerable groups, like indigenous children. The Parties have, therefore, to consider sustainable development and equity whilst they significantly reduce their GHG emissions to offer a healthy lifestyle to future generations.

One way through which developed countries can meet their obligations under Article 4 (1) of the Agreement, more specifically regarding “sinks of greenhouse gases” is the REDD+¹⁶¹ project. This is a mechanism for slowing deforestation by effectively paying forest-rich developing countries, such as the Amazon States, to preserve many of its remaining forests.

Nevertheless, it has been argued that REDD+ projects could lead to negative impacts on communities that depend on forests for their daily subsistence. Among these groups, indigenous communities pose great concern, as there are claims of indigenous peoples being forcibly evicted from their traditional lands to give way for such projects. It is therefore, that applying a rights-based approach to mitigation measures such as the REDD+ program should be mandatory, and Amazon States should uphold this condition if they join the project.¹⁶²

Even more relevant for determining the standard of care, is the fact that the Parties have committed to adopting appropriate national climate measures according to Article 4 (2) of the

¹⁵⁹ Paris Agreement, Article 2 (1) (a): “*Holding 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, recognizing that this would significantly reduce the risks and impacts of climate change*”

¹⁶⁰ UN Development Programme, “What are NDCs and why are they important?”, 15 November 2019, <https://undp.medium.com/what-are-ndcs-and-why-are-they-important-ee80ebb6ec2f>

¹⁶¹ Reducing Emissions from Deforestation and forest Degradation (REDD+) is a mechanism developed by Parties to the UNFCCC.

¹⁶² Atapattu, S. “The Right to a Healthy Environment and Climate Change: Mismatch or Harmony?” J. Knox & R. Pejan (Eds.), *The Human Right to a Healthy Environment*, Cambridge: Cambridge University Press. (2018), pp. 259-260, DOI: <https://doi.org/10.1017/9781108367530.014>

Agreement. The second sentence of this Article states that “*Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions.*” The use of the word “shall” emphasizes the legal obligation of countries to set aside national sovereignty by pursuing “*domestic mitigation measures*” in harmony with the temperature goal mentioned above.

Therefore, a legal argument that could be put forward is that those state Amazon State Parties which do have significant forest cover with relevance to the global climate system, such as the Brazil or Peru, are obliged to protect and conserve their forests. On the other hand, countries with less forest should focus on afforestation and preservation. Forests can thus legally be described under the Paris Agreement as a substantial aspect of NDCs as they must be incorporated into the Parties domestic mitigation measures. This argument can also be supported by the aforementioned Article 5 (1) of the Agreement as it explicitly requires Parties to “*take action to preserve and enhance [...] forests*”. Thus, the protection of forests is an international common concern of States.

In an important sense, and reinforced by its Preamble¹⁶³, the Paris Agreement signifies the recognition by the international community that climate change poses unacceptable threats to the full enjoyment of human rights, and that actions to address climate change must comply with human rights obligations.¹⁶⁴

In addition, in Article 7 of the Agreement, the Parties establishes the global goal on adaptation to the temperature goal referred to in Article 2, aiming to reduce vulnerability to climate change. More specifically, paragraph 5 of this article sets focus not only in indigenous peoples, but also in science. Therefore, reinforcing the importance given to it in the aforementioned Article 4(1) and, consequently the precautionary principle¹⁶⁵ (one of the principles of international environmental law¹⁶⁶).

“Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vul-

¹⁶³ See Chapter 2.1.4.1.

¹⁶⁴ UN Human Rights Council, *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment (A/HRC/31/52)*, 1 February 2016, para. 22.

¹⁶⁵ The core of the precautionary principle is reflected in Principle 15 of the 1992 Rio Declaration: “*Where 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.*”

¹⁶⁶ Phillippe Sands and Jacqueline Peel, *Principles of international environmental law*. (Cambridge: Cambridge University Press, 2018) p. 229-230.

*nerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.*¹⁶⁷

4.2.2 Obligation to protect the right to health

This obligation arises where the States must prevent private actors to act in a way that may lead to human rights being violated. In addition, if the preventive measures have failed, the State must provide effective remedies.¹⁶⁸ As previously mentioned, just as States have a responsibility not to actively participate in industrial activities that cause negative consequences on the people's right to health, they have the obligation to "enact or enforce laws to prevent the pollution of water, air and soil"¹⁶⁹. According to Hesselman and Toebes that list (from the CESCR's General Comment N° 14) is not exhaustive and would certainly refer to the regulation of GHG emissions, or could take into consideration any widely internationally agreed health standards for shaping health and climate policies, including work from the WHO or the IPCC.¹⁷⁰

The obligation to protect the right to health from polluting activities by private actors was also addressed by the CRC in General Comment N° 15. The Committee considered that "States should require businesses to undertake children's rights due diligence. This will ensure that business enterprises identify, prevent and mitigate their negative impact on children's right to health including across their business relationships and within any global operations"¹⁷¹

The IACtHR has made it clear that States additionally have an "obligation to prevent". In the 1988 case of *Velásquez Rodríguez v Honduras* the Court affirmed that States have "a legal duty to take reasonable steps to prevent human rights violations"¹⁷² and that "this duty to prevent includes all those means of a legal, political, administrative and cultural nature that promote the protection of human rights"¹⁷³

¹⁶⁷ Paris Agreement, Art. 7 (5).

¹⁶⁸ De Schutter, p, 427.

¹⁶⁹ CESCR General Comment N° 14, para. 51.

¹⁷⁰ Marlies Hesselman and Brigit Toebes, "The Human Right to Health and Climate Change: A Legal Perspective". *Global Health Law Groningen Research Paper* (2015), p. 12, <http://dx.doi.org/10.2139/ssrn.2688544>

¹⁷¹ CRC General Comment N° 15, para. 80.

¹⁷² IACtHR, Case of *Velásquez-Rodríguez v. Honduras* (1988), para. 174.

¹⁷³ *Ibid*, para. 175.

More concretely, concerning the environmental implications this research must necessarily consider, the following excerpt from the Court's ruling in the case of *Velásquez Rodríguez v Honduras* will be of special importance:

*“An illegal act which violates human rights and which is initially not directly imputable to a State (for example, because it is the act of a private person or because the person responsible has not been identified) can lead to international responsibility of the State, not because of an act itself, but because of the lack of due diligence to prevent the violation or to respond to it as required by the Convention.”*¹⁷⁴

In this regard, in the case of deforestation in the Amazon and its effects on indigenous children's right to health, the obligation to protect implies that Amazon States are obliged to effectively regulate, monitor and enforce private conduct to avoid that it cripples the Amazon's utility as a carbon sink. As such, the existence of the rainforest is crucial towards reversing climate change and thus, the detrimental effects mentioned in Chapter 2.

Therefore, in order for these measures to be considered “appropriate and reasonable” the context requires some concrete elements to be addressed:

Firstly, the authorities must execute or observe the implementation of social and environmental impact assessments (EIA) of land related activities in indigenous settlements (or where these could be affected). It must be noted that, after being addressed in some non-binding treaties¹⁷⁵, the obligation to perform EIAs was recognized by the ICJ it as a duty under the principles of international law in the *Pulp Mills* case.¹⁷⁶

Additionally, Amazon States should ensure the participation of indigenous communities in the decision-making process by respecting their Free, Prior and Informed Consent (FPIC). This right is recognized in the UNDRIP and requires States to have consent before the adoption of legislation or administrative policies that affect indigenous peoples (Article 19); and the undertaking “*of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources*” (Article 32).¹⁷⁷

¹⁷⁴ *Ibid*, para. 172.

¹⁷⁵ Rio Declaration, Principle 17: “*Environmental impact assessment, as a national instrument, shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.*”

¹⁷⁶ ICJ, *Pulp Mills on the River Uruguay (Argentina v. Uruguay)* case (2010), para. 204.

¹⁷⁷ OHCHR, “Free, Prior and Informed Consent of Indigenous Peoples”, September 2013, <https://www.ohchr.org/Documents/Issues/ipeoples/freepriorandinformedsent.pdf>

Moreover, States must ensure that activities like excessive logging are strongly regulated under national legislation, and that these norms are enforced with sanctions. This of course must be complemented by the reduction of logging licenses granted by the national authorities (although, this latter measure could actually be considered as a negative obligation -duty to respect-, if it is not considered as a positive action to reverse the prior approval of the licenses).

In this regard, Article 32 (3) of the UNDRIP establishes that “*States shall provide effective mechanisms for just and fair redress for any such activities, and appropriate measures shall be taken to mitigate adverse environmental, economic, social, cultural or spiritual impact.*” This means that in the case that the authorities are not able to prevent illegal logging, then the State has to ensure that these areas are, for example, reforested.

Lastly, it is crucial to highlight once again that there exists an enhanced sense of urgency to these obligations. As Carlos Nobre affirms (see Chapter 2.1) the time window for the international community to effectively address, and hopefully reverse, the effects of climate change is relatively small. Moreover, this state of emergency increases due to the significant impacts the children will have to endure since they are currently growing up into an uncertain and unhealthy future.

