

The Future of Humanitarianism in Response to Climate Change

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Abstract— This article explores the complex interplay between climate change and humanitarian need, examining the ways in which the two phenomena are intertwined. It begins by analysing the relationship between climate change and humanitarian need, exploring the various factors that contribute to the exacerbation of humanitarian crises in the face of climate change. Specifically, the article delves into the role of conflict in climate change and the resulting implications for the humanitarian sector. Next, the article examines whether the humanitarian sector can uphold its guiding principle of 'do no harm' while continuing to operate within its current framework. Finally, the article offers a series of solutions and recommendations for the humanitarian sector in addressing the challenges posed by climate change and its impact on humanitarian need. Overall, this article serves as a comprehensive exploration of the complex dynamics at play in the intersection of climate change and humanitarian need.

Index: New humanitarianism, climate response, climate resilience, climate conflict.

I. INTRODUCTION

Climate change is a significant challenge that will continue to be an existential threat in the coming years. Many countries are already experiencing environmental changes causing difficulties for their citizens. These transformations, combined with existing difficult living conditions, put the livelihoods and, worse, the lives of millions of people at risk. In 2018, the Intergovernmental Panel on Climate Change (IPCC) released a report to present climate change's substantial impact on global humanitarian efforts. Notably, Africa's Sub-Saharan region is particularly susceptible to climate change's complex and extensive effects [1]. While studies such as the IPCC special report [2] are only now starting to go into depth about the precise consequences of warming temperatures, it is evident that there is a symbiotic link between climate vulnerability and humanitarian needs.

This paper discusses this relationship to understand the impact of climate change on humanitarian needs. However, the ultimate focus is researching how humanitarianism as a concept must adjust to confront the danger of climate change. It argues that the field of humanitarianism must be quickly re-conceptualised to maintain its principles and address long-term objectives. Some scholars [3], [4] have already referred to this re-conceptualisation as "new humanitarianism". To support this argument, the paper examines how the demand for humanitarian relief is rising due to climate change and outlines methods and tools that humanitarian workers can use to address the issue in a more comprehensive and long-term manner.

II. THE ENVIRONMENT AND HUMANITARISM

The environment and humanitarian work are intertwined for two reasons. First, the number of individuals who require emergency help may drastically grow due to climate change. Second, a humanitarian reaction to a crisis or conflict may have a detrimental effect on the environment and generate additional harm.

Similarly to climate change, humanitarian emergencies can be man-made or natural. The IPCC report 2022 says: "It is unequivocal that human influence has warmed the atmosphere, ocean and land". Also known as the Anthropocene, human activity has dominated the climate and environmental impact on our planet in our current geological age. Indeed, according to the most cautious forecasts, the planet will likely reach an additional 1.5 degrees of warmth by 2040 [5]. Ultimately, climate-related dangers and calamities will rise as temperatures fluctuate. According to the IPCC assessment [2], these environmental changes will increase risks to human security, food security, livelihoods, water supply, health, and economic growth. Events like a decline in crop productivity and nutritional quality, which also impacts animals and lowers food security, will happen more frequently. The health effects of rising temperatures include a projected rise in vector-borne illnesses like malaria and dengue fever. Additionally, the regional temperature rises vary; one location where warming is anticipated to reach 1.5 degrees regardless of the scenario is sub-Saharan Africa, which will make the consequences, as mentioned above, far more common [1]. Lastly, climate change provokes more natural catastrophes, leading to a greater demand for humanitarian aid.

Data shows [6] that climate change may intensify and extend a conflict, heightening its unfavourable humanitarian effects. Indeed, conflicts can be directly triggered by exploiting and depleting a country's natural resources. This tragedy is particularly evident in the areas surrounding the lake Chad basin [7]. Millions of people in East Africa depend on the lake

for their water and livelihoods. Still, because of climate change, irrigation, and population increase, it has shrunk to a tenth of its original size. To obtain and control the water, parties from the four neighbouring nations, Nigeria, Niger, Chad and Cameroon, have been battling. According to SIDA [6] the advantages of participating in conflict exceed the drawbacks, which accounts for the rise in violent crime. Many farmers who live off the land have little to nothing to lose. By blocking the trade routes in the Lake Chad Basin, organisations like Boko Haram have utilised the fight over resources to rally support and make money, further affecting the lives of people who have not already left the area. Hence, as McGoldrick [8] argued, the environmental changes will probably lead to increased migration and more tensions and conflicts. Climate change can, at worst, significantly contribute to the start of a conflict [9]. Regarding the terrible drought that plagued Syria between 2006 and 2009, devastating drought resulting from climate change clearly made a bad situation a lot worse [10]. The long-term effects of climate change on manufactured crises and natural disasters will result in significant humanitarian difficulties around the globe, particularly in sub-Saharan Africa.

