Sub-Saharan Climate Displacement and Mental Health:

An Interdisciplinary Policy Recommendation

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Introduction

The World Bank has warned that by 2050, unless urgent action is taken, climate change could push more than 200 million people to leave their homes. This would be the largest force of forced migration known in human history (World Bank Group, 2021). People who are forced to flee their homes due to the weather events caused by climate change are often called "climate migrants". Sub Saharan Africa, although having contributed the least to climate change, will most likely experience the most devastating effects (World Bank, 2022). Climate scientists are observing long periods of climate variability. Namely in the forms of droughts, floods, and storms (Schaven, 2019). Reports done by the World Bank Group in 2021, have shown that Northern Africa may see 19 million climate refugees moving. This is equivalent to 9% of its population (World Bank, 2022). Over the past few years, Europe has been witnessing a rising force of Sub Saharan asylum applicants, and with climate change, this number will only grow (European Commission, 2018).

As we saw during the 2015 humanitarian migration crisis, the European governments were facing policy and practical issues when addressing a large number of refugees. As Metcalfe-Hough in 2015 pointed out, the European Union (EU) needs to put a long term strategy forward which minimizes economic and human costs and maximizes the benefits of migration. This paper, with its policy recommendations, contributes to making the EU more equipped when facing climate migration flows of the future. With the hope of not repeating the crisis of 2015.

Furthermore, Shultz, Rechkemmer, Rai, & McManus (2019), highlighted the importance of mental health among refugees. Bad mental health lowers a refugee's chance of improving their personal life, and with that the quality of life. This could create a feedback loop of increasing differences between the native population of a European state and the displaced refugees, which can also influence the social and economic stability of the host state. PTSD, anxiety and depression are likely in the post-migration environment (Blackmore, 2020) and even though the mental health of refugees is of great importance, it has been relatively understudied. We already see that refugees now have high mental health needs while the services provided by European countries are under-utilized (Satinsky, Fuhr, Woodward, Sondorp & Roberts, 2019). This paper aims to bridge the existing gap in the literature by focussing on how the European Union could increase their effectiveness concerning its mental health policy in light of the incoming waves of climate refugees.

Drawing from this, this paper examines under what conditions climate change influences the migration flow from Sub Saharan Africa towards Europe, and how the European Union could more effectively react in their policy. As a sub-question to this, this paper will also examine to what extent the EU can more effectively react to the mental health issue in their policy. The effectiveness of the policy recommendation can be assessed through the Sustainable Development Goals (SDGs).

This will be done by, first, which assessment method will be used. Secondly, outlining which conditions influence the migration flows from Sub Saharan Africa. In this, there will be a focus on climatic and socio-economic conditions. Secondly, this paper will discuss the mental health of refugees. Lastly, this paper will discuss three policy proposals focussing on psychological counselling, early mental screening and the creation of legal protections and obligations.

Assessment Method

A relevant method to assess the current mental health status of climate refugees, as well as the policy effectiveness would be through the Sustainable Development Goals (SDGs). SDGs were adopted by the United Nations in 2015 to achieve social, economic, and environmental sustainability all over the world (UNDP, 2015). Each goal has several indicators (For an example, see Figure 1 below) that allows the measuring of the overall progress based on data and evidence, that aims to achieve the goal itself.

To track the indicators, a starting baseline year and a target year need to be identified. The progress of each indicator is measured as an average of progress overall variants of the indicator; these are then averaged at the SDG goal level (UNESCAP, 2020).

It is necessary to realize that all of the goals are interlinked with one another, meaning that a specific action taken in one area will most likely affect other areas as well. For this reason, multiple SDGs could have been used to assess the governmental policies and institutions in charge of regulating climate migration, as well as the mental health conditions of climate refugees; however, only three goals were selected to provide a more specific assessment: SDG 3, 16, and 17.