4.2.3 Obligation to fulfil the right to health

The CESCR’s General Comment N° 15 (on “the right to water”) provides what De Schutter describes as “the most comprehensive description of the obligation to fulfil available to date”¹⁷⁸. The author mentions two characteristics of the obligation to fulfil highlighted by the description of the General Comment: a dynamic one, which aims to the full realization of the right and requires to be implemented progressively; and the primarily procedural implications that the obligation entails.¹⁷⁹

Analogically to General Comment N° 15, the body expressed the following in the CESCR’s General Comment N° 14 regarding the right to health:

The obligation to fulfil (facilitate) requires States inter alia to take positive measures that enable and assist individuals and communities to enjoy the right to health. States parties

¹⁷⁸ De Schutter, p. 530.

¹⁷⁹ *Ibid*, p. 531.

*are also obliged to fulfil (provide) a specific right contained in the Covenant when individuals or a group are unable, for reasons beyond their control, to realize that right themselves by the means at their disposal. The obligation to fulfil (promote) the right to health requires States to undertake actions that create, maintain and restore the health of the population (...).*¹⁸⁰

Concerning the right to health's obligation to fulfil (provide), Hesselman and Toebes emphasize the fact that individuals or environmental groups cannot stop climate change by themselves. Consequently, there is a need for State presence and an active international community to take action – along with responsible members of the private sector (mainly businesses, who account for a great part of the emissions).¹⁸¹ This notion can be linked to the international environmental law principle of cooperation first mentioned in the 1972 Stockholm Declaration.

It can be thus concluded that even without the petition of indigenous communities, Amazon States need to be proactive and take measures to protect the rainforest. Their precarious socio-economic conditions makes them a more-than-average vulnerable group, and this is exacerbated even more if the victims of rights violations are children. It is for this reason that States must also help this disadvantaged individuals to be able to protect and claim for their rights.

Consequently, States also have a duty to help their citizens to protect their own health. The obligation to fulfil (promote) entails, among other responsibilities, “ensuring that the State meets its obligations in the dissemination of appropriate information”¹⁸² Hence, State authorities should take appropriate measures to inform persons within their territory about the concrete impacts which climate change or any kind of environmental harm might have on their health. In this regard, it is important that Amazon States comply with their obligation to fulfil by promoting the progressive empowerment of indigenous communities. The IACtHR case of *Indigenous Communities Members of the Lhaka Honhat Association v. Argentina* (see Chapter 3.3.3.2) exemplifies this by the recognition of land property rights of an indigenous community.

Additionally, it can be argued that in order to “maintain” and “restore” the health of indigenous children, the Amazon States must necessarily protect the rainforest. The reason for this lies in the importance they have both as carbon sinks preventing climate change (and its effects on health), and as a key factor of the underlying determinants of health of indigenous

¹⁸⁰ CESCR General Comment N° 14, para. 37.

¹⁸¹ Hesselman, Toebes, p. 14.

¹⁸² CESCR General Comment N° 14, para. 37.

communities (food, culture, etc.). Furthermore, towards achieving this, the Amazon States should comply with their obligation under the Article 5 (1) of the Paris Agreement not only to “conserve” the Amazon, but to “enhance” it. This latter word could in fact mean to expand the rainforest.

This last obligation, in turn, leads to another duty which explains *how* States should implement the protection. The CESCR also addressed the procedural implications mentioned by De Schutter, affirming that the obligation to fulfil the right to health entails to “adopt appropriate legislative, administrative, budgetary, judicial, promotional and other measures towards the full realization of the right to health”¹⁸³ This includes ensuring everyone equal access to the underlying determinants of health, which, as mentioned earlier, are deeply affected by the climate change. Thus, this duty commends Amazon States not only to enact laws, but to use all of the State’s tools to efficiently achieve the fulfilment of people’s health. In this case, this would entail protecting the Amazon rainforest.

Furthermore, the CESCR declared that, in order to fulfil the right to health, the States should “formulate and implement national policies aimed at reducing and eliminating pollution of air, water and soil”¹⁸⁴. This formulations should extend to the international level when concerning challenges of environmental substance like climate change. On this topic, Hesselman and Toebes agree that, for example, negotiations under the UNFCCC should be seen as directly covered by the human right to health of the population, as well as other human rights.¹⁸⁵

4.2.4 Obligation to the progressive realization of human rights

Lastly, it is important to notice that the progressive realization of rights is not only part of the obligation to fulfil, but also among the State parties’ general obligations under the ICESCR. The CESCR explains that progressive realization means that “States parties have a specific and continuing obligation to move as expeditiously and effectively as possible towards the full realization of Article 12.”¹⁸⁶ In the same manner, Art. 26 of the ACHR establishes the progressive realization of human rights in the inter-American system (see Chapter 3.3.2.1).

