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**CLIMATE CHANGE  
AND CHILDREN'S  
RIGHTS.  
THE SAHEL REGION.**

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# **1 Introduction.**

Climate change is probably one of today's major concerns in international relations, and the effects of it are already beginning to be felt in places all around the world. Despite its wide-ranging effects, we know that climate change will have the greatest impact on the most economically, culturally and socially vulnerable individuals. It is for this reason that climate change may become one of the sources of an increase in human rights violations. Despite knowledge of this possibility, the study of climate change and its effects from a human rights-based approach has for long been dismissed.

Furthermore, the Sahel region of Africa has been described by several studies as a "hotspot" for climate change. Despite that fact, few analyses have been conducted until recently that look at the human rights implications of climate change for the region. Furthermore, still fewer studies have analysed the potential violations of children's rights that climate variability can bring to a region already marked by other vulnerabilities such as poverty and conflict.

With the existing negative predictions for the future of this region in terms of climate change, predictions which will be presented in greater depth in this study, it is necessary for the region to be as prepared as possible to adaptation to the new climatic conditions that are expected in the coming decades. In order to develop the policies necessary for an effective adaptation exercise, it is necessary to first analyse the possible consequences of climate change. Therefore, in this study we will try to contribute to the understanding of the latter's impact by analysing the possible consequences that climate change could have on the right to health and education of children, two rights essential for the correct development and welfare of the latter.

## **2 Objectives and reasons.**

### **2.1 Why was the topic chosen?**

The choice of this topic of study stems not only from the need for a deeper understanding of the effects of climate change, which can be considered one of the greatest threats facing humanity nowadays, but also arises from a global societal change driven by new generations, and which aims to make us aware of how important it is to take care of the environment so that future generations can enjoy not only the same living conditions, but also a prosperous and more sustainable future.

Being these younger generations the ones that have driven this global change, I believe it is important to study the effects that these climate variations will have on them. The study theme will therefore seek to analyse the effects that climate change may have on the younger generations in one of the places that is expected to be most affected by climate change, the Sahel.

## **2.2 Objectives, methodology and research question of the study.**

The aim of this study is therefore to shed light on the possible implications of climate change in this part of the world, which has one of the highest rates of change. Because of the magnitude of the possible effects of climate change, in this study we will focus on the consequences of climate change for children, focusing mainly on two of the rights granted to this population group: the right to education and the right to health.

To do so, firstly, a review will be made of the different existing theories on the relationship between human rights and climate change. Once the link between the two fields has been established, certain concepts necessary for the development and understanding of the analysis will be introduced. Then, a review of the regional context will be made, first of the African continent, and then of the Sahel region, focusing on the state of human rights and climate change in either of them. Following this contextual overview, the main legal sources of protection of children's rights found in the region will be presented, followed finally by an analysis of the impact that climate change will have on the health and education rights of children in the Sahel.

As this was a desk study, the methodology employed during the course of this research was the following. Firstly, academic sources were used to understand the theoretical state of the relationship between climate change and human rights. Once the theories of interest were identified, we proceeded to analyse the contextual situation in the region of study through the analysis of databases belonging mainly to organisations such as the World Food Programme, the World Bank and the World Meteorological Organisation. Next, in order to present the legal bases for the protection of children's rights, a study was made of the Conventions signed at the international level in the United Nations and in the Organisation for African Unity, currently the African Union. Finally, a study was carried out on the combination of all the factors previously analysed to provide an answer to the research question, which is the following: What will be the impact of climate change on the right of children to health and education in the Sahel region?

### **3 State of the question – Human Rights and Climate Change.**

The aim of this chapter is to contextualise the relationship between human rights and climate change, and to show its relevance today. In order to do so, firstly, we will review the history of the relationship between both areas; secondly, we will show its relevance as a method of analysis through studies by different authors; thirdly, we will give examples of the relationship between climate change and human rights; and finally, we will present other related concepts that help in understanding the link between both areas and that will be important for the analysis that will be carried out later in this study.

#### **3.1. Recent history of Human Rights and Climate change.**

Even if Human rights and Climate change have always held strong connexions, as will later be explained, the history of a common approach to solve development, and thus human rights' related challenges, does not date that back in time. It was only in 1972, not even 50 years ago, that a world conference to tackle environmental issues was held. The latter was the UN Conference on the Human Environment, and it took place in Stockholm, Sweden. The outcomes of the conference were an Action Plan for the Human Environment, the first of its kind due to the inclusion of environmental actions at both national and international level; the Stockholm Declaration, which marked the beginning of a dialogue between industrialised and developing countries on the connection between pollution, economic growth, and the well-being of humans; and finally, the creation of the United Nations Environment Programme (UNEP).

After this first conference, environmental issues started to take a more prominent role in the international community's agenda. The UN created the World Commission on Environment and Development, known as the Brundtland Commission because the former Prime Minister of Norway, Gro Harlem Brundtland, chaired it. The outcome of the Commission was the key report "Our Common Future". In this report Brundtland stated that:

The environment does not exist as a sphere separate from human actions, ambitions, and needs, and attempts to defend it in isolation from human concerns have given the very word "environment" a connotation of naivety in some political circles. (...) "environment" is where we all live; and "development" is what we all do in attempting to improve our lot within that abode. The two are inseparable.

(...) These links between poverty, inequality, and environmental degradation formed a major theme in our analysis and recommendations. What is needed now is a new era of economic growth - growth that is forceful and at the same time socially and environmentally sustainable. (Bruntland Commission, 1987).

This approach resulted in the establishment of a common objective, sustainable development. This term proposed a developmental process which considered both economic, social, and environmental dimensions and was defined by the Commission as the achievement of a long-term stability through a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (Bruntland Commission, 1987).

The concept of sustainable development became, since then, essential in the understanding of environmental issues and in the tools of policy creation to tackle climate change. It was used 20 years after the first environment conference in the 1992 UN Conference on Human Settlements and Development in Rio de Janeiro. This conference in Brazil resulted in the drafting of the first action plan to achieve sustainable development worldwide, the Agenda 21, and in the Rio Declaration on Environment and Development which set the principles for State responsibility with regards these two interconnected disciplines.

Later on, in September of the year 2000, officials from over 40 countries gathered in the Millennium Summit to define clear goals of development based on principles such as equality, solidarity or respect for nature. The eight goals agreed on in the Summit became known as the Millennium Development Goals (MDGs) and were lately endorsed by 20 multilateral organisations and 192 countries. The goals aimed to tackle problems such as Hunger and Poverty (Goal 1), Child Mortality (Goal 4) or Environmental Sustainability (Goal 7), but despite the ambition of the project, the MDGs were widely criticised because of being too unrealistic, and because of taking out of the spotlight other important developmental issues such as climate change or the protection of other human rights not included in the MDGs (Hopper, 2018).

It is for this reason that at the end of the Millennium Development Goals in 2015, new targets, the Sustainable Development Goals (SDGs), were proposed. In the latter, which are in force since 2016 and until 2030, an approach based in the concept of sustainable development was used. As the impact of climate change became more noticeable, and dealing the lack of accomplishment of the MDGs, the recognition of

development not being a simply economic phenomenon grew and was embodied in these new Sustainable Development Goals (United Nations, 2015). This recognition, and the notion of a connexion between the impacts of climate change and human rights, have also been reflected in other international treaties such as the Paris Agreement. In this treaty, it is emphasised “the intrinsic relationship that climate change actions, responses and impacts have with equitable access to sustainable development and the eradication of poverty” and it is acknowledged 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 (UNFCCC, 2015).

### **3.2. Using a Human Rights’ approach for analysing Climate change.**

As it has been shown, there have not been many occasions until recently in human history in which a human rights approach was applied to analyse the effects of the climate change problem as two interconnected things. This can be regarded as odd, having in mind that it is widely known that the latter has a clear and explicit impact in human rights. The reasons for the avoidance of this type of approach has been tackled by Stephen Humphreys, Research Director at the International Council on Human Rights Policy (ICHRP), in the book *Human Rights and Climate Change (2010)*. In this book, he exposes the main obstacles in the use of this approach but also defends why this one is at the same time an extremely useful and important method with which we can analyse the impacts of climate change.

The problems that arise when applying the human rights approach are the following. The first one, is the enforcement impediments the rights usually affected from climate change suffer from. This kind of rights, as the author explains, tend to be part of the group of social and economic rights, which generally do not have strong enforcement mechanisms under international law. The second obstacle is the difficulty in the establishment of responsibilities. Because of the extraterritorial character of the producers of the greenhouse gases that are among the main causes of climate change,

human rights law, that is focused mainly on the violations of human rights on the part of governments to their own citizens, finds it hard to impose obligations to these foreign actors.

