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in an Era of Misinformation

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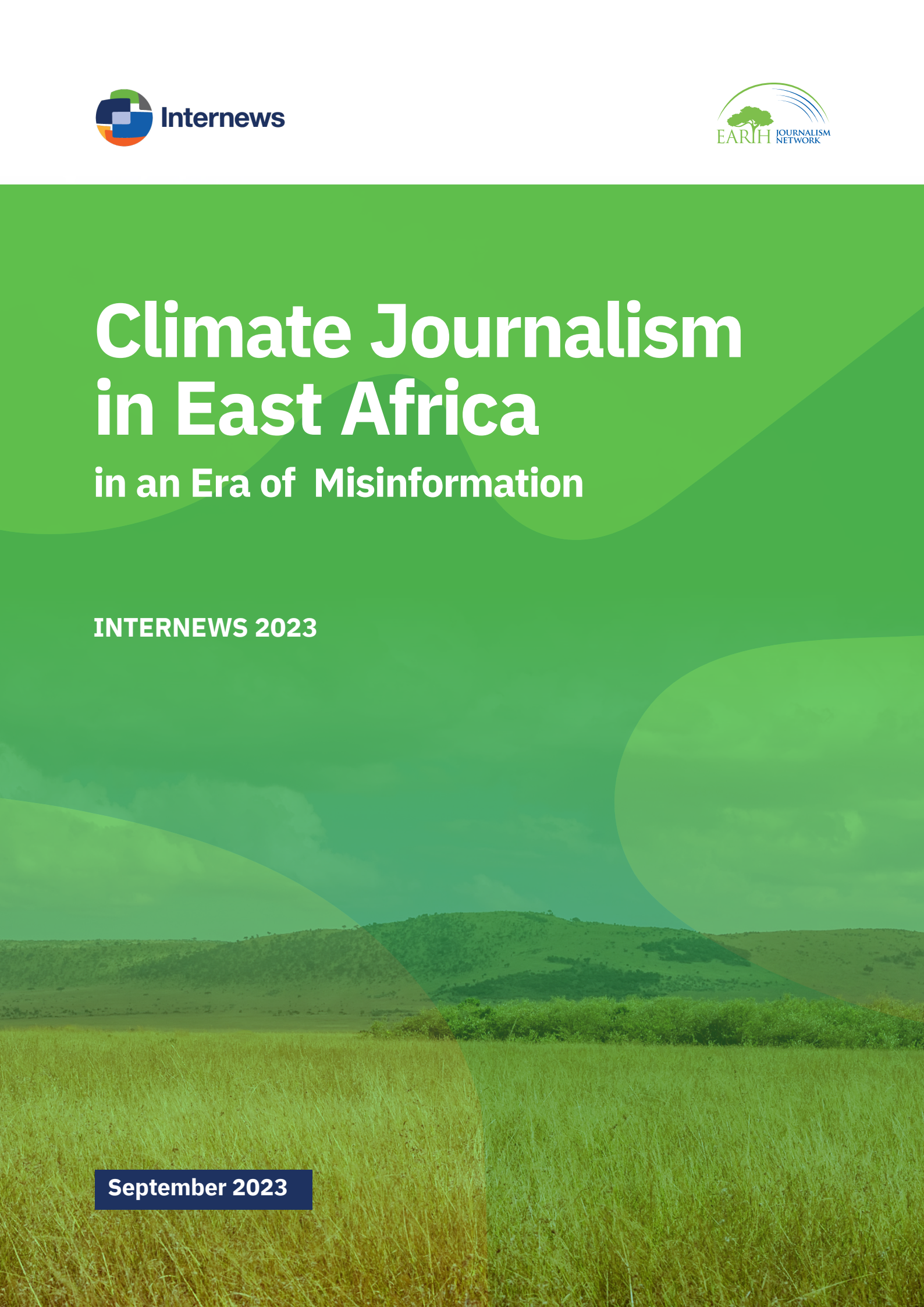

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Climate Journalism in East Africa in an Era of Misinformation

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Executive Summary

Among other findings, two-thirds of the journalists said they still "balance" their stories by seeking sources who explain that climate change is happening and being caused by humans, along with those who are skeptical of these scientific conclusions.

