

AFRICA CLIMATE SUMMIT 2023: CLIMATE CHANGE AND THE SOCIAL DIMENSION

2023 AFRİKA İKLİM ZİRVESİ: İKLİM DEĞİŞİKLİĞİ VE SOSYAL BOYUT

Yıl 4, Sayı 1, ss.41-61.

Year 4, Issue 1, pp.41-61.

Makale Türü: Araştırma Makalesi

Article Type: Research Article

Geliş Tarihi: 11.10.2023

Submitted: 11.10.2023

Kabul Tarihi: 15.01.2024

Accepted: 15.01.2024

DOI: 10.58851/africana.1374553

Atf Bilgisi / Reference Information

Dal, S. (2024). Africa Climate Summit 2023: Climate Change and The Social Dimension, *Africana Dergisi*, 4 (1), 41-61. <https://doi.org/10.58851/africana.1374553>

Süleyman DAL

Dr., Türkiye, Bağımsız Araştırmacı, slymndal@gmail.com,
ORCID: 0000-0001-6918-0706

Abstract

Climate change, driven by its effects of increasing greenhouse gas emissions, refers to systematic and long-term changes in the planet's climate system. These changes manifest themselves with various effects, such as the increasing frequency and severity of extreme weather events, rising sea levels, and higher surface temperatures. Beyond being an environmental issue, climate change has political, economic, and social dimensions. The African continent, where poverty rates are high, is the region that feels the impacts of climate change most intensely in social and societal contexts. The purpose of addressing the social dimension of climate change is to minimize its adverse effects through a comprehensive approach. In this context, this study focuses on the social dimension of climate change and examines the Africa Climate Summit 2023 (ACS'23). The goal of this study is to shed light on the social dimension of climate change in Africa. This study argues that summits play a crucial role in setting agendas, addressing issues, and generating solutions within the framework of climate change. In this context, it seeks to answer questions such as: what the effects of climate change are in general, how it impacts societies on a social level, and what the positioning of this issue is in the ACS'23. To address these questions, a descriptive analysis method is employed, centering on the work of the United Nations (UN) and the African Union (AU), with a literature review. The results indicate that climate change has gained prominence in discourse at the global/regional level, but there have been delays in taking action. They also highlight the critical importance of sustainable policies and financial resources in addressing the (social) problems caused by climate change in the African continent. This study is expected to contribute to the academic literature -in Türkiye- by drawing more attention to the social issues in Africa as a result of climate change.

Keywords: Africa, summit, climate change, social dimension, sustainability.

Öz

Sera gazı emisyonlarını artırıcı etkileri nedeniyle hızlanan iklim değişikliği; sistematik ve uzun süreli olarak, gezegenin iklim sisteminde meydana gelen değişiklikleri ifade etmektedir. Bu değişiklikler; şiddetli ve sık hava olaylarının artması, deniz seviyelerinin yükselmesi ile yüzey sıcaklıklarında artış gibi farklı etkilerle kendini göstermektedir. Çevresel bir sorunun ötesinde iklim değişikliğinin; siyasi, ekonomik ve sosyal boyutu bulunmaktadır. Yoksulluğun yüksek seyrettiği Afrika, toplumsal ve sosyal bağlamda iklim değişikliğinin etkilerini en yoğun hisseden bölge/ktadır. Sosyal boyutta iklim değişikliğinin ele alınma amacı, bütüncül bir yaklaşımla olumsuz etkileri en aza indirmektir. Bu anlamda iklim değişikliğinin sosyal yönüne odaklanan çalışma, 2023 Afrika İklim Zirvesi'ni incelemektedir. Çalışmanın amacı, sosyal boyutuyla iklim değişikliğini Afrika özelinde ele almaktır. Çalışmada; gündem oluşturma, sorunların ele alınması ve çözüm üretilmesi çerçevesinde zirvelerin önemli olduğu savunulmaktadır. Bu minvalde; genel olarak iklim değişikliğinin etkileri nelerdir, sosyal olarak toplumları nasıl etkilemektedir, 2023 Afrika İklim Zirvesi'nde bu hususun konumlanışı ne durumdadır, sorunlarına cevap aranmaktadır. Bu bağlamda betimsel analiz yöntemi kullanılarak Birleşmiş Milletler (BM) ile Afrika Birliği'nin çalışmaları merkeze alınıp literatür taraması yapılmıştır. Sonuçlar; global/bölgesel düzeyde iklim değişikliğinin söylem bazında öne çıktığını, aksiyon almada gecikmeler yaşandığını, Afrika kıtasında iklim değişikliğinin sebep olduğu (sosyal) problemlere çözüm üretmede sürdürülebilir politikaların ve mali kaynak oluşturmamın kritik öneme sahip olduğunu göstermektedir. Çalışmanın; iklim değişikliğinin bir neticesi olarak, Afrika'daki sosyal sorunlara daha çok dikkat çekme noktasında -Türkiye'deki- akademik literatüre katkı sağlaması beklenmektedir.

Anahtar kelimeler: Afrika, zirve, iklim değişikliği, sosyal boyut, sürdürülebilirlik.

STRUCTURED ABSTRACT

In this study, the social effects of climate change in Africa are discussed. First, after evaluating the effects of climate change in general, the social dimension of climate change was analyzed specifically for Africa within the framework of ACS'23. The two main bearers of the summit are the United Nations (UN) and the African Union (AU). The basis of the study is created by considering the actions and texts/reports of these two organizations. The declaration published at the end of the summit is a conclusion.

Despite presenting an environmental facade, climate change has multifaceted societal and social ramifications. Africa is the most exposed to these impacts due to higher levels of poverty, deprivation, and economic inadequacy compared to other regions. The African continent relies largely on an agriculture-based economy, making it particularly susceptible to the effects of climate change. Consequently, food production diminishes, and the local populace's struggle against hunger becomes more challenging. Decreased water resources due to drought exacerbate inequalities in access to water. The extreme temperatures brought about by climate change proliferate health issues and the incidence of infectious diseases. The UN and the AU are engaged in significant efforts to combat climate change. These two entities take the lead in shaping crucial policy-making processes in the fight against climate change. They have played roles, especially in the creation of international agreements like the Paris Agreement. These organizations implement various programs and projects to provide financing and technical assistance to African countries for combating climate change. The UN and the AU encourage scientific research related to climate change and support evidence-based policy formulation.

Africa and many African nations are actively engaged in combating climate change and reducing the associated social impacts. Several African countries have formulated national climate action plans and taken steps towards their implementation. These plans aim to reduce greenhouse gas emissions, enhance adaptation efforts, and support sustainable development goals. Some African nations are reducing fossil fuel usage by investing in renewable energy sources, with a particular emphasis on solar and wind energy projects. The preservation and restoration of forests and natural habitats are crucial for biodiversity conservation and carbon sequestration. Sustainable management of water resources and water efficiency initiatives play a pivotal role in building resilience against drought and water scarcity challenges.

At ACS'23, climate change was discussed in all its aspects and its effects were on the agenda in the social context. In the declaration published within the framework of the final text of the summit, climate change and the social dimension; (on a global scale) and especially in Africa, as follows: (i) Emphasizing the validation by the Intergovernmental Panel on Climate Change (IPCC) that Africa experiences accelerated warming compared to the global average, and if unchecked, climate change will persistently affect African economies and societies, impeding progress and well-being; (ii) Expressing alarm over the disproportionate burdens and hazards that numerous African nations confront due to climate change-induced erratic weather phenomena and patterns, including protracted droughts, catastrophic floods, and wildfires, leading to extensive humanitarian crises with adverse consequences for economies, health, education, peace, and security, among other threats. In order to overcome social and other problems, it was stated at the summit that collective action was needed on the following issues: (i) urging the international community to promptly take action to reduce emissions, honor its commitments, uphold previous pledges, and aid the continent in tackling climate change; (ii) encouraging investments that promote climate positivity and trigger a developmental path centered on industries set to revolutionize our world, enabling African nations to attain a consistent middle-income status by 2050. At the summit, commitments were made, by African leaders, on the following issues: (i) formulate and execute policies, regulations, and incentives aimed at attracting domestic, regional, and worldwide investment in sustainable growth and all-encompassing economies; (ii) orient our economic development strategies toward growth that benefits the

climate, including the expansion of equitable energy transitions and the generation of renewable energy for industrial operations, climate-resilient and regenerative agricultural practices, and essential safeguarding.

