Digital Policy Hub — Working Paper

Countering Climate Disinformation in Africa

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About the Hub

The Digital Policy Hub at CIGI is a collaborative space for emerging scholars and innovative thinkers from the social, natural and applied sciences. It provides opportunities for undergraduate and graduate students and post-doctoral and visiting fellows to share and develop research on the rapid evolution and governance of transformative technologies. The Hub is founded on transdisciplinary approaches that seek to increase understanding of the socio-economic and technological impacts of digitalization and improve the quality and relevance of related research. Core research areas include data, economy and society; artificial intelligence; outer space; digitalization, security and democracy; and the environment and natural resources.

The Digital Policy Hub working papers are the product of research related to the Hub's identified themes prepared by participants during their fellowship.

Partners

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About CIGI

The Centre for International Governance Innovation (CIGI) is an independent, non-partisan think tank whose peer-reviewed research and trusted analysis influence policy makers to innovate. Our global network of multidisciplinary researchers and strategic partnerships provide policy solutions for the digital era with one goal: to improve people's lives everywhere. Headquartered in Waterloo, Canada, CIGI has received support from the Government of Canada, the Government of Ontario and founder Jim Balsillie.

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Key Points

- Climate change is a particularly acute issue for Africa, as the continent's already fragile environment has been severely impacted. Over 60 percent of Africans rely on some form of subsistence agriculture for at least part of their livelihoods. Thus, the people who are least able to deal with the effects of the climate crisis are those being hurt the most.

- Climate disinformation is an existential risk for many on the continent: misinformation can decrease support for effective mitigation policies and also significantly limit effective adaptation measures.

- As weather patterns become more extreme and erratic, it is imperative that Africans are equipped with reliable, timely and accurate information about how best to deal with the changing climate. Any efforts that limit or counter such information flows can be extremely damaging to the global fight against climate change and can mean the difference between life and death for many Africans.

- In order to counter harmful climate disinformation in Africa, policies must centre around fact-checking mechanisms; educating communities about climate change and the realities of disinformation; empowering communities to develop local solutions; utilizing technology and digital platforms as positive tools; and encouraging partnerships between global entities and local stakeholders.

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Introduction

Online misinformation has emerged as a significant impediment to effective climate action globally, and its impacts are particularly acute in Africa, a continent profoundly affected by the consequences of environmental shifts. Defined as the dissemination of inaccurate or false information regarding climate change causes, effects or solutions, misinformation casts a shadow over the region's efforts to address this pressing issue (Hassan 2022). Africa faces a unique set of challenges associated with climate change, including droughts, floods, food insecurity and health crises, which will exacerbate the vulnerability of its populations.[1] The propagation of misinformation amplifies these challenges, hindering informed decision making, policy formulation and adaptive measures.

Africa's susceptibility to misinformation is multifaceted. Misinformation often takes various forms, ranging from misleading narratives about climate-related events to misrepresentations of scientific consensus, creating confusion and skepticism among the public (Roday and Daly 2022). The consequences of such misinformation can be dire, impacting public perception, community actions and policy initiatives. For instance, false attributions of climate events can lead to misconceived beliefs about their causes, hampering efforts to mitigate future risks. Moreover, disinformation-driven policy decisions or delays in adaptive measures, fuelled by misleading information, can aggravate the continent's vulnerability to climate change impacts (Africa Center for Strategic Studies 2021).

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1   See www.afdb.org/en/topics-and-sectors/sectors/climate-change.

The urgency of addressing climate disinformation in Africa cannot be overstated. Empirical evidence from various studies and reports highlights the detrimental effects that misinformation has on the region. Case studies from different African countries illustrate how misinformation has influenced public understanding (Hassan 2022), hindered effective adaptation strategies (Roday and Daly 2022) and impeded sustainable development efforts (Shola and Victor 2023). For example, misinformation affecting agriculture can lead to suboptimal farming practices, exacerbating food insecurity and economic hardships for rural communities. On a continent where over 60 percent of the population continues to earn at least part of their livelihoods from some form of subsistence agriculture, any information that prevents Africans from making effective decisions regarding adaptation methods to the changing climate can mean the difference between life and death (World Bank 2023). Furthermore, while adaptation is often viewed as the most pressing issue for the continent, effective mitigation will continue to be integral in the global fight against climate change, as Africa will continue to experience both the highest population and GDP growth rates in the world. Although individual efforts are important, there is also an essential role for policy makers to play in these efforts with regard to both mitigation and adaptation. While Africa is often viewed as a marginal player in the climate conversation, it is imperative that the continent remains at the centre of global environmental governance given that it is at the epicentre of the climate crisis. As such, whole-of-society approaches are required to counter online disinformation. including proactive engagement and communication strategies that are developed collaboratively between public and private actors from the local to the global.