This research effort explores the media and journalistic landscape in East Africa surrounding climate misinformation. While climate misinformation is generally a well-studied area in the Global North and parts of the Global South, there is little empirical evidence from African journalists' perspectives on the topic. This is an important gap because East Africa is confronted with an array of climate-related challenges, and there is a pressing need to gain a better understanding of how to support journalists – and audiences – in the region, by providing relevant and accurate information on climate change and equipping media professionals with the tools and knowledge they need to distinguish and debunk misinformation.

Specifically, the aim of this pilot study is to determine the climate change reporting habits among journalists in Ethiopia, Uganda, Kenya, and Tanzania, explore their perceptions and understanding of the causes and impacts of climate change, assess their perceptions regarding climate mis/disinformation and the practices surrounding it, and to ascertain their specific needs to improve the quality of their climate coverage, such as training. As part of this undertaking, EJN distributed a survey, carried out interviews, and hosted a webinar and informal focus group discussions (FGDs) on climate misinformation to gain insight into journalists' initial understanding and/or introduce them to the issue and its implications.

Data methods

Given the novel geographic focus of the study, an exploratory cross-sectional research design was employed, applying a mixed method approach, including an online survey with 468 responses, eight FGDs and 14 Key Informant Interviews (KIIs). The sampling strategies included snowball sampling for the online survey, which was initially distributed via EJN's network in the region, numbering around 2,700 members as of August 2023. The FGDs were held with participants of the webinar, which also used a snowball strategy and was advertised via EJN's network and social media channels. The participants for the KIIs were selected through purposeful and convenient sampling to gain additional country-level-specific insights and triangulate findings.

Findings

Two-thirds of the journalist respondents stated they are regularly reporting on climate change topics at least monthly. The reporting habits are similar across the four East African countries. The most widely used primary sources of climate information include respective government agencies,

scientists, researchers, scientific articles and academic data sets. Information from politicians and policymakers, climate-focused corporations/businesses, family and friends are not considered trustworthy. Primary sources of information are derived from governments and subject area experts in the respective countries. Journalists also rely on other local news channels (both in English and local languages), community radio and major news websites such as Al Jazeera, BBC and CNN as secondary sources of climate information. Social media and the internet are important platforms for the dissemination and consumption of climate-related information.

Major gaps and disparities exist in the opinions and climate knowledge of journalists in all four East African countries regarding climate change. The risk of reporting inaccurately on the science of climate change or disseminating involuntarily disseminating misinformation is high in absence of credible information sources. **Two-thirds of journalists said they still "balance" their stories between sources who explain that climate change is happening and being caused by humans, along with those who are skeptical of these scientific conclusions.** There is a lack of confidence among the majority of journalists with regard to their understanding of climate change. The motivation for climate reporting for most journalists is to sensitize journalists to the risks posed by climate change and make them aware of potential solutions that would strengthen mitigation and/or resilience, to help them make informed decisions. They also want to push for better laws, policies and measures to curb global warming. The majority want their governments to act against people and corporations involved in activities that destroy the climate. On the other hand, there is a small group of journalists that wants to represent climate change as a fake concept.

There is a lack of capacity to tackle climate mis/disinformation in the region, and there are divergent views regarding what the term "climate misinformation" means. Whereas a third of the journalists have some grasp of the term, the majority are not sure of the concept. Another third of the journalists said they didn't know the meaning of the term. Journalists aren't sure whether the sponsors of climate information stories they feature are practicing mis/disinformation or not.

There is clearly a lot of uncertainty, if not actual misinformation, about certain basic principles of climate change. We encourage readers to review the detailed findings described in section 4, which include some notable findings, such as:

- As noted above, it is alarming that two-thirds of journalists still feel the need to "balance" their stories with the view of climate skeptics;
- At least a third of journalist respondents don't seem to have time or capacity to fact-check their stories;
- Roughly half of the respondents believe that moving to net zero will be bad for their country's economy and 40% believe decarbonization will hold their countries back;
- Roughly half of the respondents are unaware that sea level is accelerating.