In conclusion; general and specifically in Africa, combating climate change necessitates a comprehensive effort at both the global and local levels. Vital measures to address the social (and other) issues caused by climate change and mitigate their impacts include reducing greenhouse gas emissions, preserving ecosystems, enhancing energy efficiency, promoting sustainable agriculture, establishing social justice, and implementing education and policy regulations. National and international collaborations are of utmost importance in the African context. While the efforts of the UN and other international organizations in combating climate change are significant, they also have shortcomings and challenges. Climate change demands more international cooperation, swift action, and comprehensive policy and financing solutions, necessitating the enhancement and improvement of existing efforts. This is because Africa faces resource constraints, high social and economic challenges, as well as political issues and instability. The AU commitment to social justice in African countries is crucial. The AU should allocate more funding to awareness and education projects and programs regarding climate change, with its support and coordination. Many African countries are also working on efforts to combat climate change and reduce its social impacts. However, African countries must strengthen appropriate policy and legal frameworks for climate change mitigation. Efforts to combat climate change should align with sustainable development goals.

Introduction

Climate change refers to the long-term and systematic alterations in the Earth's climate system. These alterations encompass variations in average weather conditions, temperature, precipitation, winds, and other climate attributes. Climate change has occurred over centuries and is a result of both natural factors and human activities. Climate change is commonly associated with the following factors: global warming, greenhouse gas emissions, impacts on biodiversity, rising sea levels, and shifts in weather patterns. The increase in greenhouse gases leads to the warming of the Earth's surface and rising average temperatures. This phenomenon can result in the melting of polar ice caps, elevating sea levels, and more frequent and severe weather events. Human activities such as the burning of fossil fuels (coal, oil, natural gas), deforestation, and industrial processes are responsible for the accumulation of greenhouse gases in the atmosphere. These gases (carbon dioxide, methane, nitrous oxides, etc.) trap heat from the sun in the atmosphere, thereby causing an increase in the Earth's surface temperature. Climate change affects natural habitats, impacting plant and animal species, and may lead to the endangerment of certain species and disruptions in ecosystems. The melting of polar ice caps and the expansion of seawater contribute to the rise in sea levels, resulting in coastal erosion, salinity issues, and flooding in coastal regions. Climate change influences weather patterns and precipitation regimes, leading to an increase in droughts, floods, storms, and other extreme weather events.

Climate change leads to extensive impacts on the world in various dimensions. These impacts can affect natural, economic, and social systems, in addition to changes in the climate system. Elevated temperatures promote the spread of diseases like heatstroke and malaria, complicate access to clean drinking water, and create issues with access to water resources. Decreasing water resources and triggering waves of migration due to extreme weather events increase the number of displaced individuals. Extreme weather events and agricultural losses result in economic setbacks. Climate change adversely affects energy supply and causes damage to infrastructure through heavy rains, flooding, and hurricanes. These effects demonstrate that climate change is a multifaceted and intricate issue.

Climate change is often accelerated due to human activities, particularly the increase in greenhouse

gas emissions such as the use of fossil fuels, deforestation, and industrial processes. Climate change destabilizes food production by adversely affecting agriculture. Irregular precipitation, droughts, and extreme heat result in crop losses and higher food prices, thereby increasing food insecurity. Elevated temperatures and humidity levels facilitate the spread of infectious diseases. The expansion of habitats for mosquitoes and other vectors contributes to the proliferation of diseases like malaria. Climate change deepens injustices among and within societies. Low-income and vulnerable communities are more susceptible to the effects of climate change and have limited access to resources. Climate change amplifies pressure on natural resources, leading to social conflicts. Disputes over access to water resources or land use, in particular, escalate into conflicts at local and national levels. Climate change encourages migration from uninhabitable regions. Events such as droughts, floods, and rising sea levels force people to abandon their homes, triggering waves of migration and exacerbating immigration issues.

Africa's relationship with climate change is multifaceted and intricate, encompassing a range of social impacts. Much of Africa still relies on agriculture-based economies. Climate change adversely affects agricultural productivity due to issues like drought, diminishing water resources, and extreme weather events, consequently reducing food production and increasing the risk of food insecurity. Africa is heavily dependent on water resources, and many regions already experience water scarcity. Climate change exacerbates problems related to decreasing water resources, drought, and water shortages. Diseases like malaria are on the rise, and heatwaves and limited access to water sources lead to health problems. Africa's economies are predominantly based on natural resources such as agriculture, mining, and forestry, which are negatively affected by climate change. Events like heavy rainfall, floods, and droughts result in economic losses. Climate change disproportionately impacts already impoverished and vulnerable communities, intensifying issues related to social justice. Aligning efforts in social justice and economic development with climate change appears to be an inevitable necessity.

Africa is recognized as a continent where climate change has a greater social impact compared to other regions. The fundamental reasons for this can be listed as follows: Much of the African continent is characterized by poverty and economic vulnerability. Low income levels, deficiencies in essential infrastructure, and fragile economies make it difficult for them to resist the effects of climate change. A significant portion of Africa still relies on agriculture-based economies, which are highly sensitive to climate change. Drought, dwindling water resources, and extreme weather events negatively affect agricultural production. Access to water resources is already problematic in many African countries, and climate change further exacerbates the pressure on water resources. Drought and water scarcity pose serious challenges for drinking water and irrigation. Climate change intensifies displacement and migration due to issues related to access to water resources, agricultural losses, and extreme weather events, leading to social and economic problems. Particularly in Africa, social injustices related to the distribution of resources and the protection of affected communities are becoming more widespread due to climate change. Lastly, some African countries have inadequate capacity for policy development and implementation to address climate change. Political instability and poor governance further complicate efforts to combat climate change.

In this study, which focuses on the social dimension of climate change, the Africa Climate Summit 2023 (ACS'23) is discussed. The inaugural ACS'23 has the objective of tackling the growing exposure to climate change and its associated expenses, both on a global scale and specifically in Africa. Given the anticipation of increasing climate-related crises in terms of frequency and severity, there is an urgent need for action to alleviate these challenges. The summit, which took place in Kenya, offers a platform for policymakers, practitioners, businesses, and civil society to discuss climate solutions, the obstacles to overcome, and opportunities realized in various regions. The summit had a primary focus on four key areas: i) Energy systems and industry ii) Cities, urban and rural settlements, infrastructure and transport iii) Land, ocean, food and water iv) Societies, health, livelihoods, and economies (ACS'23 official website, 2023). The focus of this study is the UN and the AU and the work of these two institutions. In the study, climate

change and its effects in general will be discussed first. After evaluating climate change in the social context, within the framework of ACS'23, the focus will be on the social impacts of climate change, specifically in Africa.

Climate Change and Its Effects

Climate can be assessed across various geographical levels, such as municipalities, nations, or the entire planet, through metrics like mean temperatures, the typical count of rainy days, and the occurrence of droughts. Climate change pertains to alterations in these metrics spanning years, decades, or even centuries (National Research Council, 2013, p. 1). Climate represents the extended-term average atmospheric conditions in a particular area spanning 30 to 50 years or more. Climate change denotes a methodical shift in the prolonged state of the atmosphere across numerous decades or beyond (Public Health Institute, 2016, p. 1). Climate change is identified by assessing the extensive extended-term temperature and rainfall patterns, alongside additional factors like atmospheric pressure and moisture levels in the nearby surroundings. Furthermore, the erratic weather variations, the shrinking of worldwide ice sheets, and the resulting increase in sea levels are some of the most widely recognized global and local outcomes of climate change (Abbass et al., 2022, p. 42540). The phenomenon of climate change can be linked to two major shifts in energy utilization. Initially, coal substituted waterpower, driving the industrialization of the 19th century and triggering an unparalleled surge in efficiency (Müller-Kuckelberg, 2012, p. 2). It's evident that alterations in greenhouse gases (GHGs) concentrations in the atmosphere have the potential to modify global climates (Dietz et al., 2020, p. 136). The scientific consensus is strong that climate change is already a fact. Rise in peak temperatures, frequency of hot days, and heat index have been detected across almost all regions in the latter part of the 20th century. Cumulative proof indicates that the recorded warming over the last five decades can be largely ascribed to human actions. The trend of rising global average surface temperature is predicted to persist, with anticipated increases ranging from 1.4 to 5.8 °C by 2100 compared to 1990 (Abeygunawardena et al., 2003, pp. 1-2).

Governments will come under immense pressure to increase public spending due to climate change, including funding for household disaster assistance and infrastructure reconstruction. Climate change can also impact various economic sectors like agriculture and tourism, leading to a reduction in tax revenues and worsening budget deficits. Extreme weather events, rising temperatures, and droughts resulting from climate change can have significant adverse effects on budgets and debts. Officials estimate that the US government needs to allocate between \$9 and \$28 billion annually for expenses related to wildland fire suppression, crop insurance, coastal disaster relief, air quality, and healthcare. While many studies have examined the impact of climate change on GDP, few have focused on its effects on fiscal balances and government budgets. One finding suggests that Austria's government budget will decrease by 1.2 percent in 2050 (Giovanis & Ozdamar, 2022, pp. 1-2). As nations across the globe progress in implementing the Paris Agreement, numerous countries are reassessing their internal governance structures and establishing approaches aimed at facilitating their shift toward eco-friendly, climate-resilient development on the domestic front. Effective domestic governance is equally crucial as we strive to enhance our climate change efforts post-2020 within the framework of the Paris Agreement (Averchenkova et al., 2019, p. 9). Climate change is progressively evolving into a consistent focal point on the agendas of numerous policy-making assemblies. This elevated status reflects the recognized significance of climate change in molding and exerting influence over the course of development and the equilibrium of power within the worldwide political economy (Adano & Daudi, 2012, p. 1).