The Perverse Nature of Climate Change in Africa

The impact of the climate crisis is already being felt around the world in significant ways, and no place on Earth remains untouched. However, this impact is being felt in both asymmetric and perverse ways (Heffernan 2023, 169). Robert Keohane and Marc Levy usefully outline this unevenness by asking us to "imagine two maps of the world. One displays the relative severity of environmental problems — air pollution, soil and water degradation, desertification, destruction of habitat — and therefore biodiversity. The other map shows the capabilities that governments have to cope with these problems: the material resources at their disposal, the level of education of their people, the competence and honesty of their governments. Juxtaposing these maps would graphically reveal that environmental problems are most serious in those parts of the world with the least capacity to deal autonomously with them" (Keohane and Levy 1996, 6).

Moreover, it is those states that are best equipped to deal with the climate crisis and experiencing the least of its harmful effects that have also historically been the major drivers of climate change. In acknowledging this unfortunate reality, understanding climate change in Africa necessitates a nuanced exploration of its multifaceted impact on the continent's diverse ecosystems and communities. The Intergovernmental Panel on Climate Change (IPCC) emphasizes that Africa is particularly vulnerable to the adverse effects of climate change due to its reliance

on rain-fed agriculture, limited adaptive capacity and extensive coastline (IPCC 2018). The African Development Bank Group outlines the various effects of climate change, from exacerbating water scarcity in arid regions to intensifying extreme weather events such as droughts and floods across the continent.[2] Moreover, there is a disproportionate burden on African economies and health systems due to changing climatic patterns (Trisos et al. 2023). A comprehensive understanding of climate change in Africa demands an interdisciplinary approach, incorporating insights from climatology, ecology, sociology and economics to navigate the region's complex vulnerabilities and develop effective mitigation and adaptation strategies.

Understanding climate change in Africa extends beyond its immediate environmental impact to encompass its socio-economic ramifications. A United Nations Economic Commission for Africa report highlights how climate change exacerbates existing inequalities and challenges socio-economic development on the continent.[3] These findings elucidate how vulnerable populations, particularly in rural areas, face heightened risks of food insecurity, displacement and loss of livelihood due to changing weather patterns. Additionally, the World Bank (2023) has emphasized the interconnectedness between climate variability and socio-economic stability, outlining how extreme weather events can trigger economic shocks, hinder infrastructure development and impede progress toward achieving sustainable development goals. A holistic understanding of climate change in Africa necessitates not only recognizing its environmental dimensions but also acknowledging its far-reaching socio-economic implications, necessitating comprehensive strategies that integrate environmental resilience with socio-economic development agendas.

Africa encounters a distinctive set of climate challenges owing to the diversity of its ecosystems and geography. The continent is particularly vulnerable to a wide spectrum of climate risks, including desertification, land degradation and loss of biodiversity. Its extensive arid and semi-arid regions, such as the Sahel and the Horn of Africa, are particularly susceptible to droughts, which significantly impact agriculture and water availability.[4] African coastal regions are also increasingly vulnerable due to rising sea levels, posing risks to coastal communities, infrastructure and economies. The complex interplay of these challenges exacerbates food insecurity, amplifies health risks and heightens socio-economic disparities across the continent (Trisos et al. 2022). As demonstrated in Figure 1, understanding Africa's unique climate challenges requires a holistic perspective that accounts for its varied ecosystems and the differential impacts of climate change across regions, necessitating region-specific adaptation strategies to build resilience effectively.