Nevertheless, the surge in violence and misery brought on by climate change is already here. The capacity of climate change to operate as a moderating variable, increasing fatal conditions in states already ravaged by instability and violence, will have its most immediate and apparent consequence during the next ten years. These are referred to as *overlapping vulnerabilities* by the Norwegian Red Cross [11]; this term is used to describe nations that are susceptible to instability, war, and crises, as well as changes in climate ecosystems that endanger resources. A Norwegian Red Cross research from 2019 details that political risks might include inadequate institutions, marginalisation and conflict. Moreover, the report urges that the most severe humanitarian disaster in the coming decade may occur in countries with overlapping vulnerabilities. Indeed, environmental emergencies are more likely to happen in these nations. An environmental crisis is characterised by the quick onset of natural, technical, or human-made disasters resulting in significant environmental harm and casualties. Environmental emergencies double damage nations, escalating the complexity and difficulty of the problem. Environmental catastrophes will become more frequent and severe due to climate change, which will be disproportionately catastrophic for the poor, violent, and conflict-ridden nations of Africa and Asia.

The fact that these countries' life-support systems are already highly frail is a significant factor in the increased destruction. Climate change increases the likelihood of fatal events because of droughts or floods brought on by extreme weather, resulting in clean water pollution and problems with agricultural productivity. However, many of these occurrences can be lessened by investing in adaptation. Nevertheless, these nations make little to no investment in catastrophe preparedness or completing the required adjustments to mitigate the effects of global warming. When a country struggles with widespread poverty or violence, it may not have the resources or political stability to invest in adaptation to climate change. This scenario can be especially damaging when conflict disrupts the systems and structures necessary to mitigate climate change impacts [11]. Overlapping vulnerabilities make it difficult for nations to recover from humanitarian disasters, making them more susceptible to future crises [8].

Moreover, the effects of a humanitarian disaster are often not confined to a single nation or region. Mass migration from one location to another due to resource constraints may pressure the ecosystems and resources of those other places. Indeed, natural disasters have caused 26.4 million people to be displaced annually between 2008 and 2016 on average. More alarmingly, according to projections, there could be 1.2 billion displaced people globally by 2050 due to climate change and natural disasters [12].

III. HUMANITARIAN CAUSING HARM

The provision of humanitarian aid can sometimes have unintended negative consequences, such as increasing suffering or exacerbating environmental risks and climate vulnerability [4]. If proper consideration is not given to environmental management and protection in the aid response, it can lead to long-term damage and make the affected area unliveable. In the past, humanitarian organisations have faced criticism for not adequately addressing environmental issues in crisis-stricken countries already facing overlapping vulnerabilities [13]. The failure to properly consider the environment can have serious and disastrous consequences. Humanitarian efforts in Darfur resulted in the loss of livelihoods and the clearing of forests to create housing bricks. In Afghanistan, excessive water drilling by humanitarian workers dried up the wells. Additionally, due to humanitarian actions' disregard for Haiti's waste management regulations, the country had the worst cholera outbreak in recent times. Less severe instances include volunteers rebuilding homes in places particularly vulnerable to natural catastrophes or dispersing seeds that would not thrive in a climate with high temperatures [4]. These illustrations show, on many levels, how humanitarian organisations and individuals can damage people by being careless or how their efforts can be ineffective due to management. In these circumstances, their goals of saving lives, easing suffering, and upholding human dignity are undermined by humanitarian behaviour. Therefore, environmental emergencies will result in additional suffering for humans due to the destructive consequences on the environment, which will increase the demand for humanitarian help.