In the context of the study, the two institutions that constantly put climate change on the agenda are the UN and the AU. Evaluations and analyzes will be made within the framework of the approaches of these two institutions to the subject. The global institution known as the UN was established in 1945 and currently consists of 193 Member States. The UN operates based on the principles and objectives outlined in its founding Charter. Over the years, the UN has adapted to the rapidly changing world. However, its

fundamental purpose remains unchanged: to provide a platform where nations from all corners of the globe can convene, deliberate on shared challenges, and devise solutions that promote the well-being of humanity. The UN is a component of the larger UN system, which includes numerous programs, financial resources, and specialized agencies, each dedicated to specific areas of focus, governance, and budgets. The UN collaborates with these distinct entities within the UN system, all working together to assist the organization in achieving its objectives. The UN itself is just one facet of the broader UN System. The UN's cooperation with other UN system entities is vital for realizing the goals set forth in the UN Charter. Since its founding, the United Nations has assumed new responsibilities that were not envisioned at the time of its inception. The Organization has established objectives for creating a more sustainable world and has committed to collective efforts to combat climate change. As global challenges have expanded, so has the scope of the UN's mission (UN official website).

According to UN; the climate emergency is deteriorating as emissions of greenhouse gases persist in their ascent. The most recent report from the Intergovernmental Panel on Climate Change (IPCC) reveals that global temperatures have already surged 1.1 °C beyond pre-industrial levels and are poised to approach or surpass the critical 1.5 °C threshold by 2035. Disastrous and escalating occurrences of extreme heatwaves, droughts, deluges, and wildfires have become increasingly commonplace. Escalating sea levels are imperiling the lives of countless individuals residing in coastal communities. Furthermore, the world is presently confronted with the most extensive episode of species extinction since the era of dinosaurs, and the oceans were inundated with more than 17 million metric tons of plastic contamination in 2021, with forecasts suggesting a potential twofold or threefold increase by 2040 (UN SDG Report, 2023, p. 3).

Drawing upon the findings compiled in the Global Sustainable Development Report and the insights gained since 2015, this current report outlines a set of pressing measures for your contemplation across five pivotal domains: “(a) Heads of State and Government should recommit to seven years of accelerated, sustained and transformative action, both nationally and internationally, to deliver on the promise of the SDGs. (b) Governments should advance concrete, integrated and targeted policies and actions to eradicate poverty, reduce inequality and end the war on nature, with a focus on advancing the rights of women and girls and empowering the most vulnerable. (c) Governments should strengthen national and subnational capacity, accountability and public institutions to deliver accelerated progress towards achieving the Sustainable Development Goals (SDGs). (d) The international community should recommit at the SDG Summit to deliver on the Addis Ababa Action Agenda and to mobilize the resources and investment needed for developing countries to achieve the SDGs, particularly those in special situations and experiencing acute vulnerability. (e) Member States should facilitate the continued strengthening of the UN development system and boost the capacity of the multilateral system to tackle emerging challenges and address SDG-related gaps and weaknesses in the international architecture that have emerged since 2015.” (UN SDG Report, 2023, pp. 4-5).

There are 17 goals in the UN SDG: “(1) End poverty in all its forms everywhere (2) End hunger, achieve food security and improved nutrition and promote sustainable agriculture (3) Ensure healthy lives and promote well being for all at all ages (4) Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (5) Achieve gender equality and empower all women and girls (6) Ensure availability and sustainable management of water and sanitation for all (7) Ensure Access to affordable, reliable, sustainable and modern energy for all (8) Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (9) Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation (10) Reduce inequality within and among countries (11) Make cities and human settlements inclusive, safe, resilient and sustainable (12) Ensure sustainable consumption and production patterns (13) Take urgent action to combat climate change and its impacts (14) Conserve and sustainably use the oceans, seas and marine resources for sustainable development (15) Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

(16) Promote peaceful and inclusive societies for sustainable development, provide Access to justice for all and build effective, accountable and inclusive institutions at all levels (17) Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development” (UN 2030 Agenda, official website).

The goal focusing on climate change is stated in article 13: ‘Take urgent action to combat climate change and its impacts.’ Recognizing that the United Nations Framework Convention on Climate Change (UNFCCC) serves as the foremost international, intergovernmental platform for deliberating the worldwide reaction to climate alteration. The World Meteorological Organisation (WMO) depicts the accumulation of greenhouse gases in the atmosphere throughout the 20th century as a consequence of the increasing utilization of energy and the expansion of the global economy. As outlined by the WMO, the buildup of greenhouse gases in the atmosphere modifies the radiative equilibrium of the atmosphere. The most recent comprehensive evaluation of the scientific findings was carried out in 2007 by the Intergovernmental Panel on Climate Change (IPCC) regarding the reasons, consequences, and potential approaches to address climate change. The IPCC Fourth Assessment Report on Climate Change in 2007 encompasses inputs from three working groups addressing 1) the physical science, 2) the impacts of climate change, adaptation, and vulnerability, and 3) the mitigation of climate change. In IPCC terminology, climate change pertains to an alteration in the condition of the climate that can be discerned (e.g., via statistical analyses) through modifications in the average and/or the fluctuation of its characteristics and endures for an extended duration, generally spanning decades or more. It alludes to any transformation in climate patterns over time, whether attributed to inherent variations or stemming from human endeavors. This interpretation contrasts with that in the United Nations Framework Convention on Climate Change (UNFCCC), wherein climate change denotes a transformation in climate that is directly or indirectly ascribed to human activities that modify the composition of the global atmosphere and that is apart from natural climatic fluctuations witnessed over corresponding time intervals (UNFCCC, 2011, pp. 1-2).

According to working group II, climate change impacts, adaptation and vulnerability; observed impacts: Various natural systems, spanning every continent and the majority of oceans, are encountering the consequences of regional climate alterations, notably elevated temperatures. Projected future impacts: Regarding the anticipated repercussions, there is presently a wealth of more detailed data accessible concerning the characteristics of these consequences, encompassing various systems and industries (food, health, social costs). Regions that will be especially affected: Africa, due to its limited adaptability and the predicted ramifications of climate change (UNFCCC, 2011, pp. 2-5). In 2015, the international community embraced a collective plan for humanity, the planet, peace, prosperity, and collaboration: the 2030 Agenda for Sustainable Development. They established an ambitious set of interconnected SDGs. These objectives encompass all corners of the globe and all aspects of life and progress – spanning health, education, the environment, peace, justice, security, and equality. Their purpose is to eradicate poverty and hunger, combat diseases to ensure healthier societies and well-being, empower women and girls, and address the three-fold planetary challenge of climate change, biodiversity decline, and pollution. Attaining the SDGs would signify a monumental stride forward but will necessitate resolve and dedication from individuals in every nation, the shared duty of governments, and global unity (IGS, 2023, p. 1).

Paris Agreement signed under the responsibility of the UN in 2015; in bolstering the execution of the UNFCCC (Convention), encompassing its goal and aspirations, the intention is to fortify the worldwide reaction to the challenge posed by climate change within the framework of sustainable progress and endeavors to eliminate poverty. (UN Paris Agreement, 2015, p. 3) In the Agreement, the following emphases stand out in the context of climate change and its effects -with some actions-: The aim is to restrain the rise in the global mean temperature, keeping it well below 2°C above pre-industrial levels, with efforts to restrict the temperature surge to 1.5°C above pre-industrial levels; this recognition stems from the understanding that such measures would significantly mitigate the hazards and repercussions of climate change; additionally, there's a focus on enhancing the capacity to adapt to the adverse consequences of

climate change, promoting climate resilience, and fostering low greenhouse gas emissions development without jeopardizing food production; Parties involved should also consider the concerns of economies most affected by the consequences of response measures, especially developing country parties, during the implementation of this agreement; this involves assessing the impacts and vulnerability related to climate change to formulate nationally determined prioritized actions, giving consideration to vulnerable populations, areas, and ecosystems; Parties acknowledge the significance of preventing, minimizing, and addressing loss and damage associated with the adverse effects of climate change; this includes extreme weather events and gradual onset events, highlighting the role of sustainable development in diminishing the risk of loss and damage; advanced nations that are Parties to this agreement will furnish clear and uniform details regarding assistance for developing country Parties, which is both offered and mobilized through public initiatives. This reporting will occur every two years and align with the modalities, procedures, and guidelines that will be established; these endeavors should, when suitable, receive support. This support may come from entities such as the Technology Mechanism and, with financial backing from the Financial Mechanism of the Convention, enable collaborative efforts in research and development. Additionally, it will facilitate technology access, especially during the initial phases of the technology cycle, for developing country Parties. (UN Paris Agreement, 2015, pp. 3-15).