SDG 3 aims to achieve good health and well-being, therefore it can be used as an assessment criteria for mental health. This goal has numerous indicators that could identify the improvements of refugees in mental health: for instance, a diminished suicide rate could indicate an amelioration in mental health conditions. The same argument can be used for

alcohol and tobacco use: it is commonly known that high consumption of these substances is related to continuous stress conditions, implying a poor mental health status.

SDG 16 aspires to accomplish peace justice and strong institutions, whereas SDG 17 aims to achieve partnerships for the goals. Both SDGs 16 and 17 can assess the effectiveness of policies and institutions concerning the legal protection of climate refugees. They provide useful indicators such as bribery incidence, indicating the proper functioning within governmental institutions, detected victims of human trafficking, indicating if refugees enter Europe safely and through the proper channels, or FDI inflows, indicating that developed countries are financially helping in making developing countries more stable and resilient, thereby addressing climate displacement at its root causes.

SDG' indicators can therefore be useful to identify improvements or declines in refugees' overall conditions over time.

Goal 3

Maternal mortality	SDG	3.1.1 Maternal mortality, Deaths per 100 000 live births	70
Births attended by skilled health personnel	SDG	3.1.2 Births attended by skilled health personnel, % of live births	100
Under-five mortality	SDG	3.2.1 Under-five mortality rate, Deaths per 1 000 live births [by sex]	25
Neonatal mortality	SDG	3.2.2 Neonatal mortality rate, Deaths per 1,000 live births	12
HIV infections	SDG	3.3.1 New HIV infections, Per 100,000 population [by age and sex]	0
Tuberculosis	SDG	3.3.2 Tuberculosis incidence rate, Per 100,000 population	0
Malaria	SDG	3.3.3 Malaria incidence rate, Per 1,000 population at risk	0
Cardiovascular disease, cancer, diabetes or chronic respiratory disease	SDG	3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes, or chronic respiratory diseases, Probability (%) [by sex]	7.8
Suicides	SDG	3.4.2 Suicide, Per 100,000 population [by sex]	4.3
Harmful use of alcohol	SDG	3.5.2 Alcohol per capita consumption, Litres per annum	2.1
Road traffic deaths	SDG	3.6.1 Road traffic deaths, Per 100,000 population	7.8
Family planning satisfied with modern methods	SDG	3.7.1 Demand for family planning satisfied with modern methods, % of women of reproductive age	100
Adolescent births	SDG	3.7.2 Adolescent fertility rate, Live births per 1 000 women (aged 15-19)	13
Household expenditures on health	SDG	3.8.2 Population with large household expenditure on health, % of population	
		• *More than 10%*	5.2
		• *More than 25%*	1.1
Unintentional poisoning	SDG	3.9.3 Mortality rate attributed to unintentional poisoning, Per 100 000 population [by sex]	0.3
Tobacco use	SDG	3.a.1 Prevalence of current tobacco use, % of population aged 15 and above [by sex]	14
Population covered by all vaccines in national programme	SDG	3.b.1 Target population with access to vaccines, % of population, 3 doses vaccination against diphtheria-tetanus-pertussis (DPT3); Pneumococcal conjugate 3rd dose vaccination (PCV3); Measles (MCV2)	100
Health worker density	SDG	3.c.1 Health worker density, per 10,000 population	

Figure 1: Indicators used to assess the progress of SDG 3 (SDG Gateway Asia Pacific, 2022)

The Conditions Influencing the Refugees Flows from Sub-Saharan Africa

Climatic conditions

To properly understand how climate change processes will influence or increase climate displacement, it is important to understand the future trajectory of climate change events. Serdeczny et al (2016) provide substantive data on multiple climate change processes. For instance, global warming is projected to increase by 1.5 Celsius at the end of the 21st century. Heat extremes are also expected to increase in temperature and occurrence, regardless of the anticipated emission scenario. Furthermore, sea-level rise is expected to be about 10% higher than the global average by the end of the 21st century. While the rest of the world also experiences these climate change processes, Sub-Saharan Africa is unique in its vulnerability due to the existence of the Sahara desert and the tropical jungle around the equator. Since climate change generally increases temperature and aridification, while simultaneously decreasing the occurrence of precipitation, one can deduce that the Sahara desert will extend itself and the tropical rainforest will shrink, both in size and biodiversity, due to its diminished ability to sustain itself via its natural processes. This means that African people living close to the Sahara desert or sustaining themselves from the fruits of the tropical rainforest are forced to migrate to more suitable areas of living, making Africa more vulnerable to climate-induced displacement in terms of climatic changes (Boko et al, 2007; Coelho et al, 2020).