On the other hand, the third problem is the hardship in finding some sort of local accountability within local actors. This is due to the fact that the countries that mostly suffer the effects of climate change are usually not the ones in charge of the majority of the greenhouse gases emissions. Finally, the last obstacle to consider is the conflicts that can arise between different rights – such as to freedom and to property – and its right holders, and other rights such as the ones affected by climate change as can be the right to health or development. This situation could create what he calls “Adversarialism” as it will confront interest groups, therefore making it difficult for decisions to be made in a consensus environment, which could have a greater impact (Humphreys, 2010). Another critique to this type of approach indicates that the current “international human rights law is not equipped to treat the profound justice dilemmas thrown up by climate change” (Humphreys, *Competing claims: human rights and climate harms*, 2010) because of being obsolete and insufficient in tackling them.

Despite all these downsides, when it comes to the use of a human rights approach to analyse the impacts of climate change, the latter will continue to highly affect and impinge human rights. As it has been assessed by some authors,

Environmental protection is undoubtedly a pre-condition to the enjoyment of some internationally guaranteed human rights, especially the rights to life, health, private and home life and cultural rights, but it also directly or indirectly impacts other rights as well (Shelton, 2010).

The increase in the impact of climate change, which is expected to take place over the next decades, will make the most vulnerable to it seek protection within human rights enforcement mechanisms. This approach, therefore, will facilitate the search for solutions of direct applicability notwithstanding its lack of binding force, as it will help to find and establish “duties of mitigation, duties of adaptation (...) and duties of compensation” (Caney, 2010) for those who suffer from climate change and those who generate it.

In spite of this methodology’s disadvantages, another important aspect of the priority of using a human rights approach when considering climate change’s implications is,



as Simon Caney also states, the sole definition of the concept of human rights. Human rights, as this author explains, are: “grounded in a person’s ‘humanity’; represent moral thresholds; respect each and every individual; and take general priority over other values” (Caney, 2010), another author adds also that human rights are necessary in order for people to reach a decent life (Buchanan, 2004). This character of priority, as well as the inherent nature of these rights to humanity, thus, make them the best possible tool to understand and make recommendations regarding the kind of measures needed in order to give an adequate response to the climate change challenges.

In addition to this, the professor Dinah Shelton adds that even if some consider that this approach should not be used because of the difficulty in establishing responsibilities, “each state has a consequent right and duty to ensure that its population can enjoy the full panoply of internationally guaranteed human rights, even when the threats to them appear from another state” (Shelton, 2010). Her claims are sided with and can be found in multiple human rights agreements such as the International Covenant on Economic, Social and Cultural Rights (ICESCR) in which it is stated in Article 2(1) that: States parties should ensure these rights by taking steps “individually and through international assistance and cooperation, especially economic and technical, to the maximum of its available resources” (UN General Assembly, 1976). The author also explains how, in the United Nations Survey of International Law, it was determined that States cannot engage in activities in their own territory that could be damaging to the interests of other States in a way contrary to international law (Shelton, 2010). Taking these characteristics into consideration, a human rights approach could be beneficial because it could be helpful in defining state responsibility by determining the impacts climate change can have in human rights.

### **3.3. Climate change and the violation of Human rights.**

Another reason for the use of this kind of approach when studying climate change’s impacts is the clear relation, as it has been already defended, between the latter and the violation of several human rights, some of which will take part in the present study. The author Simon Caney arguments there is clear evidence of the violation of at least three key human rights which are: the human right to life; the human right to health; and the human right to existence (Caney, 2010). I will focus on the first two.

The human right to life is defined in the International Covenant on Civil and Political Rights (ICCPR) as the right for humans not to be “arbitrarily deprived of his life” (UN General Assembly, 1976). With this definition, and as the author explains, “it is clear that anthropogenic climate change violates this right” (Caney, 2010). This can be seen on many occasions as, for example, the death of people because of the increasingly frequent natural disasters (such as hurricanes or heat waves) that are taking place because of global warming. It is important to clarify, however, that as a negative right, the definition does not mean every life has to be saved from every threat, but that there should not be any form or act of arbitrary life deprivation from the part of other people.

Moreover, climate change also affects the right to health which is defined in the International Covenant on Economic, Social and Cultural Rights (ICESCR) in Article 12.1 as “the right of everyone to the enjoyment of the highest attainable standard of physical and mental health” this right appears also in the Convention of the rights of the Child (1990) and will be later assessed in this study. As the author explains, this right should be interpreted as “all persons have a human right that other people do not act so as to create serious threats to their health.” (Caney, 2010). This again, will prove clear that climate change violates this right because it affects people’s health as a result of the actions of others in creating an unhealthy environment. Some of the effects of climate change that can be and will be found in health, are among others: diarrhoeal diseases, cardio-respiratory diseases, risk of dengue...

### **3.4. Other relevant concepts:**

#### **3.4.1. Vulnerability and Climate change.**

The clear effects of climate change in the right to life and the right to health lead us to the next important concept in this study, vulnerability. The author Jon Barnett defines the concept as: “the degree to which people and the things that they value are susceptible to damage arising from climate change” (Barnett, 2010). This term is very important when applying a human rights approach, to the study of climate change effects, because it has been proved that the last one will affect more the people that are already vulnerable. As the author Mary Robinson states: “The human rights framework reminds us that climate change is about suffering – about the human misery that results directly from the damage we are doing to nature” (Robinson,

2010) In fact, climate change has become what I consider to be another piece in the cycle of vulnerability. This cycle can be started in the vulnerability provoked by cultural or economic reasons, as it has been proved that poverty is a key cause both of environmental damage and human rights violations (Shelton, 2010). This vulnerability generates human rights violations, which consequently increase even more the vulnerability of the victims to be affected by climate change, which boosts additionally their vulnerability to more human rights violations, therefore closing a vicious cycle that can only find a solution from a human rights approach (Barnett, 2010). We can hence observe that vulnerability acts as both a cause and a consequence of climate change and human rights violations.

#### 3.4.2. Conflict and Climate change.

The bidirectionality of the concept of vulnerability links us to the next important aspect in the present study which is the relation between climate change and conflict. Although climate change has not been found to be a direct cause of conflict, many studies have shown that the vulnerability and instability it produces can be, in fact, a big booster in the risk to conflict, consequently becoming another piece in the vulnerability cycle. The vulnerability climate change produces, whether it be in an increase of the health-related problems or the competition for natural resources, creates situations of fragility that could lead to or increase tensions among different groups and instigate radicalisation. These tensions or conflicts could, hence, further undermine the capacity of states to deal, mitigate or adapt to the challenges climate change poses, and could lead to other situations of vulnerability such as forced migration. (Solana Madariaga, European Commission, & Council of the European Union, 2008)

#### 3.4.3. Intergenerational equity.

Apart from this link between climate change and conflict, there are other two important ideas in which the present study will be based, and that increase the reasons for using a human rights approach for analysing the impact of climate change. These ideas are intergenerational equity and sustainable development, which has already been explained. The first one, the principle of intergenerational equity, has been developed by the author Edith Brown Weiss. It explains how, as it appears in many international human rights documents and as it has appeared during the history of

humanity (both in cultural and religious tradition), there is a belief in dignity for all members of human society, which means that human rights not only extend throughout space but also time. This idea, therefore, is the base for the concept of fairness among generations and means humans have the right and duty of enjoying natural resources and the environment, without damaging it at the expense of future generations' well-being. This principle also creates responsibilities for each generation to create legal frameworks that can protect these intergenerational rights against the possible actions contrary to them (Brown Weiss, 1992) and thus creates a responsibility for every generation to protect the environment and create policies that do so as well.

Having seen the state of the relation between climate change and human rights, and the theories and concepts to explain why this type of approach will be the one used in this study, we can now continue with the theoretical framework of the research question.

#### **4 Theoretical Framework – Regional Context.**

Having clarified the main theoretical background concerning the link between human rights and climate change, we can now focus on the regional context and the state of these two terms in the region chosen for the study, Africa. The following chapter will address the state of both human rights and climate change on the continent and in the particular region chosen, the Sahel, which will also be described in terms of its composition and historical context. Lastly, in the final part there will be an analysis on the main legislation regarding children's rights both in the world and in the concerned continent, and a description of the main challenges, with regards human rights, that children face in the Sahel region.

##### **4.1. State of Human Rights in Africa.**

To start framing the background context for the analysis, we need to look first at the state of human rights in the continent concerned, which is the African continent. For describing the characteristics of the state of human rights, we will be looking at the analysis that the NGO Amnesty International drafts every year in the form of annual human rights reports. Because of the unexpected pandemic and its impacts on human rights we will mainly focus on the 2019 annual report and the remaining trends for 2020. Therefore, the impact

of the pandemic will not be addressed in the present study, as it could lead to altered results in the analysis of the general effects of climate change in children's rights.