According to AU's studies; Africa stands as the planet's most arid continent, with 45% of its landmass comprising drylands and half of its inhabitants residing in arid, semi-arid, dry, sub-humid, and hyper-arid regions. Projections indicate that climate-induced water stress could impact as many as 700 million people dwelling in arid and semi-arid zones. The ramifications of climate change compound the preexisting challenges in managing water resources within these arid and semi-arid areas. Starting from 1797, the frequency of extremely hot days in Africa has surged sevenfold. The continent is anticipated to witness heightened average temperatures and more frequent heatwaves, along with a likelihood of drier conditions, with the exception of the Sahara and East Africa. Some reports show that escalation underscores the growing climate-related risks posed to Africa's ecosystems, biodiversity, human well-being, food and water security, as well as socio-economic progress. These threats encompass rising temperatures, elevated sea levels, prolonged dry periods, shifting precipitation patterns, and an increased occurrence of extreme weather events. Enhancing Africa's climate resilience is paramount to unlocking its developmental potential. Climate change is projected to impose an annual cost of around US\$40 billion on the region until 2030 (AU Climate Change Plan, 2022, pp. 10-12). The AU recognizes the technical and financial assistance provided by the EU, among other organizations, in formulating its climate strategy. This forms part of the EU's broader assistance efforts. The EU's long-term budget, the 2021-2027 multiannual financial framework (MFF), sets a target of allocating 30% of funds to climate adaptation and mitigation, which encompasses programming for countries beyond its borders. Within the framework of its Green Deal and climate change adaptation strategy, the EU has pledged to 'support sub-national, national, and regional adaptation approaches, with a particular emphasis on adaptation efforts in Africa. The agreement additionally features a regional protocol for Africa, highlighting the shared commitment to addressing various challenges. These encompass environmental issues, sustainable management of natural resources, and climate change. Specific initiatives include the phasing out of 'inefficient fossil fuel subsidies,' collaborative efforts to prevent and mitigate climate-induced conflicts, actions to address loss and damage, reinforcement of climate research and monitoring, and the provision of adequate financing for climate-resilient development (Pichon, 2022, p. 9).

The implementation of policies related to climate change adaptation and environmental initiatives is ineffective, often limited to specific sectors, or entirely absent. The AU's dedication to keeping global warming below a 1.5°C increase from preindustrial levels must be upheld. The Climate Action Network urges the phasing out of fossil fuel emissions as early as possible, with a strict deadline of 2030 to ensure the manageability of adaptation and mitigation costs. To achieve this, a resolute political commitment is essential from developed nations and all countries to establish a binding agreement in the forthcoming negotiations. The AU is focusing on climate change adaptation and mitigation policies, alongside the

framework for fostering low-carbon development technology in the region. There should be an effort to generate political momentum for the formulation of climate adaptation policies within individual national states. Furthermore, the establishment of a regional monitoring body is crucial. African nations must undergo a fundamental shift in the management of natural resources, land, water, and the formulation of food security policies (Mburia, 2015, p. 3).

Social Context of Climate Change

Climate change holds significant relevance for the field of social (policy) studies and the welfare state, as it increasingly impacts individuals' personal lives, including their homes and livelihoods. In this regard, climate change has emerged as a crucial and expanding source of social risks in the twenty-first century. The protective aspect of social insurance and related programs aimed at income redistribution and service provision is expected to gain growing importance due to global warming and the ongoing transition toward a zero-emission society. This is particularly relevant due to shifts in the nature and distribution of social risks. For an extended period, social (policy) studies and research on the welfare state have engaged in discussions about distinguishing between traditional social risks (e.g., illness, disability, retirement, and frailty) and emerging social risks associated with factors like increased labor market participation, higher divorce rates, separations or the end of cohabitation, lone caregiving responsibilities, and the expanding elderly population in need of care from others. Risks related to climate change have been on the rise for several years and, in this context, can be considered as not entirely novel. (Hvinden & Schoyen, pp. 236-237).

If evaluated in the context of social (construct), climate change -and its impacts- stands out in the following areas: human health, food security, water resources management, vital infrastructure, culture, environment, territorial integrity, local–regional conflicts resources over common pool resources, migration, drought, poverty in local communities (Karimi et al., 2022, pp. 51-58). To give an example in the context of human health; climate change-induced natural disasters, like floods and periods of extreme drought, frequently coincide with emotions of anxiety, shock, depression, grief, hopelessness, desensitization, hostility, disruptions in sleep patterns, challenges in interpersonal relationships, post-traumatic stress disorder, substance abuse, and self-harm. Additionally, heatwaves associated with climate change elevate tendencies towards aggression, acts of violence, self-inflicted harm, domestic abuse, and hospital admissions, particularly among individuals with pre-existing mental health issues (Gifford & Gifford, 2016, p. 292). Climate change has a profound influence on the agricultural industry in (West) Africa, jeopardizing food security and nutritional well-being, especially for communities with limited adaptability. It affects various sectors, including energy, farming, water management, healthcare, forestry, infrastructure, education, community resilience, disaster risk mitigation, institutional growth, industrial advancement, research and innovation, policy formulation, economic investment, and cooperative efforts (Sorgho et al., 2020, p. 1).

The research determined that the majority of fluctuations in chemical and energy consumption could be attributed to variations in water quality and climatic conditions, with the exception of soda ash usage. Additionally, the study indicated that forthcoming climate changes, whether at the highest or lowest emission scenarios outlined by the Intergovernmental Panel on Climate Change (IPCC), might marginally decrease energy and chemical consumption. Another significant discovery from this investigation is that the impact of climate change on the overall energy usage throughout the lifecycle of water supply (a reduction of 3-6%) may offset the increased water demand resulting from a warmer climate by the end of the century in the case of the studied system (Kaddo, 2016, p. 7). Combinations of climate strategies encompassing socioeconomic changes, such as accessible housing, a minimum wage of \$15, or a job assurance, boost public backing for climate control efforts in the United States. Moreover, clean energy requirements, regardless of the specific technologies encompassed, enhance the appeal of climate policies. Connecting climate initiatives with economic and social matters proves particularly effective in broadening

support for climate policies among individuals of diverse racial backgrounds (Bergquist et al., 2020, p. 1).

Current expenditure on Climate Change Mitigation Policies (CCMPs) in the UK is minuscule, standing at 0.3% of GDP, with half of this amount being obligatory spending by energy corporations. Environmental levies, which used to account for approximately 2.5% of GDP, are on the decline. Ultimately, households bear the brunt of CCMPs, particularly through mechanisms like the Emissions Trading Scheme (ETS), posing questions regarding fair distribution and conflicting with other objectives of public policy. The pursuit of both climate change and social justice objectives necessitates the adoption of alternative policies (Gough, 2011, p. 14). Regarding the impacts, the consensus remains that tropical regions of the world, which are primarily developing nations, will suffer more adverse consequences than temperate regions. Overall, these responsibilities and impacts combine to create a 'dual injustice,' a point that is consistently emphasized on a global scale by the BASIC (Brazil, South Africa, India, and China) and G77 groups of countries. Here's one example of the contemporary imbalance: if all 40 million SUV drivers in the US were to switch to fuel-efficient cars, the resulting savings alone would offset the emissions generated from providing electricity to 1.6 billion people in the Southern hemisphere. China now contributes to 29% of global CO2 emissions, nearly double that of the US, and its emissions per capita have risen significantly to be within the range of the EU. It's a notable aspect of climate change governance that both emissions per person and a nation's total emissions, influenced as they are by population size, matter. Therefore, the North-South divide in global social policy is fundamentally nuanced in the realm of global climate politics. A third-world coalition of rapidly growing capitalist economies is emerging, positioned between the North and South. In the absence of a suitable acronym, it'll refer to these nations as the East (Gough, 2013, p. 5-6).

Promising approaches are also emerging from different parts of the world that can provide insights for policy initiatives. Sierra Leone, a country frequently impacted by floods and landslides, has been taking measures to establish a responsive social protection system in times of crisis. This effort is supported by the World Bank's Global Risk Financing Facility (GRiF). The Sierra Leonean government, in collaboration with the Climate Centre and Tetra Tech, has recently crafted the forthcoming national social protection legislation. This legislation identifies groups deemed climate vulnerable and affected by disasters as potential future recipients of social protection. Additionally, the bill outlines the roles, functions, and coordination mechanisms among the Ministry of Social Welfare, the National Commission for Social Action, and the National Disaster Management Authority. It is anticipated that the bill will be ratified by parliament by the close of 2023, enabling social protection to be a legally mandated tool for responding to climate-related disasters (Sengupta & Dahlet, 2023, p. 5).