Socio-economic conditions

While these technical examinations of the expected trajectory of climate change within Sub-Saharan Africa are important to consider, since they illustrate the importance of prioritizing Sub-Saharan Africa when designing climate displacement policy, it is also important to put them into their wider socio-economic context, thus giving us a larger understanding of the interconnected process surrounding climate change in this region.

For example, Onafeso (2020), examines the relationship between climate change processes and the composition of Sub-Saharan economies. Here, he argues that the reliance of Sub-Saharan African economies on its primary industry, such as agriculture, wood-logging, and mining, makes them more vulnerable to climate change processes such as increased desertification and heatwaves since this makes essential resources such as food or water, which are also vital for the effective functioning of the primary industry, increasingly scarce. One could even argue that this process is a feedback loop where decreasing essential resources decrease the ability of Sub-Saharan economies to sustain their population and themselves less,

leading to further scarcity of essential resources and thus a break-down of the primary industry, which in turn creates even less essential resources.

Furthermore, considering the pre-colonial power structures within Sub-Saharan Africa, a decrease in essential resources could lead to political and social conflict within these countries. Due to the asymmetric power relations within African countries, as a result of their colonial pasts, conflict between ethnic, social and political groups is expected to increase in the future, especially when scarcity in resources increases (Serdeczny et al, 2016; Onafeso, 2020; Graham, 2020). Thus, exacerbating climate conditions has a profound effect on the economic, social, and political stability of Sub-Saharan countries, which forces people to search for a living environment that is not in a feedback loop of structural collapse.

Therefore, using this train of thought, European policy designed to mitigate or prevent climate displacement needs to take into account the interconnected nature of climate, social, political, and economic processes. In other words, to design effective preventative policy, both the direct causes of climate change need to be addressed by cutting carbon emission, while also acknowledging that long-term success requires economic, political, and social stability and resilience, making it harder for climate change-induced events to start the feedback loop of increasing climate displacement.

Assessment method

While this is a huge undertaking, it can be argued that the Sustainable Development Goals (SDGs), as formulated by the United Nations, can be used as a basic framework to guide policy development and its subsequent effectiveness assessment. The SDG Gateway for Asia and the Pacific has established a list of indicators (Figure 1) to operationalize the progress of different SDGs (SDG Gateway Asia Pacific, 2020). For instance, if the European Union would like to assess its policies to alleviate poverty in Sub-Saharan Africa, and therefore improve the conditions that would otherwise drive or force migration towards Europe, it can use the indicators described by the SDG Gateway, such as the percentage of population covered by social protection or access to basic water and sanitation services. Or, the effectiveness of mental health policy can be assessed using the indicators of SDG 3 by measuring the amount of tobacco or narcotic use among climate refugees (NIDA, 2020).

Mental Health of Refugees

This section of the paper will dive into the importance of determining mental health conditions among climate refugees, and the associated social and economic costs faced throughout their adaptation period.

When talking about climate displacement, it is necessary to realize that refugees have been exposed to highly traumatic events throughout their lifetime. First of all, stressful and risky situations might have been taking place in their home country. Some examples can be armed conflicts, difficult separation from the entire family and origins, but also lack of resources (Blackmore, 2020). When displaced, they are forced to go through an entire survival journey to reach the host country. Ultimately, climate refugees find themselves in a new country, in which cultural differences might lead to new challenges: basic needs, such as food, medications, appropriate healthcare and respectable occupation are difficult to reach. All of these factors can eventually lead to an alteration of mental health and the consequent development of various mental illnesses.