Having stated this, we should focus now on describing the situation of the continent with respect to human rights. We must clarify that despite the still critical situation of human rights in the continent, the situation has improved greatly over the past decades. The continent's historical background of colonialism, failed governments, exploitation of resources from external actors and other variabilities have made it vulnerable to violations of human rights despite the recent progresses. In 2019 (Amnesty International, 2020), the situation of violence and armed conflict in many African countries took one of the first places in terms of causes and foundations for human rights violations. These conflicts, violence from armed groups and communal violence led to situations in which the population suffered from indiscriminate attacks, killings, mutilations, abductions, extrajudicial executions and torture, crimes that amounted to be considered war crimes and crimes against humanity in some countries. Most of the time these violations lacked accountability and reparations for the victims who, in some cases, were also the result of a response of excessive force from the part of the local governments and security forces.

Another consequence of the violence in countries such as the Central African Republic, the Democratic Republic of Congo, Cameroon, Nigeria, Ethiopia, Mali or Somalia was the increase of mass displacements in these regions which, consequently, saw a deterioration in the access of civilians to education and healthcare. The latter was "under extreme threat" (Amnesty International, 2020) in countries including Cameroon, DRC, Madagascar, Zimbabwe or Burundi because of the crises concerning Ebola, measles, cholera and malaria.

An Additional consequence of the existent violence includes the repression of dissent which often presents itself in the form of abuses perpetrated over human rights defenders, the media, the political opposition and even during peaceful protests in over 20 African countries. This repression of dissent came also in the form of new restrictions or limitations to freedom of expression and media freedom in countries like Côte d'Ivoire, Burkina Faso, Guinea, Nigeria, Somalia... Some of these limitations supposed internet shutdowns and arbitrary arrests of journalists. As stated above, mass migration and internal displacement were among the consequences not only of conflict, but of humanitarian crises and extreme meteorological events. This movements, as depicted by

Amnesty International, resulted in “abuses, violations and forced repatriation” of refugees and migrants within the continent (Amnesty International, 2020).

The continent continues also to have a lack of improvement concerning discrimination and marginalisation of women, girls, the LGBTI community and people with albinism which often seem to arise from cultural traditions and institutionalised regulations. Despite the lack of progress in many countries, others like Angola and Botswana decriminalised same-sex relationships, and in South Africa a motion was adopted condemning violence against people with albinism.

In 2020, and even if African leaders had declared that 2020 will be the year in which the continent “silenced the guns”, the reality and the COVID-19 pandemic have made the continent go in the complete opposite direction. The ongoing conflicts and violence have remained or escalated in the majority of the continent, and governments have increased the use of excessive force and the repression of dissent, using the pandemic as the alleged reason to do so. Domestic violence against women increased, and the access to education and healthcare worsened even more because of the measures to tackle the pandemic. Another important thing to note is the impact of these measures in the economies of the region and the right to food. “Curfews, lockdowns and stay-at-home orders had a disproportionate impact on the people working in the informal economy who constituted 71% of the regions workforce” (Amnesty International, 2021). The loss of jobs increased food insecurity in the region, which was already high because of the dependency on an agricultural sector marked by droughts and the invasion of locusts.

The above-mentioned information will help us understand later on the state of children's rights in the study region, the Sahel. This is because the general state of human rights and possible violations in the region inevitably and ultimately affects more those who are most vulnerable to them. These particularly vulnerable people are usually women, persons with disabilities, and lastly, children a group that will be further analysed later in this study.

#### **4.2. State of Climate Change in Africa.**

To continue understanding the regional background of this study, an outlook at the state of climate change in the continent is also needed. This is because, as Professor Richard Washington of the School of Geography and the Environment at Oxford University stated: “Africa is more vulnerable than any other region to the world's changing weather

patterns” (Washington, 2019). To understand the impact of climate change in the region, we will mainly address the data presented by the 2019 report of the World Meteorological Organisation titled: “State of the Climate in Africa”.

We can first start by looking at temperature indicators. The later mentioned report shows that the year of 2019 was one of the warmest years recorded in the continent. The report shows how the year supposed, in the continent, an increase between 0.56°C and 0.63°C in comparison to the average temperatures recorded in the period between 1981 and 2010. Despite the continental temperatures’ average, in some parts of the continent like South Africa, Namibia, or parts of Angola an increase of more than 2°C was recorded in comparison to the previously mentioned period. Another important indicator of climate change is the sea-level rise. The level rise in most of the continent reached a 5mm rise per year and in some parts, it even exceeded that number which is over the global average (3-4mm per year). (World Meteorological Organisation (WMO), 2019).

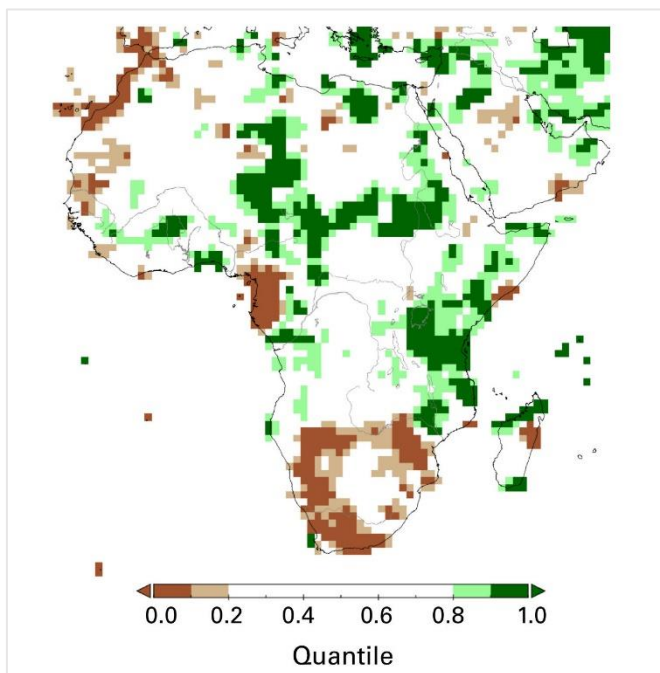


Figure 1. Source: Global Precipitation Climatology Center (GPCC), Deutscher Wetterdienst, Germany.

The last indicator we will be acknowledging is the variability of rainfall. The continent, because of its different climatological conditions, is affected by both droughts and floods that can be seen in *Figure 1* in brown and green respectively. In the image, annual total precipitation of 2019 is compared to the reference period of 1951-2010. In 2019, both meteorological events severely impacted the regions where they occurred. While a highly acute drought (in brown in *Figure 1*) continued to take place mostly in

the southern part of the continent, the contrary happened that same year in the Great Horn of Africa, where the region went from a very dry 2018 to a year marked by heavy rainfall that resulted in floods and landslides. This also happened in regions like the Sahel and its

surroundings as can be seen in the image (World Meteorological Organisation (WMO), 2019).

The continent's changing climatic conditions, coupled with conflict, instability, and a fragile economy have caused an increase in food insecurity in Africa of about 45.6% from 2012 to 2019. The changes in temperature and the extreme weather events, such as the droughts and floods depicted above, can have devastating consequences for an already vulnerable population. An example of this is the 78 deaths and the 69,000 homes that were destroyed or damaged after the floods in Sudan. In addition to this example, it is important to note that Agriculture is the heart of the continent's economy, employing around 60% of the continent's population, and that the sector entirely depends on climatological conditions. This makes the continent highly exposed and vulnerable to climate change, and the already existing infrastructure and resource problems present a challenge in terms of adaptability to it. Therefore, and in view of this vulnerability and lack of adaptability, climate change has become not only a challenge in the achievement of the before mentioned Sustainable Development Goals, but also a major threat to the human rights held by the African population.

### **4.3. The Sahel region.**

Because of the impossibility to address the causes and consequences of climate change and its effects on human rights in the African continent as a whole (dealing the differences regarding historical, cultural and climatic background), the present study will focus on the Sahel region. The definition and characteristics of such region, and its context with regards to the state of climate change and human rights will be tackled below.

#### **4.3.1. What is the Sahel region?**

The Sahel region, whose name is derived from an Arab language word which means coast or shoreline, generally refers to the region comprised between the Sahara Desert and the more humid areas and savannas of the south part of the continent. The Sahel is often therefore perceived as a belt or border between the Sahara and the rest of the Sub-Saharan Africa. Because of the extensity of the region, we will focus on six of the countries that could be part of the spectre of this before mentioned definition. The countries that will be tackled comprise the west and central part of this "Saharan belt". These are (listed from



west to east) the following: Senegal, Mauritania, Mali, Burkina Faso, Niger and Chad (Figure 2) (McKenna, 2020).

The Sahel's terrain is composed of semiarid steppes and a savanna type landscape. Because of the changes in climate and extensive human activities like farming and agriculture overstocking, the tendency of the land to change to a more desertic environment has increased over the past decades. The seasonal nature of the climate in the



Figure 2. Map of the Sahel region chosen for study.  
Source: (World Food Programme, 2018)

region means a change from an average of 8 dry months to a short rainy season, which mainly takes place in June, July and August and averages 100-200mm (McKenna, 2020).