Complexity theory and the perspective of complex systems offer both a figurative context and terminology with dimensions and intersections that can aid us in comprehending and strategizing action. They also provide a structure for charting and scrutinizing how the Earth, climate, and the pursuit of social justice might converge. Neo-liberalism contradicts and weakens the fundamental perspectives of First Nations, the appreciation of complexity, and the establishment of climate justice by positioning the individual within the market as the bedrock of society. An investigation that concentrated on assessing sustainability tactics among the world's largest 500 corporate firms revealed that top sustainability performers consistently embraced a proactive approach centered on capabilities and opportunities, without engaging in a risk management framework whatsoever. This research underscores the constraining elements of risk management frameworks and directs the focus toward more creative modes of addressing climate change and sustainability (Howard et al., 2023, pp. 6-9, p. 24). Linking with it, for instance; In April 2021, the Ministry of Environment and Sustainable Development in Colombia introduced the Carbon Neutrality Colombia initiative. This initiative aims to encourage the endeavors of both the public and private sectors, as well as civil society, in reducing greenhouse gas emissions. Its ultimate goal is to achieve carbon neutrality by 2050. Additionally, the effects of climate change can serve as a chance for economic expansion, social progress, and the responsible and sustainable supervision of ecosystems. This approach

promotes the development of low-carbon and climate-resilient practices (Belchior- Rocha and Anile, 2023, 124). Another example; Africa's carbon dioxide (CO₂) emissions stemming from commercial and industrial operations have been negligible. In 2018, South Africa, the largest CO₂ emitter on the continent, released only 6.6% of the greenhouse gas emitted by the United States and merely 3.5% of China's emissions. During that same year, Africa as a whole generated 1.45 gigatonnes of CO₂ in total, an amount even less than Russia's emissions alone. In fact, 75% of this total comes from just five industrializing African countries heavily reliant on fossil fuels: South Africa, Algeria, Nigeria, Egypt, and Morocco. When compared to India's annual per capita CO₂ emissions of 1.9 tonnes, Africa's 1.1 tonnes per person per year remains relatively low (for comparison, India's population is similar in size to the African continent's population). In essence, Africa's historical fossil fuel consumption carries no responsibility for the rapid climate change occurring worldwide (Noyoo, 2023, p. 157).

One of the most important studies that emphasize the social dimension of climate change specifically in Africa is Agenda 2063. The text of the AU Agenda 2063 is introduced as follows:

‘We, the people of Africa and her Diaspora, united in diversity, young and old, men and women, girls and boys from all walks of life, deeply conscious of history, express our deep appreciation to all generations of Pan-Africanists. In particular, to the founders of the Organisation of African Unity for having bequeathed us an Africa with exemplary successes in the fight against slavery, colonialism and apartheid. Agenda 2063, rooted in Pan Africanism and African Renaissance, provides a robust framework for addressing past injustices and the realisation of the 21st Century as the African Century.’

Africa's exceptional natural resources, its environment, and ecosystems, including its wildlife and untamed territories, are thriving, cherished, and safeguarded, with economies and communities that are resilient to climate change. Africa is determined to confront the worldwide challenge of climate change by giving priority to adaptation in all our endeavors, leveraging expertise from various fields with sufficient support (affordable technology development and transfer, capacity building, financial and technical resources) to ensure the implementation of measures for the survival of the most vulnerable populations, including island nations, as well as for sustainable development and shared prosperity. Africa is committed to achieving equitable and sustainable utilization and stewardship of water resources for socio-economic development, regional collaboration, and environmental preservation. The remarkable progress made by countries in the Global South to uplift substantial segments of their populations from poverty, enhance incomes, and drive economic and social transformation is noteworthy. Africa is an integral part of the global effort, through the UN and other international organizations, to explore multilateral approaches to humanity's most pressing issues, which encompass human security, peace, poverty, hunger, disease eradication, gender equality, and climate change. Take prompt action regarding climate change and the natural surroundings, putting into effect the Climate Action Program in Africa, which includes initiatives addressing climate change specifically aimed at women and youth (AU Commission, 2015, pp. 1-16).

Although there are other areas within the field of social (policy) studies research that are undoubtedly worthy of exploration in future studies, the research conducted so far has encompassed both conventional and climate-adjusted perspectives on issues such as risks, citizenship, social welfare systems, and overall well-being. Given the imperative for economies and societies, including welfare states, to rapidly transition towards decarbonization, it would be prudent for researchers in the field of social studies (policy) to concentrate on examining both the environmentally problematic aspects of their fundamental concepts and the potentially influential roles that welfare systems could play in facilitating sustainable transformation. The escalating climate-related risks underscore the potential increased significance of redistributive social security and public services, particularly during such a transformative period. As a result, one specialized area within climate-adjusted social (policy) study research should focus on the necessary reforms of welfare institutions and policies to ensure that they are capable of fostering and advancing sustainable well-being on a global scale and across generations. This climate emergency represents a novel structural condition

for all societies, and there is no doubt that it presents substantial challenges in terms of organizing welfare states and shaping social policies (Hirvilammi et al., 2023, p. 2, pp. 15-16)

Climate Change in Terms of Social Impacts in Africa: Africa Climate Summit 2023

Africa witnesses an escalating pattern of weather and climate fluctuations, resulting in disasters and the disruption of economic, ecological, and social systems. It is projected that by 2030, as many as 118 million individuals living in extreme poverty (defined as those with daily incomes of less than US\$ 1.90) will face the risks of drought, floods, and extreme heat in Africa if adequate response measures are not implemented. Such circumstances will impose additional burdens on poverty alleviation endeavors and significantly impede progress in prosperity. In sub-Saharan Africa, climate change has the potential to further reduce the gross domestic product (GDP) by up to 3% by 2050. This presents a formidable challenge for climate adaptation and resilience initiatives since not only are the environmental conditions deteriorating, but the number of affected individuals is also on the rise (World Meteorological Organization, 2020, p. 4). If it needs to give an example to overcome such problems; in 2017, the African Development Bank (AfDB) raised more than USD 5 billion for upcoming climate finance initiatives (Safonov, 2019, p. 16).

Although climate change impacts everyone, those with the least ability to adapt, local people, primarily the impoverished, are the most susceptible. Africa's development achievements, both past and future, are jeopardized by climate change's consequences unless adaptation efforts are enhanced. As an example, during the 2005-2006 famine in Niger, there was an early and accurate warning of the impending catastrophe, but many months passed before aid reached the affected regions. During this time, households faced a difficult choice: selling productive assets at a loss or reducing investments in human capital (e.g., malnutrition, withdrawing children from school). Either choice could have long-term implications for poverty. Despite the evident shortcomings in donor-funded disaster relief, its frequent utilization may have, nevertheless, discouraged nations from establishing robust national social safety nets integrated with their budgets and obtaining weather-based insurance. Access to financial products and services is also of some significance (Rasmus et al., 2008, pp. 1-4).

Habitats and ecosystems in Africa face a range of pressures, including but not limited to deforestation, land degradation, and a heavy reliance on biomass for energy. In sub-Saharan Africa, over 80 percent of the population relies on traditional biomass for cooking. Climate change is anticipated to introduce an additional layer of stress. Africa's susceptibility to climate change is compounded by various non-climatic factors, encompassing persistent poverty, food insecurity, a high prevalence of diseases, ongoing conflicts, limited development, and insufficient adaptive capacity. The climate crisis is also one of the triggers for conflicts. The average per capita income in most African nations is currently lower than it was three decades ago. Sub-Saharan Africa is the sole region that witnessed negative annual per capita gross domestic product (GDP) growth, with a -1 percent rate between 1975 and 1999. One-third of the population in sub-Saharan Africa grapples with chronic hunger, and like Malawi some African countries contend with high HIV/AIDS prevalence, affecting four out of ten individuals (UNDP, 2007, p. 93). The associated costs related to healthcare expenditures and productivity losses are most pronounced in some of the poorest nations, amounting to roughly 5 percent of GDP or approximately US\$28.4 billion annually in sub-Saharan Africa. Out of the 25 African countries that faced food crises in 2003, ten are currently mired in internal conflicts, while four are in the process of recovering from past conflicts. These conflicts frequently divert scarce resources towards military budgets at the expense of developmental needs and lead to a significant number of internally displaced persons and refugees. (Osman-Elasha, 2009, pp. 13-15).

When analyzing the adaptation of livelihoods to climate change disruptions in rural Mozambique, beginning with an institutional examination of the scalar dimensions of livelihood practices that

interconnect with climate change adaptation. The research takes into account various factors, including a comprehensive assessment of the vulnerability context and the acknowledgment of how different values and considerations impact the outcomes of adaptation efforts. However, in some respects, the study doesn't directly delve into sustainability aspects concerning livelihood adaptation and institutions. This omission leaves certain analytical aspects concerning environmental integrity, social justice, and equity somewhat unaddressed. This gap can be attributed to the failure to connect the discussed issues with a specific sustainability framework. The study provides a comprehensive discussion on the multifaceted aspects of adaptation in small-scale African agriculture. Still, it overlooks the examination of equity and social justice concerns, which are crucial in the context of climate change, adaptation, and mitigation, as they raise issues of fairness and justice. On the other hand, other research projects opt to focus exclusively on the infrastructure and technical alternatives when analyzing climate change adaptation in various African communities. However, they do not explore the potential implications of these strategies for sustainability, leaving this aspect largely unexplored (Bhatasara & Nyamwanza, 2018, p. 89).