The main obstacles that hinder the effectiveness of climate change reporting include: insufficient coverage; generic narratives that adopt a global perspective; focusing on overarching trends and international agreements; lack of access to climate experts; absence of training opportunities; lack of specialization among journalists and the lack of climate knowledge among journalists covering other beats. Other major challenges making it difficult for journalists to cover climate stories are budget limitations, and the security issues affecting travel to conflict zones.

Nearly all of the journalists were interested in training on how to identify and report on climate mis/disinformation, and on how to improve reporting on climate change in general.

Recommendations from this study include the following:

- Journalists should **enhance their capacity to report on climate change** and to detect and analyze information about climate change through study and training. Additional training specifically on climate mis/disinformation and on countering its effects would also be helpful.

- There is huge scope for **more enterprise reporting** on climate change, whether it's examining the impacts, looking at solutions, or investigating the drivers of greenhouse gas emissions.

- Journalists should **collaborate with one another to integrate climate change into broader stories** – not just about the weather, but also about how climate change is affecting business, politics, society, etc. – ensuring more comprehensive coverage.

- Journalists should **establish relationships with climate experts** in order to access accurate and credible information on climate change, and this could also lead to more and better data journalism on the subject.

- Journalists should **focus on localized stories that highlight the impacts of climate change** on specific communities and express them in local languages that their local audiences can understand and relate to.

- Journalism networks need to establish relationships with climate experts and research institutions – ultimately **creating a reliable network for journalists to access accurate information** – and **strengthen alliances that foster collaboration**s between African practitioners, thought leaders, and climate experts to ensure diverse and comprehensive climate reporting in the region.

- Media outlets need to **organize training for their journalists**, or at least allow their journalists to participate in such trainings, to enhance their capacity for climate journalism, including countering climate mis/disinformation.

- Media outlets should **enhance the capacity of their editorial teams to integrate climate reporting** into their day-to-day reporting on all kinds of topics, and if they have the resources, **consider creating dedicated climate sections** for climate reporting, allowing specialized journalists to cover the issue more extensively.

- Funding organizations are encouraged to **allocate more resources to climate journalism** for the training of both core teams of reporters in climate change and of journalists in other beats who need expertise, as well. This would support journalist networks in the region to provide in-depth and sustained coverage of the issue.

- Funders should **provide grants or funding for climate reporting projects** in the region. This can support ambitious investigative, collaborative or data-based efforts, but in many cases even supporting just basic daily coverage is warranted. They cannot rely on the market (i.e., commercially funded media) to provide these public information services.

Note: From *Savannah landscape in the national park of Kenya* [photograph] by Byrdyak, 2023, Envanto Elements (https://elements.envato.com/savannah-landscape-in-the-national-park-of-kenya-PLU6WAC)

1 Introduction

1.1 Background to the Study

Extreme weather events as a result of human-induced climate change have become a topic of increasing concern in recent years. There is clear consensus among climate scientists that the frequency and intensity of extreme weather events such as hurricanes, heatwaves, droughts, floods and wildfires is intensifying (Kingaby, 2023). While it is challenging to link specific events to climate change, advancements in climate attribution science have improved the estimation of the influence of human activities on extreme weather patterns (Meeme, 2021). This highlights the need for adaptation and mitigation strategies and investments to strengthen resilience at the local, national and international levels to address the mounting costs of climate change to human life and livelihoods, biodiversity and the economy (WWF, 2006; AFRISMC, 2023). In light of these impacts, countries around the world are being urged to adopt adaptation strategies that focus on building resilience, improving infrastructure and enhancing preparedness as well as mitigation strategies such as reducing greenhouse gas emissions and transitioning to cleaner energy sources (Nguhi, 2023).