On the other hand, the region's economy depends mostly on agriculture and livestock farming, which causes certain structural and developmental problems for the region, as will be discussed below. Other economic activities in some of these countries, such as Burkina Faso, Chad and Mali, include the export of minerals and oil. These other sources of wealth have often led to corruption on the part of governments and extractive companies, given the high level of competition in these sectors due to the scarcity of these goods. This economic dependence on agriculture, livestock and the export of raw materials, all highly dependent on the variability of market prices and on nature and climate change, has led the region to a situation of uncertainty regarding the projection and forecasting of economic growth. Despite the economic growth that has meant that countries in the region are significantly better off than they were several decades ago, the Sahel's economy remains one of the weakest in the world. As stated in the report *Long Term Trends across Security and Development in The Sahel* by Daniel Eizenga:

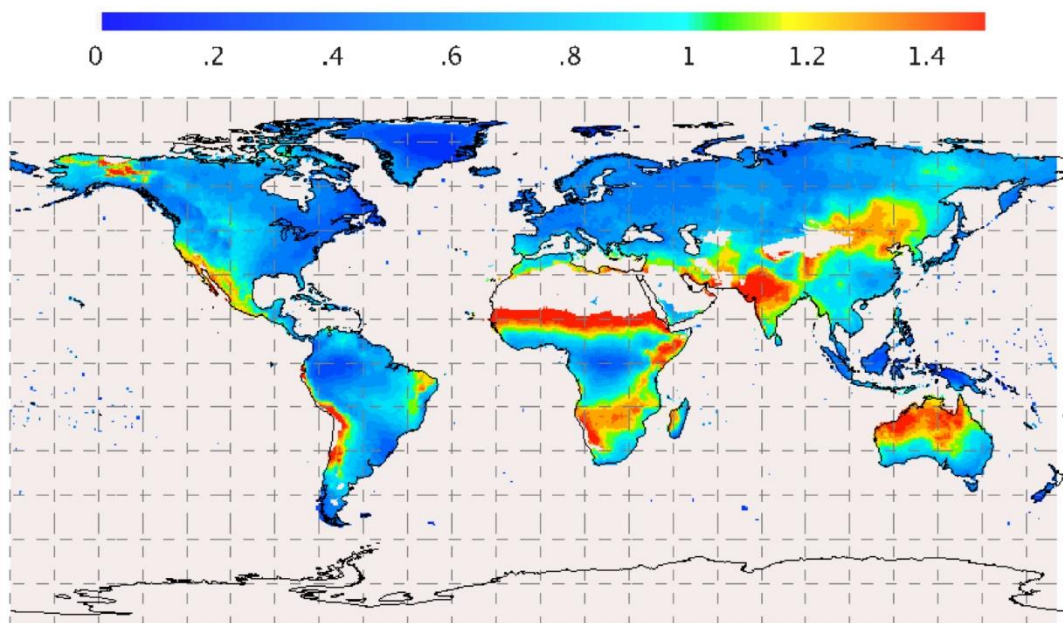
Indeed, Burkina Faso, Chad and Niger have consistently been ranked near the bottom of the Human Development Index over the last decade alongside countries experiencing significant civil conflict such as the Central African Republic and South Sudan. This suggests that while economic development is taking place and the overall level of development in the region has improved over the last twenty

years, Sahelian countries are at risk of being left behind their neighbours (Eizenga, 2019)

#### 4.3.2. Climate change in the region.

The Sahel has been considered to be, for many studies and over the past decades, one of the places that will be most affected by climate change and climate variability and its effects. The region already suffered in the 1970s and 1980s from some of the worst droughts ever recorded. In some of those years, rainfall virtually disappeared, resulting in the loss of about 70 per cent of the region's livestock. The loss of two of the region's major sources of livelihood (agriculture and livestock) led to famines which by 1973 had caused an estimated 100,000 deaths (Buontempo, Booth, & Moufouma-Okia, 2012).

The climate variability that has led the scientific community to consider the region a hotspot of climate change will come, not only in a temperature change but also in one related to precipitations as can be seen in *Figure 3* below (Buontempo, Booth, & Moufouma-Okia, 2012).



*Figure 3. "Coefficient of variation for annual precipitation for regions where annual precipitations exceeds 10mm"*  
Source: (Buontempo, Booth, & Moufouma-Okia, 2012)

A climate change continues to increase its effects, there is a rising concern regarding the effects it could have in the population of this region that so much depends on land and nature use activities like agriculture and livestock. As can be seen in *Figure 3*, the annual precipitation variability in the region is nearly only comparable to some parts of India,

Australia, or Chile. But why is the region so much affected by these changes? The rainfall in the region has been found to be largely affected by the global sea surface temperature (Folland, Palmer, & Parker, 1986). “The variation in sea surface temperature over the Gulf of Guinea as a warm sea surface promotes convection over the sea reducing the penetration of the convergence band over the Sahel” (Buontempo, Booth, & Moufouma-Okia, 2012). Because of this effect along with climate change and the global warming, the continuous rise in the sea surface temperature will result and is already stemming this variability of precipitations.

The problem with the projection of rainfall variability in the region is the lack of consensus as to the sign of this variability, meaning whether it will be periods of increased drought or, on the contrary, increasingly recurrent heavy rainfall and flooding. However, despite this lack of consensus, that can be seen in *Figure 4*, what is agreed upon is that changes in rainfall patterns in this region of the world will be severely affected by climate change (Cook, 2008) and that a general rise in the tropical rainfall strength is expected to take place.

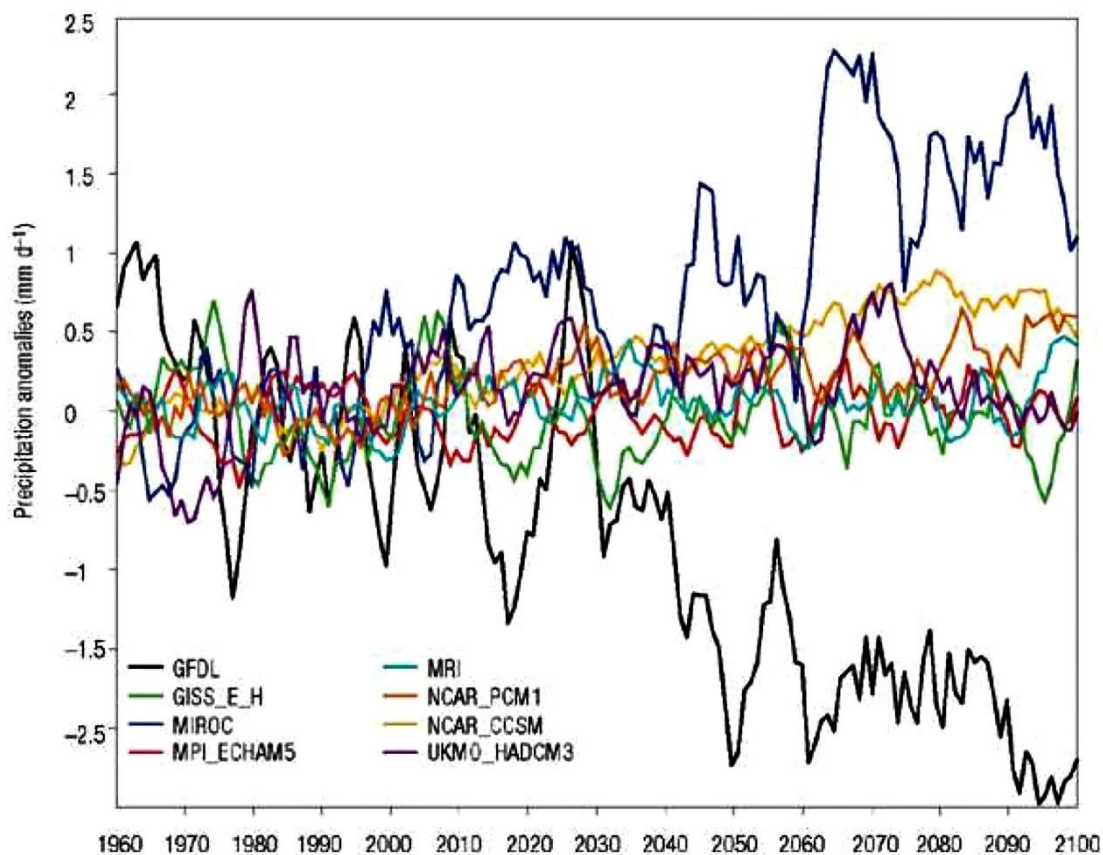


Figure 4. Sahel precipitation anomalies from 1960-2100 as simulated by different general circulation models of the global ocean and atmosphere. Source: (Cook, 2008)

To understand precipitation patterns, we should divide the region into two parts: Western Sahel (with Senegal and Mauritania), and Central Sahel (from Mali to Chad), as both have different projections for their expected changes in precipitations. The western part of the region is expected to experience, more clearly, a reduction in precipitations during the summer period. The central part of the region, on the other hand, has a less clear projection which could be a problem when drafting policies for adaptation purposes (Lewis & Buontempo, 2016)

Regarding the state of temperature in the region there is strong consensus in scientific studies suggesting and predicting an extreme increase in temperatures. The Sahel increase in temperature is expected to be 150 per cent higher than the average global variation and increase in surface warming. This dramatic rise in temperatures would be equivalent to an average increase of 3-4 degrees Celsius, more prominent in the western part of the Sahel (Buontempo, Booth, & Moufouma-Okia, 2012). Such increase in warming could be absolutely devastating in terms of food security, health and economic growth, and could also foster desertification and a reduction of the liveability of the region.