Due to climate change; the most susceptible area is Africa, particularly the sub-Saharan region, due to its limited adaptive capacity and anticipated shifts in rainfall patterns. Small islands are also highly vulnerable because of the substantial exposure of their populations and infrastructure to the threats of rising sea levels and increased storm surges. Adverse security consequences arising from future climate-related alterations are expected to be predominantly evident in countries and regions that currently experience armed conflicts, primarily in the east-central parts of Africa. A connection between environmental conditions and migration has been observed in various rural African settings. Migration patterns resulting from prolonged drought conditions initially align with established labor migration patterns and may not significantly differ in intensity from areas with well-established high rates of temporary, cyclical migration (Mearns & Norton, 2010, p. 5, 88, 112).

The motto of ACS'23, held in Kenya on 4-6 September 2023, is 'Driving Green Growth & Climate Finance Solutions For Africa And The World.' Institutions and organizations supporting and partnering with the summit; AU, EU, Kenya government, German Cooperation, Government of Denmark, Bill & Melinda Gates Foundation, UN, The Rockefeller Foundation and others. Background emphasis of the summit was; climate change presents substantial risks to the international community, resulting in significant economic damages from its physical impacts. In the last ten years, storms, wildfires, and floods have led to considerable reductions in GDP. Africa, specifically, confronts severe climate-related difficulties, including droughts, desertification, and a rising number of cyclones, which in turn cause displacement, migration, and food shortages. The continent is also disproportionately affected by the global temperature increase and is expected to encounter growing physical climate hazards. Moreover, African governments' limited capacity to address the climate emergency, due to their high debt burden and economic setbacks, underscores the urgent need for debt relief and increased financial resources. Africa's contribution to the process is expressed as follows; Shifting the narrative from a dichotomy between the Global North and Global South is of utmost importance in dealing with the climate emergency. Collaboration and unified efforts are essential for all countries to effectively address climate change. Africa is prepared to play a role in worldwide decarbonization endeavors by utilizing its plentiful resources, such as renewable energy, vital minerals, agricultural capacity, and natural assets. By capitalizing on these advantages, Africa can lead its sustainable growth while also assisting in fulfilling global renewable energy requirements. Additionally, the continent presents various investment prospects for international capital to advance decarbonization efforts and bolster local economic progress (ACS'23 official website, 2023).

The following call was made by African leaders at the summit; in order to attain the necessary reductions in emissions and ensure sufficient funding for climate initiatives, a comprehensive worldwide funding system is imperative. This entails imposing specific taxes on sectors such as aviation and maritime, discontinuing fossil fuel subsidies on a global scale, and instituting a universal tax on fossil fuels. Additionally, Carbon Border Adjustment Mechanisms (CBAM) can serve as a tax designated for targeted

mitigation and adaptation endeavors. Exploring the implementation of a Global Financial Transactions Tax represents another potential avenue for generating substantial revenue. These global levies should be collected and consolidated into a single global fund, with allocation based on maximizing climate impact and bolstering technological advancements. Moreover, the equitable distribution of funds should be overseen by a global governance body, independent of national interests. The following commitment was made; during the ACS'23, leaders will be encouraged to put forth ambitious promises and engagements. A comprehensive framework for making pledges and commitments will be formulated to steer these initiatives. By embracing ambitious concepts and undertaking courageous commitments, we have the chance to reverse the course of climate change, impacting not only Africa but the entire world (ACS'23 official website, 2023).

Summit focused on delivering climate-positive growth and finance solutions for Africa and the world. Focus themes were determined as follows; Climate Action Financing: three climate finance goals, more financing, targeted financing, and cheaper higher risk appetite financing. Green Growth Agenda for Africa: 'We as LMIC (Low and middle income countries) have a lot to contribute to the global climate agenda and we need to commit to playing our part. We cannot keep growing in a high-carbon intensive manner.' Climate Action and Economic Development: both are not in conflict but interdependent; they need to happen together or neither will happen. Global Capital optimization: as opposed to local optimization— many of the lowest cost sources of reducing global emissions are typically found in the Global South compared with industrialized countries (ACS'23 official website, 2023).

Many topics were touched upon during the summit by specialists, and it can highlight some of the topics in order to connect them with the study; The Power of the Potential: To set the stage for ACS and ACW (Africa Climate Week), showcasing Africa's potential in addressing climate challenges, emphasizing the need for a fairer financial system, and highlighting the road to COP28 (Conference of the Parties). The youth and Indigenous People and Local Communities presented their statements to the Summit. Investment Opportunities for Food Systems Transformation in Africa: The session focuses on a unified African vision to transform sustainable food systems urgently, given the challenges posed by climate change. It aims to showcase existing initiatives, announce new investments, and promote strategies for doubling agricultural production and productivity by 2030. Additionally, the session aims to boost intra-African trade, encourage private sector investments in value addition, and prioritize climate-smart and regenerative agriculture to achieve green growth. The acceleration of investments in climate-resilient water projects is crucial: This session delves into water's pivotal role in Africa's socio-economic development and its significance in building climate resilience amidst challenges like prolonged droughts. The dialogue focused on the 2023 UN Water Summit's Fresh Water Challenge, the pressing investment gap, with currently only \$10-\$19 billion being invested against a required \$30 billion, and the initiatives from the African Union and the High-Level Panel on Water Investments to bridge this shortfall. Adaptation across the Continent: This session discussed the significant needs and opportunities for accelerating adaptation action across the continent. It shined light on knowledge, capacity, and finance needs for adaptation, discussing how action is already being mobilized, opportunities for further investments to improve the resilience of people and economies, and getting resources where its needed the most (ACS'23 official website, 2023).

In connection with the summit, the 2023 regional climate week provided a chance to advocate for significant transformation and to promptly address the necessity for expediting advancements by jointly initiating a worldwide overhaul of our economic and social structures. It is discussed in this context; social, economic, and environmental instrument: challenges and opportunities in Africa (ACW, 2023, pp. 1-6). The following topics have also been on the agenda; Digitalisation and African climate solutions, research and innovation: a game changing for food and agricultural systems under a changing climate, food systems under a changing climate, climate resilient and low-carbon energy and infrastructural systems, low carbon, resilient urban areas, resilient water systems (ACS'23, Innovation Hub, pp. 1-3).

At ACS'23, climate change was discussed in all its aspects and its effects were on the agenda in the social (impacts) context. In the declaration (ACS'23 Declaration, 2023, pp. 1-8) published within the framework of the final text of the summit, climate change and the social dimension; (on a global scale) and especially in Africa, as follows: (i) Emphasizing the validation by the Intergovernmental Panel on Climate Change (IPCC) that Africa experiences accelerated warming compared to the global average, and if unchecked, climate change will persistently affect African economies and societies, impeding progress and well-being; (ii) Expressing alarm over the disproportionate burdens and hazards that numerous African nations confront due to climate change-induced erratic weather phenomena and patterns, including protracted droughts, catastrophic floods, and wildfires, leading to extensive humanitarian crises with adverse consequences for economies, health, education, peace, and security, among other threats; (iii) Recognizing that climate change stands as the paramount global challenge and the most significant peril to all life on Earth, demanding immediate and collaborative efforts from all countries to curtail emissions and diminish the accumulation of greenhouse gases in the atmosphere; (iv) Acknowledging that Africa, although not historically accountable for worldwide warming, endures the repercussions disproportionately, affecting lives, means of subsistence, and economies; (v) Additionally acknowledging that African metropolises and urban areas are undergoing swift expansion, and by 2050, they will accommodate more than 1.0 billion inhabitants. Aware of the reality that swift urbanization, poverty, and inequality constrain planning capabilities and other urban factors that heighten people's exposure and susceptibility to threats, thereby transforming cities into disaster-prone zones throughout the continent.

In order to overcome social and other problems, it was stated at the summit that collective action was needed on the following issues: (i) urging the international community to promptly take action to reduce emissions, honor its commitments, uphold previous pledges, and aid the continent in tackling climate change; (ii) encouraging investments that promote climate positivity and trigger a developmental path centered on industries set to revolutionize our world, enabling African nations to attain a consistent middle-income status by 2050; (iii) inviting world leaders to join us in seizing this exceptional chance to expedite global decarbonization while pursuing equity and collective prosperity.