To inform the public about the sources and impacts of climate change, as well as the potential solutions to this crisis, there is a need for effective, engaging, clear and accessible science-based information about climate impacts, their link to climate change and the steps that individuals and communities can take to mitigate risks and build resilience.

Unfortunately, the media landscape is increasingly clouded by climate mis/disinformation, which is the incidental or deliberate spread of false or misleading information about climate change to create doubt or confusion about scientific consensus (Darell, 2017). The exaggeration of uncertainties in climate science, the mischaracterization of climate models and the promotion of alternative explanations for observed changes in climate misrepresents scientific studies and amplifies fringe views

that contradict scientific understanding (GDI, 2023). Climate disinformation is often driven by vested interests such as fossil fuel industries that would be financially impacted by policies that mitigate climate change (Elia, 2013). These interests undermine public support for climate action or regulation as they sow doubt about the reality of climate change and deceive and manipulate the public to ignore or distort evidence that supports climate change.

The influence of interest groups that have vested interests in spreading climate change misinformation to protect their profits delays the transition to cleaner energy sources, and can extend to bankrolling campaigns, think tanks and individual scientists to foster doubt and confusion about climate change (Mozilla, 2021). This is amplified through mainstream media and social media networks where algorithms prioritize engagement over accuracy (AMWIK, 2018). False or misleading climate change information can reach large audiences quickly, leading to the persistence of misconceptions and the erosion of public trust in reputable scientific sources.

Misinformation on climate change exploits cognitive biases and pre-existing beliefs, implying that people are more likely to accept information that aligns with their political or ideological views, leading to the polarization of the issue and hindering collective action (Bwire, 2019; Chelagat, 2023). This can undermine efforts to implement effective climate policies, delay necessary actions and slow international cooperation on mitigating climate change (Kweyu, 2023). Misinformation has spurred practices that increase fossil fuel usage, exacerbate deforestation and water stress, increase greenhouse gas emissions and stall preparation for extreme weather events and public health crises. Misinformation, like climate change itself, disproportionately affects low-income communities, further exacerbating social inequality (Mobjörk, 2016).

In East African countries such as Kenya, Uganda, Tanzania, and Ethiopia, climate change misinformation takes various forms. Politically motivated campaigns, false causation claims, and doubts about scientific consensus are prevalent (Meeme, 2021). Tanzania has seen political figures like former President John Magufuli downplaying climate change impacts and disregarding scientific consensus (Elia, 2013). Ethiopia faces similar challenges due to limited data, political factors, and a limited awareness of climate change (Cook, 2020; Admassu et al., 2013). However, compared to other East African countries, the prevalence of misinformation in Ethiopia is relatively lower (Cook, 2020; Admassu et. al, 2013).

In Kenya, climate change misinformation manifests differently in various regions (Chelagat, 2023). In rural areas that are heavily dependent on agriculture, misinformation might circulate regarding the impact of climate change on local crops and seasonal patterns (Una Uhakika Report, 2015). This misinformation may arise due to limited access to scientific information and reliance on traditional knowledge systems. Additionally, political factors might influence climate change discussions leading to the spread of misinformation that aligns with specific interests. In rural areas in Uganda, misinformation revolves around shifts in rainfall patterns, impacts on crop production and changes in disease spread, with certain communities attributing climate change to supernatural causes rather than human activities (Hernandez, 2023).

Good, trusted information is the foundation of efforts to fight against misinformation. Communities need trustworthy information in order to make informed decisions about everyday practices – from the food they eat and the fuel they use to how they make a living and what they do when faced with crisis – as well as long-term collective action to hold polluters accountable and to hold policymakers to

their commitments. Communities must also be empowered with media literacy skills to identify reliable information.

Fact-checking platforms, scientific institutions, and journalists play a crucial role in countering false narratives and promoting accurate information. Science-based climate journalism is vital to combat misinformation (ILEG, 2018). Scientists and experts need to engage more effectively with the public, policymakers and media to clearly communicate the consensus, uncertainties, and urgency surrounding climate change, and address climate change through informed public discourse.