Perhaps more than anything, Africa grapples with the intricate consequences of climate change on its water resources. The African Water Atlas, developed by the United Nations Environment Programme (UNEP), underscores the critical importance of water management in the face of changing climatic patterns. Variability in rainfall patterns, coupled with increasing temperatures, intensifies the stress on water sources, affecting both the quantity and quality of freshwater available (UNEP 2010).

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2   See www.afdb.org/en/topics-and-sectors/sectors/climate-change.

3   See www.uneca.org/eca-events/CCDA-XI.

4   See https://unfccc.int/news/climate-change-is-an-increasing-threat-to-africa.

African states face particularly acute and growing challenges in ensuring access to clean water and sanitation, and these are being exacerbated by the impacts of climate change–induced droughts and floods.[5] These issues, compounded by inadequate infrastructure and limited access to water services, pose significant hurdles to sustainable development efforts in the region. Understanding the intricate relationship between climate change and water resources in Africa is fundamental to formulating resilient water management strategies that cater to the diverse needs of communities while safeguarding this precious resource in the face of climate uncertainties.

Figure 1: Climate Risk Map of Africa
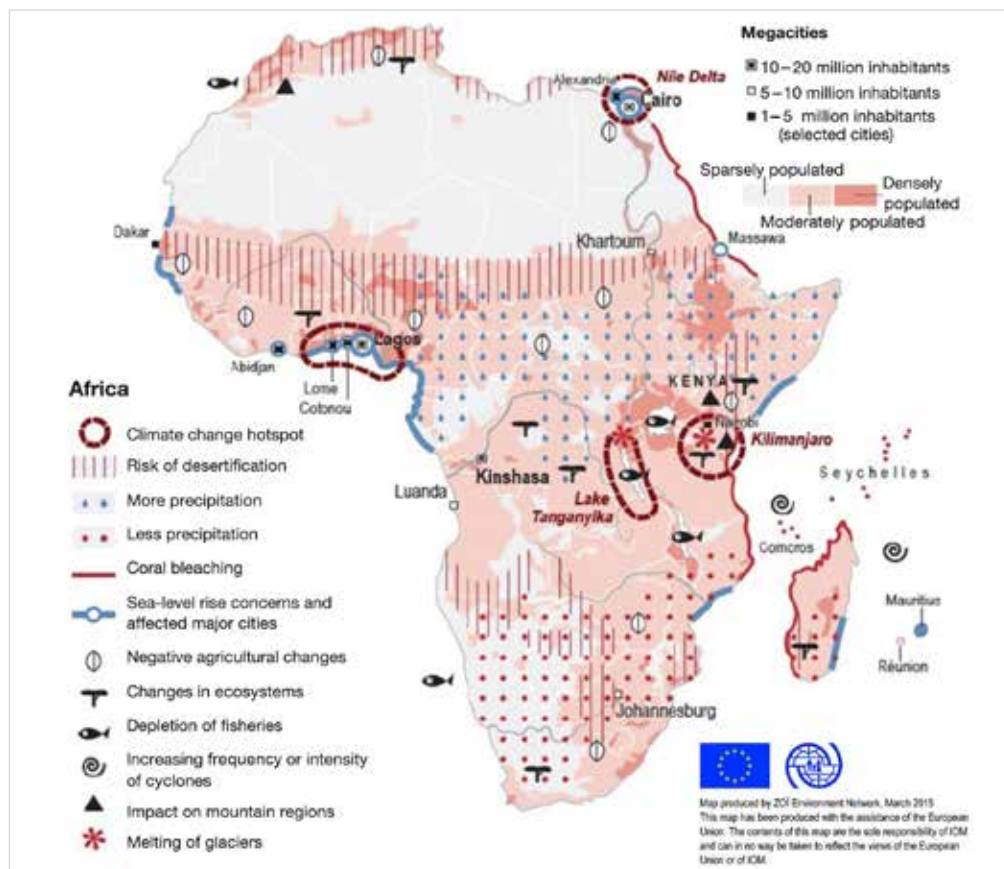
Source: Reproduced with permission from Zoï Environment Network.