With the highly negative climate projections mentioned in this section for the Sahel region, and knowing the characteristics and economic and subsistence dependency of the area on agriculture and livestock, it is therefore reasonable to assume that the effects such changes can have on society can be devastating.

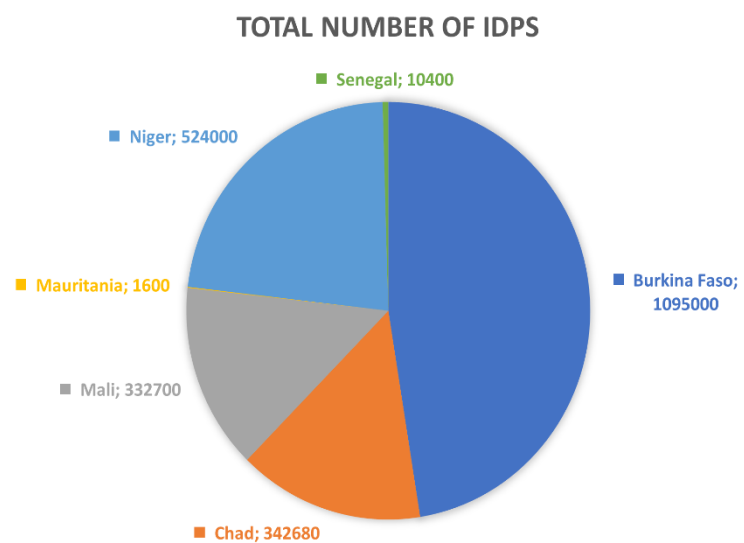
#### 4.3.3. Human rights in the region.

The Sahel, despite some progress over the past decades, continues to be one of the poorest places in the world. According to the Human Development Index (HDI) ranking, which analyses data from 189 countries, the region is clearly one of the worst positioned (if not the worst). Four of the Sahel countries are among the 10 countries with the lowest human development indicators, these being Niger at the bottom (189th), Chad (187th), Mali (184th) and Burkina Faso (182nd). The other two countries of the region, despite being ranked higher, also receive low human development positions, with Senegal ranking 168th and Mauritania 157th (United Nations Development Programme, 2020). This poverty, which characterises the region, is not only reflected in the economic factors of the countries that constitute the Sahel but is also a source of vulnerability to human rights violations. The source of these problems lies largely in the region's dependence, as explained above, on an economic model based on agriculture and the export of raw

materials. The dependency on these sectors makes the economy unpredictable and “increases the strain on regional governments, inhibiting their ability to craft long-term economic plans. It also prevents them from being able to invest in and strengthen public services and impedes efforts to improve food security, malnutrition and education” (Eizenga, 2019). The region is consequently plunged into a situation of chronic and acute malnutrition that left around 4 million people in these countries suffering from food insecurity (World Food Programme, 2018).

The other potential cause of these countries being at the bottom in terms of human development is undoubtedly the situation of violence in the area. This state of violence, in which one in four people in the region live (World Food Programme, 2018), leads to a high level of uncertainty and vulnerability to possible human rights violations. Some of the most obvious effects of these conflicts are the loss of homes; access to basic services, such as food, shelter, clean water, health care, sanitation or education; migration and internal displacements (Bisimwa, 2021). Figures for the latter can be seen in *Figure 5*.

This migration and internal displacement builds upon the already existing migratory movements in the area, which has always been a transit and exit zone in terms of unsafe migration. Furthermore, it is important to mention that the two main types of conflict in the region are: firstly, the always existing seasonal communal conflicts between



*Figure 5. Total number of IDPs in the Sahel 2019.*  
 Source of data: (The Internal Displacement Monitoring Centre, 2019)

pastoralists and farming communities that, as will be later addressed, have been exacerbated as a consequence of the effects of climate change; and secondly, the political or religious conflicts mainly triggered by Islamists groups like Boko Haram (Eizenga, 2019).

Because of all the above mentioned information, and considering the region's low human development levels, its high vulnerability to climate change with a predicted degradation of about 80 per cent of the region's land, its high dependence on agriculture, the escalation

of conflicts whether communal or by extremist groups, and the significant increase in population (currently 80 million people) which is expected to double in the next 20 years, the regional scenario could potentially become a humanitarian crisis of unprecedented proportions (World Food Programme, 2018).

## **5 Children's rights.**

As already indicated in the previous analysis of the state of human rights in Africa, those who are considered most vulnerable within a society are those who will suffer the greatest consequences in terms of human rights violations. Therefore, one of the groups most vulnerable to the effects of poverty, climate change or conflict, as is the case with children, will also be one of the groups to suffer the greatest human rights violations as a result of these three factors. This is why the study will focus on two of the main rights of this population group, the right to health and the right to education. In order to be able to analyse how climate change affects these rights in question, it is essential that we first look at the principal legal guarantees or protections, that exist and have existed in international law, regarding children's rights and specifically the right to education and the right to health.

Reviewing the history of children's rights in international law, the first international treaty recognising children's rights and their protection dates back to 1924. This document, the Declaration of the Rights of the Child adopted by the League of Nations, although not very extensive, was the basis for establishing the principles for the protection of children's welfare. Years later, with the creation of the United Nations, the General Assembly of this organisation adopted several documents in 1948 and 1959, which further extended and contextualised children's rights. Despite the existence of all these documents, none of them were binding, and in 1978, Poland drafted a document with the aim of changing this. This document later served as the basis for the Convention on the Rights of the Child, adopted in 1989 and which will be discussed in more detail below. The latter introduced binding protections for the rights of this population group and is still in force today (Ruppel-Schlichting, Human, & Ruppel, 2013).

In addition to these specific international legal documents on children's rights, there are multiple treaties that, while not specific in terms of these rights, contain protections for the rights of children. In addition to the documents that cover general human rights, and

which would therefore be applicable to all human beings, including children, there are some specific sections in these treaties on this particular population group, due to their vulnerability and with the aim of achieving greater protection of human rights as a whole and for the whole of humanity. One example of such focus on children is Article 25 of the Universal Declaration of Human Rights. The latter article in the Declaration states:

1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection (United Nations General Assembly, 1948 ).

In addition to the Universal Declaration of Human Rights, we find provisions on the protection of children in the Convention on Civil and Political Rights (ICCPR); in the International Convention on Economic, Social and Cultural Rights (ICESCR); and in other international conventions such as the one on the elimination of discrimination against women, the convention against torture and inhuman behaviour, and the convention concerning the rights of Persons with Disabilities among others. All these international treaties, which unlike the Universal Declaration of Human Rights are legally binding, agree on the special vulnerability of children and give them special protection because of it (Ruppel-Schlichting, Human, & Ruppel, 2013).

Finally, there are other international treaties drafted at a regional level, in this case we will focus on those referring to the African continent, such as the African Charter on Human and Peoples' Rights (of a more general nature), and the African Charter on the Rights and Welfare of the Child (specific to children's rights). Both treaties and its provisions will be dealt with greater detail later.

## **5.1 UN Convention on the Rights of the Child.**

The United Nations has multiple mechanisms for the protection of children's rights, as we have seen above. In this case, where we are interested in the effects of climate change on this group of the population, we will focus on the aforementioned 1989 Convention on the Rights of the Child (CRC). This convention, which is legally binding and entered into force in September 1990, has 193 states parties. Among these states are the six countries

considered in this study (because of their belonging to the Sahel region), all of which have ratified the treaty in its entirety, with the exception of Mauritania. The latter state claims that: “In signing this important Convention, the Islamic Republic of Mauritania is making reservations to articles or provisions which may be contrary to the beliefs and values of Islam, the religion of the Mauritania People and State” (United Nations, 1989).