Fazel et. al (2005) presented an analysis review in which many disorders were diagnosed to refugees as a result of their excruciating past experiences. These disorders include post-traumatic stress disorder (PTSD), depressive disorder, and general anxiety disorder.

Migration from Sub-Saharan regions was found to be extremely relevant for this paper: according to Blackmore et al. (2020), the highest prevalence of PTSD was indeed found in African case studies; this underlies the condition of African countries, where violent conflicts and human rights violations contribute to the development of mental health crisis.

It has been demonstrated by Pannetier et al. (2017) that the mental health of men and women differs throughout the migratory path. Women are more likely to be affected by PTSD, anxiety and depression. This is supported by a case study in France (Veïsse, 2012), in which sub-Saharan African women are reported to be more exposed to political violence, as well as gender-based violence - such as rape or domestic brutality. Clearly, these contribute to the development, if not already worsening of the mental health of women refugees. On the other hand, men are more exposed to anxiety symptoms related to the lack of proper documentation and residence permit (Pannetier, 2017).

It was suggested that PTSD, anxiety and depression are very likely in the post-migration environment because of social and cultural isolation, but also because of difficulties in adaptation (Blackmore, 2020). Climate refugees are usually characterized by low education levels and low socioeconomic status, which makes the integration process even harder. These conditions exacerbate the risk for mental health impairments (Gammouh, 2015) as "the poorer

one's conditions are, the higher one's risk is for mental disability" (Christopher G. Hudson, PhD, Salem State College). Flawed mental health can therefore be considered an obstacle when trying to improve one's social and economic conditions, as it might interfere with the job-seeking process and the hope for better living conditions.

According to a study published by the German Federal Chamber of Psychotherapists in 2017, only four per cent of refugees suffering from PTSD are being treated. There are not many healthcare networks to connect with refugees along their steps, and if mental health treatments are neglected and not considered a basic need from the hosting country, entire populations will keep suffering from their undealt trauma. It has been shown that individuals suffering from PTSD and similar mental impairments are likely to forget the traumatic events they have been exposed to, and it becomes harder for them to tell their stories to the asylum officers in a credible way, which makes it even more difficult for them to apply for their legal documentation (Sandalio, 2018). Moreover, the prevalence of these mental conditions will hold them from understanding and adapting to new cultural perspectives, customs and traditions, thus not improving their quality of life.

Recommendations
Mental health counselling
This paper will draw lessons from the 2015 European refugee crisis, with the goal of making recommendations to the EU to be better equipped for future waves of climate refugees. This section will focus on how to increase the effectiveness of mental health policy approaches. Research has shown that although there is a high morbidity of mental illnesses among refugees and asylum seekers, the use of mental health and psychosocial support (MHPSS) is low. Take as an example, in the Netherlands only 20% of the refugees with PTSD accessed care. Barriers are often; low awareness of the services provided, different cultural perspectives and linguistic barriers (Satinsky, E., Fuhr, D. C., Woodward, A., Sondorp, E., & Roberts, 2019). A review of MHPSS services in European capitals has shown that only 53% had interpreters available. This shows the lack of interpreters and language services. Stigma is another major barrier to asylum seekers accessing and seeking MHPSS in Europe as mental illness is still a taboo in many countries. There is a need to improve awareness of MHPSS services through community education programs (Satinsky, E., Fuhr, D. C., Woodward, A., Sondorp, E., & Roberts, 2019). Dutch psychiatrist Cornelis J. Laban and co-authors concluded in their research that refugees

with long and lengthy asylum processes were more likely to experience mental health disorders and that conditions worsened as the asylum processes drags on (Sandalio, 2018).