The vulnerability of African ecosystems and communities to the impact of climate change is a subject of paramount concern in academic research and policy discourse. These ecosystems face escalating risks, such as habitat degradation, loss of biodiversity and altered species distributions due to changing temperature and precipitation patterns (World Bank 2023). Furthermore, the IPCC report on Africa underscores how vulnerable communities, especially those reliant on natural resources for their livelihood, bear the brunt of these environmental changes (IPCC

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5   See https://amcow-online.org/.

2018). It is also clear that the disproportionate impact of climate-related hazards on marginalized populations accentuates the urgency of addressing vulnerability through targeted adaptation strategies that prioritize ecosystem resilience and community well-being. Understanding the intricate interplay between changing climatic conditions and their implications for African ecosystems and communities is crucial in formulating inclusive and effective adaptation measures that safeguard biodiversity and enhance the resilience of vulnerable populations. To do so, people require accurate, reliable and consistent information in order to make decisions — whether it be about matters of daily life, their livelihood or electoral decision making. However, such information flows in Africa — as with much of the rest of the world — are under an increasingly severe and widespread attack.

The Exceptionalism of Misinformation in Africa

The sources and channels through which climate change misinformation proliferates in Africa encompass a wide array of media and actors. Social media platforms are potent conduits for the dissemination of misleading information. These platforms often serve as echo chambers where misleading narratives and inaccurate data gain traction, amplifying skepticism about climate science and policies (Avram et al. 2020). Additionally, research conducted by the Institute for Security Studies emphasizes the influence of vested interests, such as industries with economic stakes in maintaining the status quo, in perpetuating misinformation. These interests leverage various channels, including lobbying efforts, to disseminate misleading information that casts doubt on climate science and deflects attention from pressing environmental concerns (Allen 2022). Moreover, traditional media outlets play a significant role in shaping public perception and disseminating climate-related information. A report by the Climate Change Media Partnership underscores how inadequate coverage, misinformation or sensationalism in reporting can inadvertently contribute to misperceptions about climate change. Disinformation can also stem from political discourses, where conflicting agendas and interests manipulate narratives to suit particular ideologies or policy directions (Tagbo 2010). Understanding the diverse sources and channels of climate change misinformation is crucial in devising targeted strategies that address the root causes of misinformation while promoting accurate and scientifically verified information across various communication platforms.

There are documented cases of disinformation campaigns across various African countries, each targeting specific objectives and employing diverse tactics (Shola and Victor 2023). For instance, campaigns aimed at spreading pro-Russian narratives surrounding the invasion of Ukraine have been targeted at Ghana, Nigeria and South Africa (Roday and Daly 2022). In Kenya, opaque private companies manipulated social media algorithms during a judicial review, leading to self-censorship among journalists and activists (Hassan 2022). Moreover, instances in Eritrea, Ethiopia, Tanzania and Uganda highlight strategies such as astroturfing, coordinated disinformation and fake copyright complaints aimed at silencing opposition and disrupting accurate election information (Africa Center for Strategic Studies 2021). These campaigns

demonstrate the diverse and often nefarious strategies employed to manipulate narratives, incite division and influence public opinion across the African continent.

Despite the significant deleterious impact that disinformation has in Africa, a recent report commissioned by Cornell University's Alliance for Science argues that "climate change may be a polarizing topic in the western world, but not in Africa, where flooding, drought, freshwater shortages and crop losses offer regular evidence that the phenomenon is real" (Banda, n.d.). These findings are corroborated by primary research conducted by Andrew Heffernan, in which the director of the Namibian Association of Community-Based Natural Resource Management Support Organisations posited that in Namibia, "people do not have the luxury of not believ[ing] in the science. Climate change is all around us, it is undeniable, and it is threatening our way of life in the immediate" (Heffernan 2023, 1). These findings provide interesting insight regarding people's openness to disinformation, as it suggests there is a correlation between the impact on an individual's daily life and livelihood and their willingness to believe the science that explains what is happening around them, versus relative susceptibility to campaigns that aim to undermine such scientific consensus. As a result, disinformation campaigns in Africa have largely evolved beyond whether or not climate change is real, instead questioning its causes, policy approaches to its mitigation and practical efforts at its adaptation.