The above mechanism creates a vicious loop that has to be broken. In order to address the intricate overlapping vulnerabilities of the twenty-first century, the conventional humanitarian strategy needs to be updated. Traditional humanitarianism addresses disasters as they happen and focuses exclusively on immediate needs, with the short-term objective of avoiding dependency. In light of climate change, this emphasis on immediate objectives is problematic. Threats exist to the specific rules and procedures governing humanitarian action globally [4]. Indeed, 'do no harm' and 'neutrality' are the most at risk values in today's complex humanitarian crises. Humanitarian actors are not concerned with the long-term effects of their actions since their primary goal is to alleviate human suffering rather than bring about systemic change. However, failure to resolve the unsustainability in the humanitarian domain is detrimental because of the growing knowledge of climate change and its damaging consequences on the people they are trying to serve. As a result, future generations might be compelled to move, which would cause immediate and long-term harm. Although humanitarianism is often defined by putting out fires, the profession's integrity, in light of its guiding principle to "do no harm" has recently come under scrutiny. The International Committee of the Red Cross acknowledged the neutrality principle's demise after 9/11 in 2011 when they cited experts who claimed that humanitarian action was "in fact, dead" rather than simply in crisis [8].

Humanitarianism must be remodelled to adapt to the modern, changing world. As already established, those already at risk are the ones that suffer the most from adverse environmental effects. As a result, humanitarian efforts that safeguard the environment must also be accountable to the impacted communities. Strengthening people's livelihoods, fostering resilience, and lowering the likelihood of worsening effects and subsequent catastrophes are all benefits of including environmental factors during the early stages of emergency response. The current need for a systematic approach to environmental effect assessment is shattering the notions of what humanitarianism is. The problem here is that the traditional mission of the humanitarian sector is to respond to crises wherever they occur, to be impartial, and to do no harm. Preventing crises was never an aim of humanitarianism; instead, it belongs to the development field. Hence, merging humanitarianism and development, two fields with different goals and methods, could improve their efficiencies. However, governments may view the combination of these fields as making a political statement and not being impartial. Humanitarian organisations could become less credible after a merger, limiting their access. Addressing the political vulnerabilities, or the mechanisms that promote inequality and poverty has long been the purview of development. Development, humanitarian aid, and the environment have long been distinct areas. Nevertheless, lately, their objectives have converged more. A lack of understanding of their interconnections will cause more long-term destruction, including increased humanitarian demands and environmental harm.

Humanitarian actors frequently offer aid in hazardous locations with several risks. For security considerations, development organisations are typically unable to operate in certain regions. Therefore, the responsibility falls on humanitarians in light of climate change and the rising threat complexity. They must ensure that those involved in humanitarian affairs do not suffer unintended consequences and are equipped to deal with the changes brought on by global warming. Humanitarians could increase their work's integrity if they could respond on a catered case-by-case basis. The issue of climate change has drastically altered the need for humanitarian assistance methodology change.

We have already observed how much the global south would suffer. We are aware that humanitarian crises will become more intricate and challenging to recover from. We have also identified instances in which humanitarian activity may result in additional harm. Now what can the humanitarian community do to prevent this additional harm? A different approach to humanitarian assistance is necessary for vulnerable nations.

Humanitarian players are crucial in the first response, saving lives and developing the relief management strategy. They are in a unique position to incorporate environmental protection strategies and adaptation in the humanitarian response, thanks to their access. By doing this, the region and its residents can be protected against long-term environmental damage.

IV. SOUTH SUDAN

To put everything above into context, the case study of the Sudanese area and the South Sudanese people is examined. The history of this area and its inhabitants reveals overlapping vulnerabilities. The next part charts the journey of the over 2.3 million South Sudanese refugees who have fled to neighbouring nations and discusses the consequences of climate-related displaced populations and the necessity for environmental policies. This section will demonstrate how integrated environmental policies may be used to manage camps to lessen the immediate and long-term effects of displacement on the environment.