Yet, news organizations and journalists, particularly in low- and middle-income countries in East Africa, often lack the resources, knowledge, or capacity to report relevant and high-quality climate-related information, or to fact check stories that may contain falsities. Misinformation is often compounded by rumors, conspiracy theories and a general lack of understanding about science (while disinformation is intentionally broadcast by malign actors). Both are difficult for journalists to identify and counter; and may well be replicated and propagated by journalists who don't have adequate training to understand and communicate the complex and ever-evolving climate crisis, its causes and impacts.

1.2 Purpose of the Study

The purpose of this study was to explore the media and journalistic landscape in East Africa surrounding climate misinformation. Specifically, to:

i. Determine climate change reporting habits among journalists in East Africa.

ii. Explore journalists' perceptions and understanding of climate change.

iii. Assess journalists' perceptions regarding climate mis/disinformation and the practices surrounding it.

iv. Ascertain the need for training on climate mis/disinformation.

The main research question addressed was how climate journalists in East Africa deal with climate mis/disinformation. Specifically, the following sub-questions were investigated:

i. Are journalists in East Africa currently reporting on climate change?

ii. Do they report that climate change is real and being caused by humans?

iii. Do they feel the need to report on sources who claim otherwise?

iv. Do they understand the term 'climate misinformation' and its components?

v. Do they come across active attempts at climate disinformation?

vi. Are they reporting on climate misinformation?

vii. What are the current narratives surrounding climate misinformation?

2 Literature Review

A comprehensive literature review was conducted. This report summarizes the key findings and highlights the most important takeaways related to climate change, climate journalism, and climate misinformation.

2.1 Climate Change Journalism

Journalists play a crucial role in informing the public about climate change and its impact. However, like any other field of media reporting, there are variations in journalistic practices on the dissemination of climate change information. Darell (2017) acknowledges that when it comes to accurate and balanced reporting, it is important for journalists to strive to provide accurate and balanced information on climate change by verifying facts, consulting multiple sources, and presenting different perspectives to ensure a comprehensive understanding of the issue by distinguishing between facts, scientific consensus, and opinions or misinformation.

Academic discussions on media coverage of climate change highlight two main concerns: the reluctance to publish climate science reports (Oluasson, 2009), leading to limited public awareness, and the distortion of scientific claims in media (Boykoff & Boykoff, 2004; Carvalo, 2006; McCright & Dunlap, 2003), causing inaccurate representation of scientific information. This stems from factors like sensationalism, divergent viewpoints, and language complexity. This misrepresentation hinders the accurate translation of scientific reports. Scholars emphasize the media's significant role in shaping public awareness of climate change, though challenges exist, such as inaction, exclusion of vital topics, and uneven coverage across regions. Divergent viewpoints from scientists and opposing camps on climate science compete for coverage, and there is a strong reliance on sensationalization to make an item newsworthy, resulting in spikes in climate stories in the aftermath of natural disasters (Bennett, 2002; McManus, 2000).

Boykoff & Rajan (2007) note that “scientists generally employ a lexicon of caution and speak in a language of probability, which usually does not translate smoothly into the crisp, unequivocal commentary that is valued in the press” (2007, p.3). Goalty (2001) however, forewarns that ordinary language misrepresents the world in ways which are out of step with modern insights into the nature of the physical and biological universe and of humans’ place in it. Thus, media reports on climate change are not actual reflections of science.

According to climate change scholars, the media plays a pivotal role in shaping public awareness on global warming and its implications, with a noted increase in climate science coverage in print and broadcast media across most countries on every continent. This progress has been linked to popular events such as the Kyoto Protocol in 1997 (see Boykoff, 2007; Boykoff & Rajan, 2007), international climate meetings (Ahchong & Dodds, 2012; Schafer et al., 2014), and the release of films (see Anderson, 2009). Nonetheless, there has been comparatively little media coverage of climate change in developing countries, despite the fact that they are likely to suffer the

worst effects (Painter 2007 cited in Anderson 2009).