German counselling pilot and Problem Management Plus
During the 2015 migration crisis, the European mental health services were overcrowded and, as highlighted in the previous paragraph, experienced barriers. This paper proposes the EU to further investigate the use of peer counselling and Problem Management Plus (PM+). In 2017, Germany launched a pilot training refugees as psychosocial peer counsellors. The project brings down the language and cultural barriers (for example, the stigma). In addition, it decreases loneliness and boredom, both of which are problems associated with long waiting times in the asylum process (Sandalio, 2018). The PM+, developed by the WHO, is a transdiagnostic program that can be delivered by non-professional helpers in the community after 10 days of training (Sijbrandi, et. al, 2017). Rahman et al. found that the program was effective. These types of projects could release stress from the mental-health resources (Sandalio, 2018). An element of great importance, as Europe would expect an even greater amount of refugees, putting the system under even more stress.

Assessment
To evaluate the effectiveness of the program, this paper proposes the use of a multitude of SDGs, as mental health is an integral part of the SDGs, while specifically focussing on SDG3 Good Health and Wellbeing. Our efforts to prevent conflict, promote education and eradicate poverty will not be effective unless mental health is prioritized. This is because mental health is, as mentioned before, interlinked to development factors such as economic growth (SDG8), peace and justice (SDG16) and poverty (SDG1) (Votruba, & Thornicroft, 2016); (Dybdahl & Lien, 2018). Specifically one could focus on SDG3 good health and well-being as it explicitly refers to mental health. For example, target 3.5, which addresses prevention and treatment of substance abuse, or target 3.4, which aims for a reduction of premature mortality from non-communicable diseases by "one third through prevention and treatment and promotion of mental health and wellbeing" (Dybdahl & Lien, 2018). The effectiveness of the programs could also be assessed through the progress made in the indicators of target 3.8 which focuses on the achievement of "universal health coverage, including financial risk protection, access to quality essential healthcare services " as under these essential health- care services falls mental health (United Nations, n.d.).

Early Screening

The lack of credibility of asylum seekers and refugees is a current issue within Europe. The European Council of Refugees and Exiles (ECRE) has highlighted the necessity of evaluating mental health exigencies over the obstacle created by the lack of credibility (Sandalio, 2018). Under Article 21 of the EU Reception Conditions Directive, people with mental illnesses are defined as "vulnerable", meaning that they should receive special guarantees. However, asylum seekers or climate refugees have not often been legally recognized as the vulnerable category, therefore they did not have the opportunity to be officially diagnosed with specific mental health needs.

Existing Initiatives

Numerous Member States of the EU do not yet provide an identification procedure of mental health conditions among refugees. Many projects have been proposed to assess refugees' mental health. In Finland, the project PALOMA2 consists of arranging five regional centres, with the ultimate goal of promulgating knowledge on how to provide helpful suggestions to facilitate the support of the mental health of refugees. Multiple ways of doing so are by providing advice and services, but also by developing meaningful networks that can ameliorate the efficiency of the required help (THL, 2019). Furthermore, the project PROTECT (Sandalio, 2018), launched in 2010, proposed a way to identify mental health disorders during the arrival of displaced individuals. The assessment consisted of a questionnaire that helped the social assistants recognize the subjects in need of mental health professionals. Another project worth mentioning was set in motion by MSF in Germany: psychological aid was offered to asylum seekers via a counselling programme, through which they could discuss their life experiences, traumas and mental state together with other people who were facing the same struggle (MSF Germany, 2017).

Legal Recognition

The phenomenon of climate displacement is expected to increase exponentially, due to the worsening of climate change. Climate refugees are not yet recognized by governments (Leighton, 2010), meaning that the victims that are forced to migrate are less legally protected. The issue here is that governments are not sure on how to categorize the severity of the climate event: for instance regions hit by a tsunami are more recognized than populations who have been affected by constant droughts because the consequences are less direct. For this reason, it is necessary to establish precise identification elements for climate refugees, provide more

extended legal protection, and to work towards the creation of legal entities that can address the mental health of these refugees.