South Sudan declared it was going through a famine in 2017, merely six years after gaining independence. Nevertheless, this may have been foreseen [14]. Indeed, South Sudan has been seeing a change in rainfall intensity and frequency, as well as a rise in temperature, which is similar to the trend of the larger Sahel region [15]. This area has heated up 2.5 times

quicker than the rest of the world. While some places have seen an increase in extreme floods, their annual rainfall has declined by ten to twenty per cent, resulting in severe and protracted droughts. While human conflict is one of the primary reasons for the famine in South Sudan, certain parts of the country's east are experiencing food security challenges as a result of persistent droughts that are thought to be caused by climate change [14]. Food shortages, livestock losses, internal displacement, and emigration to neighbouring countries are all consequences of protracted droughts. According to the UN Environment Programme's 2017 report [15], there are an estimated one million critically malnourished children in South Sudan. Farmers cannot decide when to grow crops due to erratic rainfall, and the region's rising heat and droughts have caused many animal fatalities [4]. Additionally, according to the South Sudanese environment minister and other experts, the internal armed conflict is partially caused by a lack of water and the instability brought on by climate change [15]. Desertification is increasing, which irrevocably limits the amount of farmable land available in the future, together with flooding and droughts [16]. According to the UN Environment Programme [15], the country's lack of social or economic structures has lowered the ability of the inhabitants to deal with environmental deterioration. As a result, compared to 2015, the region's humanitarian needs have increased by three times. In South Sudan, food production options are so strained that the population solely depends on donations from aid agencies. Although it is never anticipated that humanitarian aid will last for an extended period, for South Sudanese, there is no way that humanitarian aid can end without first assisting in stabilising climatic vulnerabilities and their own food production.

Helping to offer and teach better cultivation methods, correct grazing management, reforestation, and increased livestock and agricultural production requires the collaboration of humanitarian workers and sustainable development experts. They will only be able to meet their own fundamental requirements once more once the South Sudanese people have a workable substitute for humanitarian help. South Sudan's International Committee of the Red Cross (ICRC) has been active for about 40 years. Security concerns have prevented many development organizations from entering this area, which has hindered the development of resilient and sustainable practices. Humanitarian workers may address this gap under the 'New Humanitarianism' conception [4]; humanitarian organisations must incorporate and support sustainable development initiatives in addition to meeting fundamental needs for food, water, and healthcare. The growth in migration and human displacement is another issue that comes along with extended humanitarian crises or war. People are compelled to move to a neighbouring nation since they have lost hope for the future in their native country. As a result, the host nation's limited natural resources are under more strain. A million South Sudanese refugees have escaped to Kenya and Uganda. While these nations provide a safer temporary haven, it is necessary to evaluate to ensure that their movement will not result in lasting environmental harm in the new host community. Recently, technologies for evaluating climate vulnerabilities have been created for humanitarian organizations. The open-source NEAT+ program assesses environmental project planning and identifies present environmental vulnerabilities. Additionally, it highlights any areas where the actions of the humanitarian initiative may worsen already-existing environmental hazards. The Bidibidi refugee community in Uganda, which houses a sizable number of South Sudanese refugees, was evaluated using this technique. Their findings brought attention to the need for more recycling and waste management infrastructure. Deforestation is predicted to reach its full extent in three years, affecting both the quantity and quality of groundwater penetration. Since, the majority of the population relies on biomass for their energy needs, wastewater management needs to be more present. Moreover, the settlement's firm reliance on natural resources for building contributed to additional environmental deterioration. Additionally, they notice growing soil degradation brought on by ill-advised farming methods and land clearing. Humanitarians on the ground can start organising a response as soon as these risks are identified. These initiatives include utilising solar-powered water pumps and reducing the environmental impact of utilising biomass fuel or diesel to pump the water. Lastly, this results in a long-term reliance on renewable energy sources rather than ones that could run out. Therefore, environmental concerns are more likely to be thoroughly mainstreamed across humanitarian programs the earlier they are included in disaster response and recovery.

CONCLUSION

More fundamentally, as scholars and experts in the field of humanitarianism, it is our responsibility to take all reasonable steps to halt global warming and protect the lives of others. This paper has also emphasised the urgent requirement for a coordinated response to climate-related crises. More than ever, the sectors of the environment, sustainable development, and humanitarian assistance intersect. In addition to providing urgent assistance, humanitarian organisations and their practitioners must create the groundwork for long-term, ecologically sound development plans. It has now become essential that before beginning humanitarian operations, humanitarian practitioners must first undertake an environmental evaluation.

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