At the summit, commitments were made, by African leaders, on the following issues: (i) formulate and execute policies, regulations, and incentives aimed at attracting domestic, regional, and worldwide investment in sustainable growth and all-encompassing economies; (ii) orient our economic development strategies toward growth that benefits the climate, including the expansion of equitable energy transitions and the generation of renewable energy for industrial operations, climate-resilient and regenerative agricultural practices, and essential safeguarding; (iii) intensify our endeavors to enhance agricultural productivity through sustainable farming practices, ensuring food security while minimizing adverse environmental consequences and promoting nature and biodiversity; (iv) take the lead in establishing global benchmarks, measurements, and market mechanisms to accurately assess and remunerate the preservation of nature, biodiversity, socio-economic advantages, and the provision of climate-related services.

The summit also called for action as follows: encourage world leaders to recognize that the global economy's decarbonization presents an opportunity to foster equity and collective prosperity; extend invitations to Development Partners from both the global south and north to align and coordinate their technical and financial resources aimed at Africa, promoting the sustainable utilization of Africa's natural resources for the continent's transition to a low-carbon development model and contributing to worldwide decarbonization; devise industry policies that incentivize international investments in regions offering the most significant climate advantages while ensuring benefits for local communities; petition the African Union Commission to formulate an implementation framework and roadmap for this declaration and designate Climate Change as an AU focal point for the year 2025 or 2026.

Also, as an important note, the AU has joined the G20 as a permanent member. The inclusion of the

AU into the G20 as a permanent member is welcomed, and it is strongly believed that this inclusion will significantly contribute to the addressing of global challenges. The G20 reaffirms its firm commitment to Africa, extending its support through initiatives like the G20 Compact with Africa and the G20 Program to aid industrialization in Africa and Least Developed Countries (LDCs). The G20 is in favor of additional dialogues about enhancing collaboration between the G20 and other regional allies. The efforts of all G20 members, which facilitated the accession of the AU as a permanent member during India's Presidency of the G20, are commended. A significant role is played by Africa, especially Sub-Saharan Africa and South Africa, in the global economy. G20's commitment is to strengthen the ties with the AU and support the realization of the aspirations outlined in Agenda 2063. Strong support for Africa is also reiterated (G20 Leaders' Declaration, 2023, pp. 28-29). This result increases the hope that it will bring faster and stronger solutions to the social problems caused by climate change in Africa.

Conclusion

This study examines the societal impacts of climate change in Africa. Initially, it assesses the broader implications of climate change and subsequently delves into the specific social aspect of climate change within the context of ACS'23. The United Nations (UN) and the African Union (AU) serve as the principal organizers of the summit. The study is grounded in an analysis of the initiatives and documents/reports released by these two entities. The summit's concluding statement represents the culmination of this research.

Despite presenting an ecological veneer, climate change carries multifaceted societal and communal implications. Africa bears the brunt of these consequences due to elevated poverty levels, destitution, and economic insufficiency when compared to other regions. The African continent predominantly hinges on an agriculture-centered economy, rendering it particularly vulnerable to climate change's repercussions. As a result, food production dwindles, rendering the local population's battle against hunger more arduous. Dwindling water resources due to drought compound disparities in water access. Climatic changes in the form of extreme temperatures propagate health challenges and the prevalence of communicable diseases. Rising sea levels displace coastal communities, deepening societal issues through waves of migration. Industries such as fishing and tourism endure adverse effects due to climate change. Climate-related incidents disrupt schools, hindering children's education and fostering educational discrepancies. Climate change escalates societal conflicts by heightening pressure on natural resources. It exacerbates social injustices by disproportionately impacting underprivileged and susceptible communities.

The United Nations (UN) and the African Union (AU) are engaged in significant efforts to combat climate change. These two entities take the lead in shaping crucial policy-making processes in the fight against climate change. They have played roles, especially in the creation of international agreements like the Paris Agreement. The Green Climate Fund (GCF) - a vital component of the groundbreaking Paris Agreement - stands as the world's most significant climate fund. Its mission is to assist developing nations in enhancing and achieving their objectives for Nationally Determined Contributions (NDC) focused on low-emission and climate-resilient trajectories. The GCF is required to allocate 50% of its funds to activities aimed at reducing emissions (mitigation) and 50% to those addressing the impact of climate change (adaptation), in terms of grants. Additionally, a minimum of 50% of the resources dedicated to adaptation should be directed to the nations that are most vulnerable to climate change, particularly African states. The GCF's programming strategy acknowledges the need to expand both mitigation and adaptation endeavors. The GCF seeks to harness cooperative advantages while reducing potential conflicts between adaptation and mitigation. Africa, despite contributing the lowest greenhouse gas emissions globally, continues to face the most significant vulnerability and disproportionate impact from climate change. As the world's largest multilateral climate fund, the GCF is actively assisting African nations in achieving their climate-related objectives by investing in projects aimed at promoting low-emission and climate-resilient development. Up to this point, the GCF has supported 78 projects, providing a total of USD 3.7 billion in

GCF funding and attracting an additional USD 9 billion in co-financing from various public and private partners. The GCF engages in climate change mitigation and adaptation through four primary approaches; first, creating a conducive environment for climate action by advocating for comprehensive strategies, planning, and policy development. This is especially crucial in sub-Saharan Africa, where debt levels have significantly increased since the beginning of the pandemic. In partnership with the FAO, the GCF is assisting Botswana in developing a National Strategy for Green Resilient Recovery, focusing on agriculture and tourism. Second; accelerating climate innovation. For instance, in collaboration with Acumen, the GCF is investing equity in the KawiSafi Fund, which offers risk capital to small and medium-sized enterprises (SMEs) developing innovative off-grid solar and climate-resilient agriculture solutions for vulnerable communities in East Africa. Third, de-risking projects that might not be considered financially viable, thus establishing a commercial track record for new climate solutions. One such example is the support provided to the Great Green Wall initiative. To date, the GCF has approved 29 projects involving both the public and private sectors in Sahelian countries, with a total GCF financing of over USD 1 billion. Finally, aligning finance with sustainable development by enhancing domestic financial institutions' capacity to incorporate climate risks into all financial decision-making processes. For instance, the GCF has assisted the Development Bank of Southern Africa in establishing a dedicated climate investment facility and will aid in issuing the first municipal bonds for wastewater recycling in South Africa. (Green Climate Fund, 2023).

The organizations (UN and AU) implement various programs and projects to provide financing and technical assistance to African countries for combating climate change. The UN and the AU encourage scientific research related to climate change and support evidence-based policy formulation. Moreover, Africa has developed numerous initiatives to combat climate change at both continental and regional levels. For instance, the African Union's climate change programs have played a pivotal role in fostering regional cooperation. Various adaptation and resilience projects are implemented in Africa to combat climate change. These projects can be beneficial in areas such as sustainable water resource management, teaching climate-friendly farming practices to farmers, erosion control, among others. To put Africa's NDCs into action, an investment of approximately US\$ 2.8 trillion will be necessary from 2020 to 2030. The African Development Bank (AfDB) has increased its climate financing to reach US\$ 25 billion by 2025, with 67% of this funding dedicated to adaptation. Additionally, the bank is striving to secure up to US\$ 13 billion for its Africa Development Fund (UN Ghana, 2023). Africa receives support from the international community in terms of climate finance and technical assistance, contributing to environmental sustainability and increased adaptive capacity. Africa presently obtains approximately 30 billion dollars annually in climate funding, with one-third of this sum originating from the World Bank. However, the climate financing requirements are estimated at 280 billion dollars annually. To bridge this climate financing deficit, the public and private sectors, multilateral organizations, and development partners must intensify their efforts. The World Bank is firmly dedicated to sustaining its assistance to Africa, which encompasses activities like the preparation of Country Climate and Development Reports, as well as the provision of technical aid and financial backing (UNFCCC, 2023). According to another prevalent and significant perspective, the support of the international community in the context of climate change in Africa is insufficient. Calculating the requirements and potential returns on specific investments could represent progress in building a stronger argument for increased financial support from the international community (ACET, 2023).

Africa, along with numerous African countries, is deeply involved in the battle against climate change and the mitigation of its social consequences. By November 2019, 49 out of the 54 African countries had approved their NDCs. With the signing and ratification of the Paris Agreement, almost all African nations have pledged to strengthen climate action by decreasing their greenhouse gas emissions and bolstering their ability to withstand adverse impacts. The need for adaptation to climate change's adverse effects is pressing for the continent (AFDB, 2023). Numerous African states have devised national strategies for addressing climate-related issues and have initiated measures to put these strategies into

action. These blueprints are designed to minimize carbon emissions, strengthen adaptive measures, and contribute to the attainment of sustainable development objectives. Certain African countries are diminishing their reliance on fossil fuels by channeling resources into sustainable energy alternatives, with a specific focus on solar and wind energy endeavors. The protection and revival of woodlands and native ecosystems are of utmost importance for safeguarding biodiversity and sequestering carbon. The sustainable governance of water resources and initiatives to enhance water efficiency are central to bolstering resilience against drought and the challenges of water scarcity.