Public perception and policy decision making regarding disinformation campaigns in Africa hold significant implications for societal cohesion and governance. The impact of these campaigns extends beyond influencing public opinion; they intricately shape policy discourse and decision-making processes. Public perception — often and increasingly influenced by manipulated narratives — can sway opinion on critical issues, such as elections, conflicts and government actions (Hassan 2022). Misinformation can erode trust in institutions, leading to societal divisions and hampering efforts toward inclusive governance. Policy decisions affected by misinformation may result in suboptimal outcomes, hindering effective responses to societal challenges exacerbated by disinformation (Council of Canadian Academies 2023). Mark Duerkson (2024) also posits that "researchers in [Africa] speak of 'information disorder,' in which the circuits of societal communication have been so clogged with intentionally false stories that young voters are disengaging. Kenya and Nigeria saw their lowest voter turnouts in decades in their recent elections, a startling trend that begs big questions about how democracies can engage in the digital era when so much disinformation is designed to drive distrust and discredit democratic institutions" (ibid.). However, recognizing the far-reaching consequences of these campaigns has prompted efforts to bolster media literacy, strengthen regulatory frameworks and enhance fact-checking mechanisms in policy formulations (Shola and Victor 2023). Addressing these challenges requires a multifaceted approach that not only focuses on countering disinformation, but also emphasizes transparency, accountability and the fostering of critical thinking among citizens to fortify democratic processes and ensure informed policy choices in Africa.

Socio-economic factors serve as amplifiers of misinformation regarding climate change in Africa, perpetuating its spread and influence. Disparities in access to education and information contribute to the propagation of myths, particularly among underserved communities. Limited access to quality education and information channels exacerbates the vulnerability of these populations to misinformation (Africa Center for Strategic Studies 2022). Furthermore, socio-economic inequalities can create conditions where misinformation thrives, as marginalized groups often lack the

resources to critically evaluate information and rely on informal sources. Economic disparities and unequal power dynamics can foster the spread of misinformation through vested interests and unequal access to media platforms, shaping narratives that undermine accurate climate-related information dissemination (UNDP 2022). Moreover, cultural beliefs and practices can influence the reception of climate change information, potentially perpetuating misconceptions when they conflict with established cultural norms (Nash et al. 2020). Analyzing the interplay of these factors is crucial in developing targeted interventions to address misinformation effectively. Understanding and addressing these socio-economic factors are crucial in combatting the widespread dissemination of climate misinformation in Africa.

The dynamics of urban-rural disparities and cultural contexts also contribute significantly to the amplification of misinformation. Differences in urban and rural access to information and varying cultural beliefs can lead to contrasting perceptions of climate change (Gutu Sakketa 2023). Limited connectivity and information dissemination channels in rural areas often result in reliance on traditional communication methods, making these communities more susceptible to misinformation due to the lack of diverse sources and fact-checking mechanisms available in urban settings. This connectivity gap is also paradoxical, as social media use is a driver of misinformation, while internet connectivity and improved online media literacy are commonly identified as solutions to the problem. This paradox will be integral to manage as social media users in Africa increased from 100 million in 2016 to 400 million in 2024 (Duerkson 2024). While the continent's uptake of traditional telephone land lines and personal computer connectivity, it has largely leapfrogged these increasingly dated technologies and is now getting connected via smartphones at a rapidly increasing rate.

The role of the international community in information dissemination regarding climate change in Africa is pivotal in shaping global narratives and fostering knowledge exchange. Institutions such as the United Nations Framework Convention on Climate Change play a central role in coordinating international efforts to disseminate accurate climate-related information. Through multilateral agreements and platforms, such as the Paris Agreement, these institutions facilitate knowledge-sharing among nations, enabling the exchange of best practices, scientific findings and mitigation strategies. Additionally, partnerships between international organizations and African governments support capacity-building initiatives, aiding African states in enhancing their information dissemination mechanisms and improving access to accurate climate-related data.[6] The collaboration fosters a more cohesive approach to combatting misinformation and ensures that reliable information reaches diverse stakeholders across borders. Moreover, the role of global cooperation must extend to funding mechanisms and support systems that aid in countering misinformation and promoting accurate information dissemination. Initiatives such as the Green Climate Fund as well as partnerships with international donor agencies provide financial assistance to African countries for climate adaptation and mitigation projects (Chen, Attridge and Getzel 2022). These funds not only bolster infrastructural resilience but also support educational campaigns and media initiatives aimed at combatting misinformation. Collaborative efforts between international entities and local organizations facilitate the development of culturally sensitive and context-specific communication strategies, ensuring that accurate climate information reaches diverse populations effectively. By integrating

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6   See https://unfccc.int/news/climate-change-is-an-increasing-threat-to-africa.

financial support and targeted information campaigns, global actors must fortify Africa's capacity to address and counter the spread of misinformation on climate change.