However, because of the broad spectrum of rights (civil, political, economic, cultural, and social) contained in this convention, we will focus on two of them: the right to health and the right to education. To explain their importance regarding the present study we will present the provisions concerning the latter. Once presented, these provisions will be later used to analyse the impact of climate change in these two rights. Despite the limitation of this study to two of the rights contained in the CRC, it is important to note that the convention emphasises the indivisibility and interconnectedness of all the rights contained therein. Furthermore, the Committee on the Rights of the Child emphasises that four of the rights contained in the Convention have a *general principle* character and therefore underlie the rest of the rights and the meaning of the Convention itself. These are: the principle of equality (contained in Article 2); the principle of prevalence of the best interests of the child (Article 3); the right to life and development (Article 6); and finally, the principle of child participation (Article 12) (Ruppel-Schlichting, Human, & Ruppel, 2013). These principles, while they will not be further developed in this study, will be essential to the understanding of the analysis of the effects of climate change on the chosen children's rights, and are similarly necessary for policy development and accountability in the framework of this study.

#### 5.1.1 Right to Education.

The right to education, chosen for this study as explained above, is one of the rights that, as we will see, is largely limited and violated because of climate change and its direct and indirect effects. On the other hand, this right is not only essential for the proper development of children, but it is also very necessary for the improvement of the region's development levels (economic, political and social), and for greater adaptability to the expected changes brought about by climate change. We find this right and its corresponding provisions in the Convention on the Rights of the Child mainly in articles 28 and 29. In addition to these articles, reference is made to this right in Article 32, 1.



Article 28 of the Convention on the Rights of the Child enshrines the right of children to education, which is therefore recognised by all states that have ratified the treaty. It also establishes the commitment of these states to progressively achieve compliance with and access to this right. To this end, Article 28 of the CRC stipulates that states parties shall:

(a) Make primary education compulsory and available free to all; (b) Encourage the development of different forms of secondary education, including general and vocational education, make them available and accessible to every child, and take appropriate measures such as the introduction of free education and offering financial assistance in case of need; (c) Make higher education accessible to all on the basis of capacity by every appropriate means; (d) Make educational and vocational information and guidance available and accessible to all children; (e) Take measures to encourage regular attendance at schools and the reduction of drop-out rates (United Nations, 1989).

In the same Article it is also established that “3. States Parties shall promote and encourage international cooperation in matters relating to education, in particular with a view to contributing to the elimination of ignorance and illiteracy” (United Nations, 1989). With this, we can see how the convention specifies that not only must states parties ensure the right to education for their citizens and therefore children’s access to it, but they also commit themselves to ensuring this throughout the international community, providing assistance to other states if needed.

The right to education is also portrayed, as indicated above in Article 29, where it is specified which core values (in line with the convention itself) should be part of children's education. Some of these values are, for example, the respect for human rights, the development of children's talents and abilities, or the respect for the environment. And finally, we can see this right in Article 32, 1, where it is established that States Parties must ensure children are protected from the performance of any activities that could be harmful to them and interfere with their education: (United Nations, 1989). From this article we can conclude that states must ensure that children do not suffer any form of economic exploitation or work that may interfere with their right to education or personal health, which leads us to the next right chosen for this study.

#### 5.1.2 Right to the Highest attainable standard of health.

Having seen how the right to education is typified in the Convention on the Rights of the Child (CRC), we must now look at the right to health. This right is referred to

as the right of children to the highest attainable standard of health, and as we explained before this right should be interpreted as that “all persons have a human right that other people do not act so as to create serious threats to their health.” (Caney, 2010). It should be interpreted in this way as it would be impossible to achieve an absolute state of health for all people. Additionally, the *General comment No. 15 (2013) on the right of the child to the enjoyment of the highest attainable standard of health (art. 24)* states that:

The Committee interprets children’s right to health as defined in article 24 as an inclusive right, extending not only to timely and appropriate prevention, health promotion, curative, rehabilitative and palliative services, but also to a right to grow and develop to their full potential and live in conditions that enable them to attain the highest standard of health through the implementation of programmes that address the underlying determinants of health (UN Committee on the Rights of the Child, 2013).

In the above-mentioned Convention, this right is enshrined in several articles. The main and specific article on this right is Article 24, which states that States Parties recognise this right, and that no child should be deprived of it. It also adds that in order for children to be able to enjoy this right States Parties shall therefore take the necessary measures for diminishing child mortality rates; for ensuring the availability and access to medical assistance and health care; for the reduction of malnutrition and diseases, having in mind the risks of environmental pollution; and for ensuring the whole population is aware of and educated about basic knowledge regarding children’s health and nutrition(United Nations, 1989).

Moreover, and similar to the right to education, this Article includes a provision whereby States Parties commit to promote international cooperation and therefore ensure that this right can be enjoyed equally throughout the world, with no exception for developing countries. Other articles of this convention also address: the right of children receiving medical treatment to have access to subsequent medical examinations (Article 25); the right of children to benefit from social security that guarantees them access to health care (Article 26); or the right of children to receive physical or psychological assistance as well as support for their reintegration into society after facing abuse, torture or other cruel or inhuman treatment (Article 39);

## **5.2 African Charter on the Rights and Welfare of the Child.**

In addition to the UN mechanisms mentioned above, there are other human rights protection instruments, in this case we will focus on those aimed at children's rights, which are developed by certain regions of the world. For this study, focusing on the African Sahel region, we will focus on the rights of children contained in the African Charter on the Rights and Welfare of the Child (ACRWC). The Charter was drafted by the Organization of African Unity (today's African Union) and was adopted in 1990 within a year since the Convention on the Rights of the Child. The reason African states decided to draft their own document stems from the lack of African representation, and therefore contextual adequacy in the drafting of the CRC. As done before with the Convention on the Rights of the Child, we will now focus on the African Charter on the Rights and Welfare of the Child's approach to the right to education and the right to health.

### **5.2.1 Right to education.**

The right to education is enshrined in the African Charter on the Rights and Welfare of the Child in Article 11. This article specifies that “1. Every child shall have the right to education.”, it further states that the education offered should, similarly to that agreed in the CRC, be aimed at inter alia:

(a) the promotion and development of the child's personality, talents and mental and physical abilities to their fullest potential; (b) fostering respect for human rights and fundamental freedoms with particular reference to those set out in the provisions of various African instruments on human and peoples' rights and international human rights declarations and conventions; (...) (g) the development of respect for the environment and natural resources;” (Organization of African Unity (OAU), 1990).

The Charter also emphasises that the States Parties of the Charter shall take measures aiming the achievement of the full realisation of the right to education by providing free and compulsory education; by encouraging regular attendance at schools; and by ensuring equal access to education through measures whose intention should be the reduction of inequalities among female and “disadvantaged” children (Organization of African Unity (OAU), 1990).

It should be noted that the right to education is also enshrined in the African Charter on Human and Peoples' Rights. This other mechanism for the protection of human rights at

the regional level states in its Article 17.1 that “Every individual shall have the right to education” (Organization of African Unity (OAU), 1981).

#### 5.2.2 Right to Health and Health Services.

Finally, we find the right to health and medical services, enshrined in the African Charter on the Rights and Welfare of the Child in Article 14. This article provides that “1. Every child shall have the right to enjoy the best attainable state of physical, mental and spiritual health”. The latter also indicates that States Parties assume, by ratifying this Charter, the commitment to ensure and take the necessary measures to achieve the full implementation of this right, with a particular regard:

(a) to reduce infant and child mortality rate; (b) to ensure the provision of necessary medical assistance and health care to all children with emphasis on the development of primary health care; (c) to ensure the provision of adequate nutrition and safe drinking water; (d) to combat disease and malnutrition within the framework of primary health care through the application of appropriate technology; (...); (f) to develop preventive health care and family life education and provision of service; (g) to integrate basic health service programmes in national development plans; (h) to ensure that all sectors of the society, in particular, parents, children, community leaders and community workers are informed and supported in the use of basic knowledge of child health and nutrition, the advantages of breastfeeding, hygiene and environmental sanitation and the prevention of domestic and other accidents; (i) to ensure the meaningful participation of non-governmental organizations, local communities and the beneficiary population in the planning and management of basic service programmes for children; (j) to support through technical and financial means, the mobilization of local community resources in the development of primary health care for children. (Organization of African Unity (OAU), 1990).

As with the right to education, the right to health is also enshrined in the African Charter on Human and Peoples' Rights in Article 16 “1. Every individual shall have the right to enjoy the best attainable state of physical and mental health.” In it is also stated that “2. States parties to the present Charter shall take the necessary measures to protect the health of their people and to ensure that they receive medical attention when they are sick.” (Organization of African Unity (OAU), 1981)

## **6 Analysis: effects of climate change in children's rights in the Sahel.**

Having considered the main theories regarding the relationship between human rights and climate change; the regional context of both variables; and the protection that exists in the region in relation to children's rights, focusing on the right to health and education, we can now proceed to an analysis of the impact of climate change on children's rights in the region. For this purpose, the analysis will be divided into three study sections. The first section will analyse the relationship between climate change and conflict or the possibility of conflict in the region. The second will focus on the direct or indirect link between climate change and the violation of the right of children to education. Finally, the third will focus on showing the effects of climate change on the right to health of children in the region.