Even when the Covenant recognizes the constraints which limited resources represent for the accomplishment of this duty, it also highlights that there exist immediate obligations for the

¹⁸³ *Ibid*, para. 33.

¹⁸⁴ *Ibid*, para. 36.

¹⁸⁵ Hesselman, Toebes, p. 14.

¹⁸⁶ *Ibid*, para 31.

State parties in relation to the right to health: *e.g.* guaranteeing its exercise without discrimination of any kind (as established in Art. 2 (2) of the ICESCR) and taking the steps “to the maximum of its available resources” (as stated in Art. 2 (2) of the ICESCR) towards the full realization of the right.¹⁸⁷

In the climate change context, this demands Amazon States to urgently act towards the reduction and mitigation of CO₂ emissions (in order to take the necessary steps for the full realization of the right to health) and to avoid activities such as deforestation to produce harmful effects on the health of those who are more vulnerable to climate change and, thus, avoiding discrimination of groups like indigenous children.

Regarding the obligation of taking steps “to the maximum of its available resources”, Article 4 (2) of the Paris Agreement has a particular significance: that provision requires States to establish their NDCs according to their “highest possible ambition”. For the Amazon States this necessarily means to protect and enhance their rainforest, due to the implications they have on climate change and indigenous children’s health.

5 Conclusion

The first chapter of this thesis has proven that forests are crucial to stop climate change and its impacts. The Amazon rainforest is especially important due to its unique function as a carbon sink. Subsequently, it has also been demonstrated that forest degradation of the Amazon affects negatively the health of indigenous children. Some of these effects, at first, seem to be beyond the consequences climate change mentioned in Chapter 2.

However, these additional impacts can be equally explained by both causes: the direct impact of human activities which occur in the rainforest and contribute to climate change; and by climate change itself. A clear example of this is the increasing deforestation in the Amazon and its consequences, which do not only limit to causing indigenous communities to lose their sources of food and water. But additionally, it contributes to global warming that leads to a dryer climate and higher temperatures. This, in turn, is provoking an increasing number of forest fires in the Amazon. In brief, the lack protection of the Amazon creates a vicious circle with detrimental consequences for health.

¹⁸⁷ *Ibid*, para 30.

The UN and Inter-American systems of human rights protect the right to health placing particular emphasis in vulnerable groups, like indigenous children, and its significance individually and collectively. Different treaties acknowledge the right to health as being a broad concept whose fulfilment is determined by multiple factors, including the underlying determinants of health. In addition, there exists awareness of the interlinkages of these elements not only in international human rights law, but also in other relevant areas like international environmental law. The right to health has been addressed in the latter field of international law since its beginnings with the 1972 Stockholm Declaration.

In this regard, the right to a healthy environment seems to summarize this interconnections in a single and concrete prerogative. It is of great relevance for Amazon States that the jurisprudence of the IACtHR has very recently both recognized (Advisory Opinion 23/17) and decided (case of *Indigenous Communities Members of the Lhaka Honhat Association v. Argentina*) based on the right to a healthy environment. These developments could contribute to constitute this right as customary international law, and therefore, to be enforceable to all States.

Nevertheless, Amazon States currently have obligations under international human rights law to respect, protect and fulfil the right to health of indigenous children. It is established in the ICESCR, the CRC and the Protocol of San Salvador that States must adopt measures towards fulfilling the right to health, and to do so progressively. In addition, as Parties to the Paris Agreement, Amazon States have the obligation to conserve and enhance their forests as a response to climate change and its consequences. The Preamble of this agreement is specific when acknowledging the human rights implications of climate change, and the vulnerability of, *inter alia*, indigenous peoples and children.

It is therefore that Amazon States must take a holistic approach towards the protection of human rights and the preservation of the environment. In this respect, it is fundamental integrating their obligations under international human rights law and international environmental law. Placing their best efforts in meeting the goals set in the provisions of the Paris Agreement will, in turn, provide States with fulfilling their due diligence duty to protect the right to health of indigenous children.

The scientific community largely agrees that the evidence about the consequences of climate change is clear regarding its seriousness and immanency, and that the time to address this challenge is strikingly short. This is a global emergency and States must pursue to fulfil their obligations accordingly.

“Our house is on fire. I am here to say, our house is on fire.”

- Greta Thunberg.

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