Assessment

The European Union should therefore aim to provide a standard mental health screening at the early stages of the asylum seekers, but then should also extend these practices throughout the adaptation of the refugee. More infrastructures and projects should be created, and more professionals should be involved when diagnosing mental conditions. A relevant method to assess these processes would be through SDG 3, which can compare different variables to reach good health and well-being. This could generate an ideal situation for refugees to improve their living conditions, and scale-up in the new society they find themselves living in.

International Framework Surrounding Climate Displacement

The 1951 Convention and Protocol relating to the status of refugees is an ambitious and comprehensive codification on the status of international refugees, their individual rights, and the associated obligations of states to accommodate these rights, resulting in a universal definition of the term refugee. A refugee is, according to the convention, an individual who cannot or will not return to their country of origin due to fear of persecution for reasons of race, religion, nationality, membership of a particular social group, or political opinion, thereby affirming and enforcing certain provisions within the Universal Declaration of Human Rights. While the Convention initially only applied to European refugees who fled events occurring before 1951, signifying the emphasis of post-war reconstruction, this was later rectified with the adoption of the 1967 Protocol Relating to the Status of Refugees, removing the temporal and spatial restrictions in the initial definition and therefore extending the rights and obligations mentioned within the Convention universally (UNHCR, 2010).

Refugee Convention shortcomings

But despite its ambitious and universal application, the convention is continuously scrutinized by its member states to find loopholes or gaps in its application to shirk them from their legal obligations. This is usually done when a state of conflict in the refugee's origin country does not specifically or directly cause a heightened risk of individual persecution (Holzer, 2012). Therefore, due to the clause of political, social, religious, or ethnic persecution, alongside the individual focus on the definition of refugees, states try to avoid their obligations, even though a refugee is faced with real risk when returning to its country of origin, whether due to individual reasons or the general state of the country. Luckily, some governments have

reaffirmed the application of the convention to refugees from countries in conflict. For example, the EC Qualification Directive further expands upon the rights of refugees by protecting them from serious harm if these refugees would be sent back to their country of origin, as a result of armed conflict, thereby protecting refugees without the explicit individual threat that would be required under the Convention (Lambert, 2010).

Policy gaps, Climate displacement, & The European Union

In the case of climate displacement, this problem is even more apparent. As examined by Wilkingson et al (2016), climate refugees fall between the policy gaps entirely due to the absence of any environmental prosecution in the Convention's refugee definition. Furthermore, the complex relationship between climate change and displacement, which blurs causes, consequences, victim, and offender, it is harder to form a concrete international legal framework that would advance social justice in terms of climate displacement (Hulme, 2019).

More specifically, in the case of the European Union, the Dublin III regulation, which establishes a mechanism to determine which member state is responsible for the application and subsequent hosting of the refugee in question, adds even more legal shortcomings. For example, Hungary's suspension of the Dublin III regulation (The Guardian, 2015) led to an increase in pressure on border countries, such as Italy, Greece, and Malta, resulting in an increase of physical and psychological strains on arriving refugees during the 2015 refugee crisis. These unnecessary physical and psychological strains are best exemplified by the overcrowded, unsanitary, and inhumane, conditions in the Moria refugee camp on the island of Lesbos, where a qualitative link has been established between these conditions and the worsening mental health of arriving refugees (Van der Wiel, Castillo-Laborde, Urzúa. Fish & Scholte, 2021). One can only imagine the increased toll on refugees in camps if climate displacement refugees are added to these already unsustainable and inhumane refugee camps.

Legal recommendations

It is therefore paramount that a global compact, designed to support the Convention, should be created to address these legal shortcomings. In the case of the European Union, a more centralized framework should be created to effectively address the underlying causes of climate change-induced displacement, such as extreme weather events or decreased precipitation, and codifies the legal rights of refugees and obligations of national governments in terms of climate displacement, while also filling legal holes and enforceability issues. This would create a two-pronged effect: mitigating the social, political, and economic impacts of

climate displacement, while also providing an example to the international world on the need for a globalized framework on climate displacement. National courts can also have a role in developing this framework. For instance, the Dutch court in The Hague ruled that migrants in its territory cannot be transferred to the appropriate member state responsible for its application and accommodation under the Dublin III regulation if it would put their physical and mental health at risk (EDAL, 2017). This would provide other EU member states and EU institutions with substantive examples of refugee protection while also protecting the basic human rights of refugees.