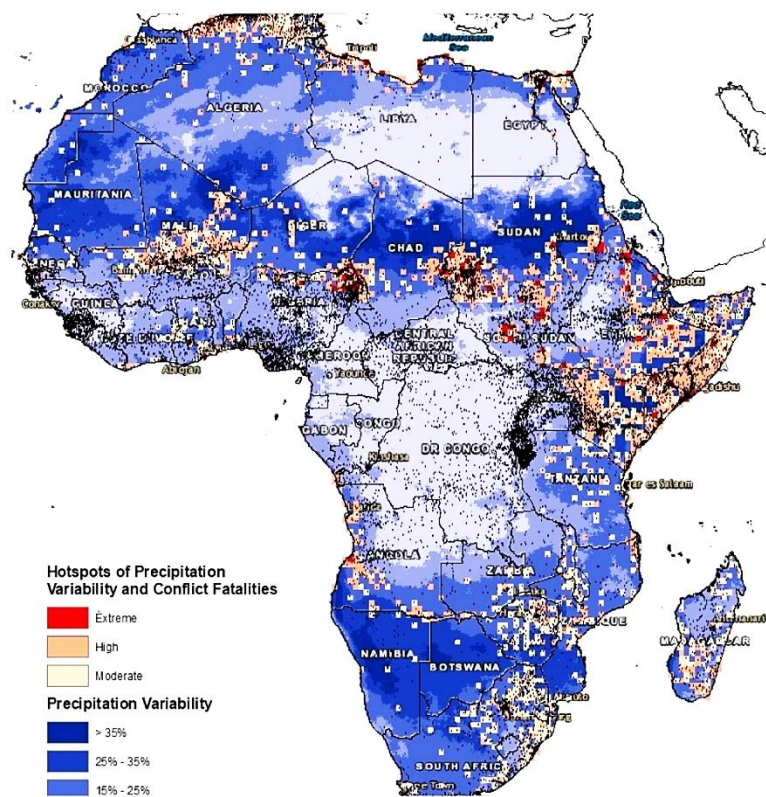
### **6.1 Climate change and conflict in the region.**

In order to understand some of the factors which make climate change a source of major human rights violations, we need to understand the relationship between conflict in the Sahel region and the increasing variability of its climatology. As explained earlier in this study, there is a relationship between conflict and climate change that in many cases, although not direct, is clearly tangible. This relationship is based on the concept of vulnerability. As explained in the previous section on conflict and climate change, the vulnerability of the population for economic, cultural or social reasons means that these people are immersed in a cycle that only increases the latter because of a greater exposure to certain factors such as: situations of conflict, human rights violations, or even the impact of climate change and the possible natural disasters that it provokes with increasing frequency.

A report from the World Food Programme has found that climate change effects might act as a risk multiplier regarding conflict because of the exacerbation it produces in maybe already existing vulnerabilities and inequalities. There are many reasons for this. Firstly, rainfall variability could lead to floods or droughts which, as a consequence, could reduce access to both food and water. This could also impact on the main economic source of the African continent and the Sahel region, agriculture, further increasing inequalities and poverty. Secondly, as the report shows, studies have found that a 1°C increase in temperature can lead to an economic downturn of at least 2% in countries with weak

economies. This economic loss could lead to higher prices, which would increase the risk of clashes and violence. It could also lead to increased unemployment, which in resource limited countries encourages recruitment by armed groups. The report also highlights the ease with which such situations could develop into large-scale forced migration movements and the weakening and disruption of previously unconsolidated political institutions or democracies. Finally, the report indicates that changes and variability in climate could have an impact in the mobilisation of pastoralists. A decrease in the mobility of pastoralists could result in an increase in their vulnerability to climate change extreme events. On the contrary, a change in their mobility routes in search for resources could lead to the rising of conflicts with the already established communities in their new routes (World Food Programme (WFP); Stockholm International Peace Research Institute (SIPRI), 2019).

The Sahel region is a great example of the latter types of communal conflicts. This can be seen in *Figure 6*. These conflicts, which are seasonal in nature, occur very frequently in the region. In the countries that make up the Sahel, disputes between landowning communities are relatively frequent and are amplified by ethnic militias that are increasingly involved in these conflicts. In this situation, lack of resources and climate variability have led to an exponential increase in these inter-communal clashes, given the scarcity of resources in the destination locations and the increase in the number of resource-dependent people there. These types of conflicts spurred by climate change are already taking place in countries like Mali or Burkina Faso, and they are an example of how these communal



*Figure 6. The map shows the intersecion between climate variability and conflict. Source: (World Food Programme (WFP); Stockholm International Peace Research Institute (SIPRI), 2019)*

disputes are transforming into more persistent and violent conflicts.

## 6.2 Impacts of climate change in the right to education

As we have seen, climate change could be, and already is in some countries in the Sahel region, a cause of the increase in conflict. This will be one of the main points in the analysis of the effects that these climate variations have on the right of children to education.

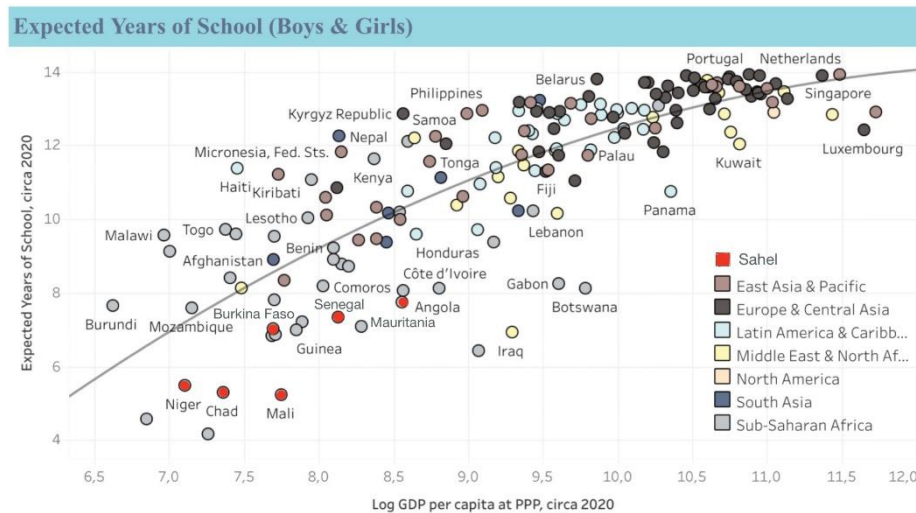


Figure 7. Expected “years of school a child born today can expect to obtain by age 18, giving the prevailing pattern of enrolment rates in his/her country. Source: (The World Bank, 2020)

Before we begin to analyse the effects of climate change on this right, we must look at the state of education in the region. This, as can be seen in *Figure 7* (showing the Sahel countries in red), is a highly sensitive situation, with the number of expected years of schooling far below the global average (The World Bank, 2020). It is estimated that one in three to four children do not attend school in this region (World Food Programme, 2018).

With the right to education already so weakened in the region despite the many international treaties and conventions (discussed above) that commit not only Sahelian states to protect and facilitate access to the right to education but the international community as a whole, the prospects for the future of this right in the wake of climate change are not positive. This is because the already existing vulnerability caused by low human development indices and reliance on agriculture-based economies could, as we have seen, be increased by a rise of conflicts. The latter are one of the main causes of lack of school attendance, whether due to insecurity, recruitment of young people by militias

or armed groups, or forced migrations that interrupt (in many cases for long periods of time) access to education.

To this disruption of education caused by the increase in climate change-related violence, should be added the disruption caused by the increase in natural disasters such as floods or droughts and the effects they can have on society, such as the loss of infrastructure or the loss of life, both of children and their families. It has been studied that “exposure to negative rainfall shocks significantly reduces children’s school attendance by almost 10%” (Agamile & Lawson, 2021). This is because, in situations where families suffer extreme weather events, these often take their children out of school so that the latter can help or contribute to the economic maintenance of the household. The activities this children could take part in, are in many cases resulting in child labour and exploitation or even recruitment by militia groups, which is something States Parties have the legal obligation to avoid under Article 32, 1 of the Convention on the Rights of the Child that aims, as we have previously indicated, to avoid the involvement of children in activities that could be harmful to them and interfere with their education.

We must emphasise the fact that the negative data with regard to the right to education indicates, as seen, a serious lack of commitment by Sahelian states to comply with international treaties such as those mentioned above, which openly include the protection of this right. Moreover, another example of this lack of compliance is that the states of the region, by not being able to guarantee school attendance are failing to ensure the promotion and development of both children’s personality and abilities, something they are bound by Article 11 of the African Charter on the Rights and Welfare of the Child. Finally, we must also highlight the role of the international community. According to these treaties, the international community should not only provide assistance so that these countries can improve their compliance with these rights but should also take measures against climate change to prevent a worsening of access to education for the reasons we have outlined here.