Managing Misinformation and Sustainable Development

Embracing misinformation regarding climate change in Africa can deepen social inequalities and impede inclusive solutions. Misinformation disproportionately affects marginalized communities, amplifying their vulnerability to climate impacts (Jaiswal, LoSchiavo and Perlman 2020). Inaccurate beliefs may divert attention from the needs of these groups, perpetuating disparities in access to resources and adaptive strategies. The UNDP stresses that misinformation can widen the gap between urban and rural areas, hindering equitable distribution of climate adaptation measures. By fostering false perceptions, misinformation can undermine community cohesion, impeding collective action necessary for resilience-building efforts (UNDP 2022). Addressing misinformation is therefore crucial not only for accurate policy formulation, but also for fostering inclusive approaches that prioritize the most vulnerable populations in Africa's climate adaptation strategies.

Misinformation surrounding climate change in Africa has multifaceted effects on critical sectors, such as agriculture, water resources, health and the economy. In agriculture, skewed beliefs may hinder the adoption of climate-resilient farming practices, exacerbating food insecurity. Misinformation can impede the implementation of adaptive agricultural techniques, leading to reduced crop yields and increased vulnerability to extreme weather events, impacting livelihoods across the continent (Food and Agriculture Organization of the United Nations 2023).

Regarding water resources, the misunderstanding of climate change effects can misguide water management strategies. Misguided beliefs may overlook the urgency of water conservation measures and efficient management, intensifying water scarcity challenges faced by many African regions.

In terms of health, misinformation can escalate risks. *The Lancet* Countdown's analysis underscores the intricate links between climate change and health outcomes, emphasizing how misinformation might downplay the health risks associated with climate-related events (Romanello et al. 2023). Disregarding accurate information could lead to increased exposure to vector-borne diseases, malnutrition and mental health issues, particularly impacting vulnerable populations.

Economically, the repercussions are profound. The World Bank's assessments reveal how misinformation can undermine investment in climate-resilient infrastructure and industries (Mearns and Norton 2010). Inaccurate beliefs might deter international investment and impede economic growth, amplifying the economic strain caused by climate-related disasters and long-term impacts on various sectors. Therefore, addressing and rectifying misinformation is pivotal to mitigating these adverse effects, fostering informed decision making and implementing targeted strategies across these critical sectors in Africa.

A Whole-of-Society Approach to Countering Disinformation

Combatting climate change misinformation requires a multifaceted approach. Initiatives focusing on proactive engagement and communication strategies emphasize the importance of tailored messaging. These strategies involve utilizing local languages and culturally sensitive narratives to effectively reach diverse populations (2019). Collaborative fact-checking platforms play a crucial role in verifying information and debunking myths, providing accurate and accessible information to counter misinformation. Moreover, fostering partnerships between governments, academia, civil society and media outlets strengthens the dissemination of scientifically accurate information, enabling a collective effort to combat misinformation.

Fact-checking mechanisms, as emphasized by organizations such as the International Fact-Checking Network, are pivotal in countering the proliferation of false information. Promoting scientific literacy is fundamental in enabling individuals to critically evaluate information and discern fact from fiction (United Nations Educational, Scientific and Cultural Organization [UNESCO] 2021). Incorporating climate education into school curricula and community programs, as demonstrated by initiatives highlighted by the IPCC, enhances scientific literacy, and organizations such as the Climate Institute have partnered with the IPCC and other international groups to provide online tools and resources for such education initiatives.[7] Encouraging critical thinking skills and providing access to reliable scientific resources empower communities to make informed decisions and resist the influence of misleading information.