In summary, addressing climate change, both globally and specifically in Africa, requires a comprehensive approach. Essential actions to tackle the social (and other) consequences of climate change and reduce their effects consist of decreasing greenhouse gas emissions, conserving ecosystems, improving energy efficiency, promoting sustainable agriculture, establishing social equity, and enforcing education and policy regulations. National and international collaborations are of utmost significance in the African context. While the efforts of the UN and other international organizations in addressing climate change are substantial, they also come with limitations and challenges. Climate change calls for increased international cooperation, prompt action, and all-encompassing policy and financing solutions, necessitating the enhancement and refinement of ongoing initiatives. This is because Africa faces limitations in resources, substantial social and economic hurdles, along with political issues and instability. The African Union's dedication to achieving social justice in African nations is critical. The AU should allocate more resources to awareness and educational projects and climate change programs while offering support and coordination. Many African countries are also engaged in combating climate change and lessening its social repercussions. Nonetheless, African nations must fortify appropriate policy and legal frameworks for climate change mitigation. The endeavors to combat climate change should be in harmony with sustainable development objectives.

REFERENCES

- Abbass, K.; Qasim, M. Z.; Song, H.; Murshed, M.; Mahmood, H. (2022). A review of the global climate change impacts, adaptation, and sustainable mitigation measures. *Environmental Science and Pollution Research*. 29: 42539–42559. Springer.
- Abeygunawardena, Piya et al. (2003). Poverty and climate change: reducing the vulnerability of the poor through adaptation.
- ACET -African Center for Economic Transformation-. (2023). Climate finance: how to move from the trillions to the people? Website: <https://acetforafrica.org/research-and-analysis/insights-ideas/articles/trillions-people/> Access date: 4.11.2023.
- AFDB -African Development Bank Group-. Climate change in Africa. Website: <https://www.afdb.org/en/cop25/climate-change-africa#:~:text=As%20of%20November%202019%2C%2049,gas%20emissions%20and%20building%20resilience>. Access date: 4.11.2023.
- Africa Climate Summit 2023 (ACS'23), official website: <https://africaclimatesummit.org/> Access date: 9.10.2023.
- ACS'23 (2023). Climate action innovation hub.
- ACW (the Africa Climate Week). (2023). Regional exchange on climate action acceleration at the Africa climate week 2023. Nairobi, Kenya.
- Adano, W. R. & Daudi, F. (2012). Links between climate change, conflict and governance in Africa. *Institute for Security Studies*. Paper: 234.
- African Union (AU). (2023). The African leaders Nairobi declaration on climate change and call to action. Kenya: Africa Climate Summit (ACS'23).
- AU (2022). African union climate change and resilient development strategy and action plan: 2022-2032.
- AU Commission (2015). Agenda 2063: The Africa we want. Popular version.
- Averchenkova, A.; Gannon, K. E.; Curran, P. (2019). Governance of climate change policy: A case study of South Africa. London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science. Policy report.
- Belchior- Rocha, H. & Anile, L. H. D. S. S. (2023). Climate justice and toxic environments in Latin America: Role for environmental social work. Devendraraj Madhanagopal & Bala Raju Nikku. (Ed). *Social Work and Climate Justice: International Perspectives*. NY: Routledge.
- Bergquist, P.; Mildenerberger, M.; Stokes, L. C. (2020). Combining climate, economic, and social policy builds public support for climate action in the US. *Environmental Research Letters*, 15, 054019. IOP publishing.
- Bhathasara, S. & Nyamwanza, A. (2018). Sustainability: a missing dimension in climate change adaptation discourse in Africa? *Journal of Integrative Environmental Sciences*, 15:1, 83-97.
- Dietz, Thomas; Shwom, R. L.; Whitley, C. T. (2020). Climate change and society. *Annual Review of Sociology*. 46: 135–158.

- G20. (2023). G20 New Delhi leaders' declaration. 9-10 September 2023. India: New Delhi.
- Gifford, Eva & Gifford, R. (2016). The largely unacknowledged impact of climate change on mental health. *Bulletin of the Atomic Scientists*. 72: 5, 292-297.
- Giovanis, Eleftherios & Ozdamar, O. (2022). The impact of climate change on budget balances and debt in the Middle East and North Africa (MENA) region. *Climatic Change*, 172: 34. Springer.
- Gough, Ian. (2011). Climate change and public policy futures. London: The British Academy.
- Gough, Ian. (2013). Climate change, social policy, and global governance. *Journal of International and Comparative Social Policy*, 29 (3).
- Green Climate Fund (GCF). Website: <https://www.greenclimate.fund/> Access date: 4.11.2023.
- Hirvilammi, Tuuli; Häikiö, L.; Johansson, H.; Koch, M.; Perkiö, J. (2023). Social policy in a climate emergency context: Towards an ecosocial research agenda. *Journal of Social Policy*, 52, 1–23. Cambridge University Press.
- Howard, Amanda; Rawsthorne, M.; Joseph, P.; Terare, M.; Sampson, D.; Katrak- Harris, M.; (2023). *Social Work and Human Services Responsibilities in a Time of Climate Change: Country, Community and Complexity*. NY: Routledge.
- Hvinden, Bjørn & Schoyen, M. A. Social policy research and climate change. pp. 236-250.
- Independent Group of Scientists (IGS). (2023). Global sustainable development report 2023: Times of crisis, times of change: Science for accelerating transformations to sustainable development. NY: UN publication.
- Kaddo, Jameel R. (2016). Climate change: Causes, effects, and solutions. A with Honors Projects. 164.
- Karimi, Vahid; Valizadeh, N.; Rahmani, S.; Bijani, M.; Karimi, M. (2022). Beyond climate change: Impacts, adaptation strategies, and influencing factors. Suhaib A. Bandh. (Ed.). *Climate Change: The Social and Scientific Construct*. Switzerland: Springer.
- Mburia, Robert. (2015). Africa Climate change policy: An adaptation and development challenge in a dangerous world. Climate Emergency Institute.
- Mearns, Robin & Norton, A. (Ed.). (2010). Social dimensions of climate change: Equity and vulnerability in a warming world. Washington DC: The World Bank.
- Müller-Kuckelberg, Kristina. (2012). Climate change and its impact on the livelihood of farmers and agricultural workers in Ghana. Friedrich Ebert Stiftung. Ghana Office.
- National Research Council. (2013). Climate change: Evidence, impacts, and choices. 2nd edition.
- Noyoo, Ndongwa. (2023). Green social work for climate change: Curriculum innovations for a post-apartheid South Africa. Devendraraj Madhanagopal & Bala Raju Nikku. (Ed). *Social Work and Climate Justice: International Perspectives*. NY: Routledge.
- Osman-Elasha, B. (2009). Climate change impacts, adaptation and links to sustainable development in Africa. *Unasylya* 231/232, Vol. 60.
- Pichon, E. (2022). The African Union's first climate strategy and EU-Africa climate cooperation. European Parliamentary Research Service.

61 | Süleyman DAL

- Public Health Institute. (2016). *Climate Change 101: climate science basics*. Center for Climate Change and Health.
- Rasmus, H.; Jorgensen, S.; Paul B., S. (2008). *Climate change: Challenges for social protection in Africa*. [S.l.]: SSRN.
- Safonov, G. (2019). *Climate change, energy and environment: Social consequences of climate change*. FES.
- Sengupta, S. & Dahlet, G. (2023). *Policy coherence between social protection and climate action: initial findings from global studies and projects*. Red Cross Red Crescent Climate Centre.
- Sorgho, R.; Quiñonez, C. A. M.; Louis, V. R.; Winkler, V.; Dambach, P.; Sauerborn, R.; Horstick, O. (2020). *Climate change policies in 16 West African countries: A systematic review of adaptation with a focus on agriculture, food security, and nutrition*. *Int. J. Environ. Res. Public Health*, 17, 8897. MDPI.
- United Nations (UN). (2023). *The sustainable development goals report: Towards a rescue plan for people and planet. Special edition*. NY: UN Publications.
- UN official website: <https://www.un.org/en/> Access date: 8.11.2023.
- UN (2015). *Paris Agreement*.
- UN. *Transforming our world: The 2030 agenda for sustainable development*. A/RES/70/1. Official website: sustainabledevelopment.un.org Access date: 7.10.2023.
- UN Ghana. (2023). Official website: <https://ghana.un.org/en/244689-africa-suffers-disproportionately-climate-change> Access date: 4.11.2023.
- UNDP. (2007). *Fighting climate change: human solidarity in a divided world*. Human Development Report 2007/2008. USA: New York.
- United Nations Framework Convention on Climate Change (UNFCCC). (2011). *Fact sheet: Climate change science - the status of climate change science today*.
- UNFCCC. (2023). *Africa Climate Week demonstrates continent's determination to lead on climate action*. Website: <https://unfccc.int/news/africa-climate-week-demonstrates-continent-s-determination-to-lead-on-climate-action> Access date: 4.11.2023.
- World Meteorological Organization (WMO). (2020). *State of the Climate in Africa*. Switzerland: WMO