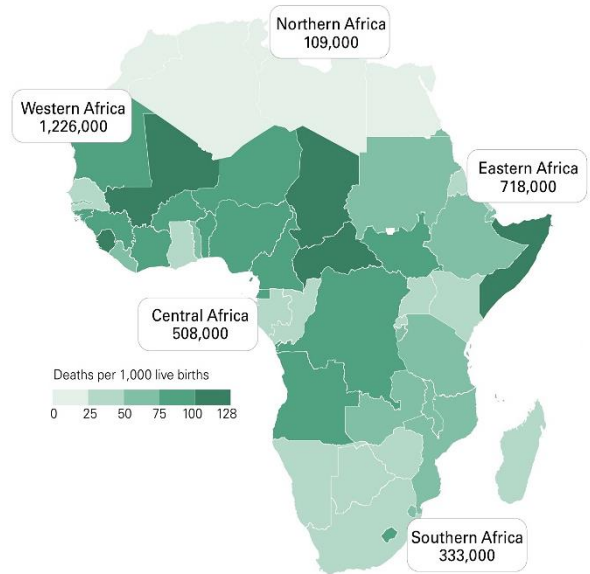
### **6.3 Impacts of climate change in the right to health**

Finally, we find the right to health. This right is probably one of the most directly vulnerable to the effects of climate change. Children are generally more exposed and may suffer more as a result of extreme weather events or natural disasters. Not only in terms



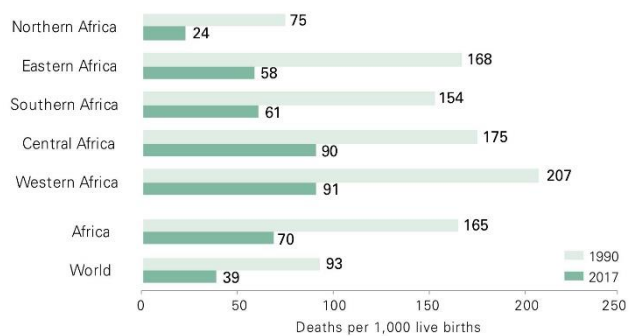
of physical health, but they may also be affected on an emotional level and therefore in relation to their mental health.

If we refer specifically to the Sahel region, we must reiterate that around 4 million people are food insecure. In addition, child mortality levels remain very high despite the progress made in this area in recent decades. We can see the evolution and the number of deaths of under-five children by region in the African continent in *Figure 8* and *Figure 9*.



*Figure 8. Under five mortality rate, 2017. Source: (UNICEF; African Union, 2018)*

The expected drastic increase in temperatures, as well as variability in rainfall, could worsen this situation for children by rising the levels of malnutrition (as a consequence of water and food scarcity), or by increasing diseases such as diarrhoea or cholera, which are very frequent in extreme events



*Figure 9. Under-five mortality rate by African Union sub-region, 1990 and 2017. Source: (UNICEF; African Union, 2018)*

like floods. This could be a clear failure of compliance with Article 24 of the Convention on the Rights of the Child in which it is clearly indicated that States Parties shall take appropriate measures for combating malnutrition and other diseases taking into consideration the risks of environmental pollution. Moreover, as indicated in the General comment No. 15 made by the Committee on the rights of the Child with regards to the right to the highest attainable standard of health in 2013, “States must provide children not only access to health care, but also the necessary living conditions to enjoy their right to health” (UN Committee on the Rights of the Child, 2013). With this we can conclude that not adapting to climate change will suppose a deterioration of living conditions for children that would consequently mean another failure in compliance to the CRC by the States Parties. Another effect of climate change could be the collapse of health care systems (given the worsening of the health of the population), which in these countries

are already under pressure due to lack of resources and staff (Ruppel-Schlichting, Human, & Ruppel, 2013).

For all of these reasons, and as indicated with regard to the right to education, States Parties to the conventions (which includes the six analysed in this study) must not forget or neglect the obligations they have assumed by ratifying these international treaties and must do everything in their power to reduce levels of malnutrition and infant mortality, among others. In addition, they must take into account the increase in population in order to create policies that make health care accessible to the whole of society without it being affected by this factor.

## **7 Conclusions and policy recommendations.**

As we have seen, climate change is one of the main concerns of our times and as such, it must be studied in depth so that it can be avoided or so that humanity can at least adapt to its worst consequences. In the course of this study, we have observed the strong link between climate change and human rights violations. We have also been able to see how this theoretical approach is increasingly present in the different policies to mitigate this phenomenon and which aim to bring about a global shift towards a sustainable development model. This is exemplified, for example, in the 2030 Agenda and the Sustainable Development Goals, which has also driven the creation of similar agreements at the regional level, such as the African Agenda 2063. These agreements also show the existing obligation of states to ensure the maximum protection of human rights that their resources allow, not only at the national level but also internationally through cooperation.

We have additionally determined that cycles of vulnerability are not only a source of human rights violations, but also a source of increased susceptibility to the consequences of climate variability, leading to an endless cycle of structural human rights violations. Another factor that has been found to contribute to fuelling human rights violations is conflict. This factor may be increased by the effects of climate change, which, as we have seen, could affect regions such as the Sahel where violent disputes between pastoralists and established communities of farmers were already occurring. As a result, this instability caused by violence may also lead to a reduction in resilience to the effects of climate change by reducing the capacity of states to act against it.

On the other hand, by focusing the analysis on finding the consequences of climate change for one of the most vulnerable sections of the population, we wanted to show the need to take into account the principle of intergenerational equity. In this way, the equality between current and future generations must be taken into consideration in the creation of adaptation measures, as these generations must be able to enjoy the earth's resources with equal dignity. In the case of Africa, and more specifically the Sahel region, we have seen how the provisions for the protection of this principle are highly threatened. It is for this reason that these states, as indicated by the African Committee of Experts on The Rights and Welfare of the Child, should not forget that the protection of the child's best interest includes:

short term, medium term and long-term best interests. For this reason, State actions which imperil the enjoyment of the rights of future generations of children (eg allowing environmental degradation to take place, or inappropriate exploitation of natural resources) are regarded as violating the best interests of the child standard ((ACERWC), 2018).

The exponential increase in temperatures, as well as the expected extreme variability of precipitation, portend an unprecedented increase in human rights violations. In the specific case studied here, the rights to education and health, we can see how climate change without the necessary mitigation and adaptation measures could lead to an alarming and unprecedented humanitarian crisis. This would mean an increase in child deaths from causes such as malnutrition or diseases common in natural disasters, such as cholera or diarrhoea, and could put further strain on already weakened health-care systems, making it impossible to protect children's right to the highest attainable standard of health. Furthermore, this humanitarian crisis could also lead to an increase in conflict and poverty that could generate large displacements and migratory movements and further pressure on households, resulting in a reduction in school attendance by children and thus interfering with the formative process of future generations and their innate right to education. The impact on these two fundamental rights of children has a direct effect on the core principle of children's rights, the prevalence of the best interests of the child in national and international decision-making, to which states are bound to by Article 4(1) of the African Charter on the Rights and Welfare of the Child. This is why it is necessary that measures to mitigate the consequences of climate change are taken as soon as possible.

With regard to these measures, I believe that it is necessary to increase the study of meteorological changes in the Sahel region, so as to have a more reliable forecast of the variation in rainfall which, at the moment, is highly uncertain. Knowledge of this data would make possible to address changes in agri-food production and the resilience of communities in these six countries, thus avoiding problems such as food insecurity. On the other hand, I believe it is necessary that these countries, with the help of the international community, do everything in their power to fulfil their obligations under the treaties outlined in this study.

Concerning the right to education and health, I consider it urgent that countries allocate funds for the training of professionals for both the health and education sectors. This must be a priority, as the expected exponential increase in population, together with the consequences of climate change already mentioned, would mean the absolute collapse of both systems, and therefore the systematic violation of these rights in the region. This allocation of resources should start with compliance with the Abuja Declaration, in which states pledged to increase spending on health to at least 15% of GDP, and the Dakar Declaration, in which a commitment was made to increase spending on education to at least 9% of GDP in these countries ((ACERWC), 2018).

Despite these recommendations on climate change adaptability and the protection of rights impacted by climate change, the lack of accountability in human rights protection systems remains a problem. The fact that the different treaty monitoring committees can only make recommendations and observations on states' actions is a disadvantage for the enforcement of these rights' protection mechanisms. This is why I believe that enforcement methods should be reviewed. They should also be adapted to the needs of climate change action and include environmental rights as part of the rights protection instruments. By doing so, greater pressure would be brought to bear on states to fulfil their obligations.

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