Educating communities about climate change and its impacts involves grassroots initiatives, workshops and community-based programs. These efforts empower individuals with the knowledge to discern accurate information, fostering resilience against misinformation. Additionally, enhancing media literacy involves training journalists and media practitioners to report on climate change accurately (Mensah-Abludo 2023). Incorporating ethical reporting standards and emphasizing evidence-based narratives in media coverage contribute to a more informed public discourse, mitigating the spread of misinformation and promoting a better understanding of climate-related issues.

Engaging communities in climate change awareness campaigns fosters grassroots participation and a sense of ownership in combatting climate-related challenges. The UNDP (2022) emphasizes the importance of collaborative efforts involving non-governmental organizations (NGOs), governments and educators in raising awareness. Partnering with local NGOs allows for tailored approaches that resonate with specific community needs. Collaborative projects demonstrate how involving community leaders, educators and government representatives in awareness programs facilitates the dissemination of accurate information (Hart et al. 2020). By leveraging local knowledge and incorporating diverse perspectives, these initiatives enhance the effectiveness of climate change communication and encourage proactive engagement among communities.

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7   See https://climate.org/project/climate-education/.

Empowering communities to develop and implement local solutions and adaptive measures is essential in building resilience to climate change impacts. The African Centre for Technology Studies highlights the significance of promoting indigenous knowledge and traditional practices in adaptation strategies (Zougmoré, Segnon and Thornton 2023). Collaborative efforts between communities and educators support the identification and implementation of context-specific solutions. These efforts encompass initiatives that range from sustainable agricultural practices suited to local conditions to community-based disaster preparedness programs (Lewandowsky 2021). Encouraging bottom-up approaches fosters a sense of self-reliance and innovation, enabling communities to adapt effectively to changing climatic conditions while preserving their cultural heritage. Collaborative efforts between NGOs, governments and educators are instrumental in addressing climate change misinformation in Africa.

The CDKN (2019) outlines the importance of partnerships in developing targeted educational programs. NGOs often possess local expertise and community networks, enabling the delivery of accurate information to remote areas. Collaborations with governments allow for the integration of accurate climate information into formal education curricula, ensuring that future generations are equipped with necessary knowledge. Educators play a pivotal role in this process, as emphasized by UNESCO studies, by guiding critical thinking skills and promoting scientific literacy among students (UNESCO 2021). These collective endeavours create synergies that effectively counter misinformation, empowering communities with accurate information to navigate the complexities of climate change in Africa.

The utilization of technology and digital platforms serves as a powerful tool in disseminating accurate climate information across Africa. Initiatives highlighted by the African Union emphasize leveraging mobile technology to reach remote communities with climate-related information (Nsengimana 2024). Platforms such as Climate Information Services offer accessible and timely data through mobile applications, enabling farmers and local stakeholders to make informed decisions (Landman 2014). Additionally, open-access online repositories such as the Climate Data Library, supported by institutions such as the World Meteorological Organization, provide scientists and policy makers with reliable data to inform evidence-based climate strategies. Harnessing these technological advancements facilitates the democratization of climate information, bridging information gaps and empowering communities with accurate and actionable data.

While social media presents opportunities for information dissemination, it also amplifies the spread of climate change disinformation. Studies by the Pew Research Center highlight how false information spreads rapidly through social media platforms, often due to the lack of fact-checking and verification mechanisms (Anderson and Rainie 2017). The dissemination of misleading narratives and conspiracy theories can lead to misconceptions about climate change among diverse audiences (International Federation of Red Cross and Red Crescent Societies 2021). Addressing this challenge requires collaborative efforts between social media companies to implement fact-checking tools and promote responsible information sharing. Encouraging media literacy and critical thinking skills becomes crucial in empowering users to discern accurate information from misinformation circulating on social media platforms.

Media platforms serve as key channels for communicating climate science to the public, influencing perceptions and behaviours. The UNEP (2023) stresses the importance of engaging media practitioners to effectively convey accurate climate information. Collaborations between scientists, journalists and communicators facilitate the accurate portrayal of climate science. Platforms that promote evidence-based reporting and feature climate-related stories, as supported by the Global Media and Information Literacy Week, contribute to raising awareness and countering misinformation. Leveraging diverse media outlets to disseminate scientifically accurate information aids in shaping public discourse and fostering informed decision making regarding climate-related issues.