Assessment

To properly assess whether (European) policy is effective, SDG 16 and 17 provide useful indicators, such as bribery incidence, indicating the proper functioning within governmental institutions, detected victims of human trafficking, indicating if refugees enter Europe safely and through the proper channels, or FDI inflows, indicating that developed countries are financially helping in making developing countries more stable and resilient, thereby addressing climate displacement and displacement in general at its root causes.

Conclusion

By 2050, reports have estimated that 200 million people will be forced to flee their homes due to the effects of climate change if urgent action is not taken (World Bank Group, 2021). Especially in Sub Saharan Africa, many people are expected to move (World Bank, 2022). Europe is witnessing and will continue to witness a growing number of Sub Saharan refugees (European Commission, 2018). In the light of this, this paper questioned under what conditions climate change influences the migration flow from Sub Saharan Africa towards Europe, and how the European Union could more effectively react in their policy. As a sub-question to this, this paper will also examine to what extent the EU can more effectively react to the mental health issue in their policy.

This paper argues that both climatic and socio-economic conditions influence the migration flows from Sub Saharan Africa. Following this, to design effective policy, both the direct causes of climate change as well as the economic, political and social conditions which create feedback loops of exacerbating mental health issues need to be addressed. In this, the SDG Gateway for Asia and the Pacific can be used to assess progress. To more effectively react to their policy this paper proposes to further investigate the use of refugee counselling and

Problem Management Plus (PM+). Secondly, to provide a standard mental health screening at the early stages of the asylum seekers. As mental health is an integral part of the SDGs, progress can be assessed through a multitude of SDGs. Especially, we recommend focusing on SDG3 Health and Wellbeing. Thirdly, this paper proposes to create legal protection for climate refugees, both in the EU and in the international community, to prevent unnecessary mental health damage. This policy could be assessed through SDG 16, Peace, Justice, and Strong Institutions as well as SDG 17, Partnerships for the Goals.

Limitations and Future Research

First, while the paper attempted to create an interdisciplinary examination of climate health displacement, its causes, processes, and consequences, especially with regards to the mental health of climate refugees, it is important to acknowledge that potential short-comings with regards to the analysis are inevitable due to the large scope of the problem. For instance, the underlying forces of climate displacement, as examined in chapter 1, can be elaborated upon by, for example, analysing the effects of colonial pasts on African countries' political stability, through a comparative analysis between a politically stable and unstable country. This way, one can better understand the relationship between the political stability of a country and the effects of climate change.

Furthermore, while the paper explicitly focussed on Sub-Saharan Africa as a case study to keep the research question focussed, as opposed to a global perspective, national, regional, and local contexts need to be considered when designing climate displacement policy, since general recommendations for Sub-Saharan Africa cannot properly account for national, regional, and local conditions that are just as important in the process of climate displacement. We thus recommend a multi-layered governance and research approach that broadens our understanding of the subsidiary nature of climate displacement.

With regards to the mental health aspect of the paper, due to the relative lack of academic research surrounding the mental health of climate refugees, further research and discussion, in general, is encouraged to increase our understanding, scope, and relevance of the problem, as well as shed more light on the issue, increasing salience in public and political discourse and humanizing climate refugees and refugees in general. Lastly, the use of SDGs as a methodology to assess the effectiveness and successfulness of mental health policy, while effective from a governmental perspective, can miss important, individualistic, information

regarding the effectiveness of mental health programs. Therefore, future research with different methodologies is encouraged to overcome this challenge and/or shortcoming.

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