Encouraging partnerships between global entities and local stakeholders is crucial in fostering comprehensive climate action. Collaborative initiatives between international organizations and regional bodies facilitate financial and technical support for climate projects in Africa. Moreover, partnerships between academic institutions, businesses and local communities promote knowledge exchange and innovation, fostering the implementation of sustainable solutions. Engaging in multilateral agreements and platforms such as the Paris Agreement underscores the significance of global collaboration in addressing climate change. By leveraging both global and local partnerships, diverse stakeholders can collectively work toward achieving climate goals and building a more sustainable future.

Advocacy for policy changes and ensuring accountability are pivotal in addressing climate change in Africa. Engaging with policy makers and government bodies encourages the formulation and implementation of climate-responsive policies. Additionally, promoting transparency and accountability mechanisms ensures that implemented policies align with climate goals and benefit local communities. Collaborative efforts between civil society organizations and governments play a crucial role in holding stakeholders accountable and driving policy changes that prioritize sustainability and climate resilience.

Promoting sustainable practices and fostering resilience-building initiatives are essential components of climate action in Africa. Projects highlighted by the UNEP emphasize the importance of integrating sustainable practices into various sectors, such as agriculture, energy and infrastructure. Encouraging the adoption of renewable energy sources not only mitigates carbon emissions but also enhances energy resilience. Furthermore, initiatives focusing on community-based adaptation support local communities in building resilience to climate impacts. Empowering communities to implement sustainable land management practices and adopt climate-resilient agricultural techniques contributes to long-term adaptation strategies, enhancing overall resilience in the face of climate change.

Recommendations

- Fact-checking mechanisms, as emphasized by organizations such as the International Fact-Checking Network, are pivotal in countering the proliferation of false information.

- Educating communities about climate change and its impacts involves grassroots initiatives, workshops and community-based programs.

- Empowering communities to develop and implement local solutions and adaptive measures is essential in building resilience to climate change impacts.

- The utilization of technology and digital platforms serves as a powerful tool in disseminating accurate climate information across Africa.

- Encouraging partnerships between global entities and local stakeholders is crucial in fostering comprehensive climate action.

Conclusion

Misinformation surrounding climate change in Africa has emerged as a critical barrier to effective climate action, impacting various sectors and communities across the continent. Key findings underscore the multifaceted nature of misinformation, influenced by socio-economic disparities, cultural contexts and rapid dissemination through digital platforms. It is imperative to acknowledge the urgency in addressing this issue. Research consistently emphasizes the immediate need to counter misinformation by promoting accurate climate information dissemination, enhancing media literacy and fostering collaborations between stakeholders. The urgency arises from the detrimental impact misinformation has on policy formulation, community resilience and the exacerbation of climate vulnerabilities, particularly in marginalized communities.

Moving forward, concerted efforts are essential. Urgent actions should encompass targeted educational programs, fact-checking initiatives and the integration of accurate climate information into policy frameworks. Ongoing efforts, as highlighted by various organizations and initiatives, stress the need for sustained partnerships between governments, NGOs, educators and the media to counter misinformation effectively. Additionally, investing in technology-driven solutions, supporting local resilience-building initiatives and advocating for transparent policies are crucial steps in combatting misinformation and fostering a more climate-resilient Africa. A collective commitment to promoting accurate information and enhancing climate literacy stands as the cornerstone for addressing climate change misinformation and steering the continent toward a sustainable and climate-resilient future.

Acknowledgements

About the Author

Andrew Heffernan is a part-time professor of international relations and comparative politics at the University of Ottawa, where he also completed a Ph.D. in political science. He is a post-doctoral fellow at the Digital Policy Hub whose research will examine climate governance and mis- and disinformation around climate change. Other major research interests include African politics, global environmental governance, climate change mis- and disinformation, community-based conservation, and the politics of food. Andrew is also active in the scholarship of teaching and learning, about which he is regularly publishing on and presenting at academic conferences, as well as implementing in his teaching in university classes.

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