Journalists' perspectives on reporting climate change vary depending on their backgrounds, personal beliefs, and their media organizations. However, there are some common themes that journalists share when covering this critical issue. Journalists recognize the urgency and importance of reporting on climate change due to its global impact and long-term consequences (Eide & Kunelius, 2023). They understand that climate change is not just an environmental issue but also a social, economic, and political one (Abass et. al., 2022). Their coverage extends to topics such as renewable energy, sustainable practices, policy developments, and individual actions that contribute to mitigating climate change (Mungai, 2021). Journalists also understand the need for transparency and accountability when reporting on climate change by investigating and questioning the actions of governments, corporations and other stakeholders who contribute to or address climate change (Ndungu & Azomahou, 2023). By holding powerful entities accountable, journalists can foster positive change and drive public discourse. Journalists acknowledge the importance of localizing climate change stories to make them relatable to their audiences (Transparency International, 2011).

While global trends and international negotiations are crucial, the impacts of climate change manifest differently in various regions. Journalists focus on local case studies, community initiatives and regional policies to engage their readers, listeners, and viewers more effectively (Bwire, 2019). Collaboration and networks help journalists to work together, share information and pool resources to uncover critical stories and amplify their impact (Ireton & Posetti, 2018).

2.2 Climate Misinformation

Climate change misinformation refers to false or misleading, unsubstantiated or inaccurate information that is spread with the intent to distort or deny the reality of climate change and its associated impacts or solutions (UNESCO, 2018). Cook (2020) notes that misinformation can include incorrect facts, rumors, misleading narratives, conspiracy theories or deceptive content that is created and shared by individuals, organizations or online bots. Banda (2021) notes that regardless of intent, misinformation contributes to confusion and misperceptions about scientific consensus on climate change. Misinformation can have serious consequences as it can mislead people, shape public opinion and negatively influence important decision-making processes. It can also affect various areas of society like politics, health, science, and social issues (Chelagat, 2023; Lynus, 2023).

Identifying specific individuals or groups spreading inaccurate information on climate change can be challenging due to the vastness of the internet and the multitude of platforms and sources involved. Some groups to consider are lobbying organizations that are funded by industries with a vested interest in disseminating misinformation on climate change (Darell, 2017). Some of these organizations actively promote climate change denial and challenge the scientific consensus. Politicians with ties to these industries may use misinformation on climate change to protect economic interests or gain political support. Some think tanks may also spread inaccurate information to support their ideological or economic agendas.

Certain partisan media outlets or specific journalists may present inaccurate or biased information on climate change through misinterpretation of scientific studies, cherry-

picking data, or amplifying fringe views to create controversy and attract attention (Kingaby, 2023). There are online communities and social media groups where climate change misinformation is actively shared and discussed, which results in the amplification of conspiracy theories and skepticism toward scientific consensus. Individuals within these communities inadvertently or intentionally spread inaccurate information. Identifying specific individuals or groups spreading inaccurate information on climate change requires scrutiny of sources, cross-referencing of claims with scientific consensus, and staying informed through credible scientific organizations.

Accurate reporting on climate misinformation can help to debunk false claims ensuring that people have access to reliable and evidence-based knowledge (Kweyu, 2023). Climate change is a pressing issue with far-reaching consequences, and reporting on misinformation can help educate the public and promote informed discussions. The public has a right to be informed about issues that affect their lives and the planet (Mungai, 2021). By exposing climate misinformation, journalists contribute to public awareness, understanding, and engagement with the topic. Journalistic ethics play a vital role in the decision-making process. Reporting on climate misinformation exposes the tactics, motivations and vested interests in misinformation. By reporting on climate misinformation, journalists can shed light on the tactics used to distort the climate debate and help counteract the spread of false information.

Reporting on climate misinformation can help build trust with the audience by demonstrating a commitment to accurate and responsible reporting (Concern, 2022). It is essential to debunk false claims, correct inaccuracies, and provide reliable sources of information to maintain trust with the public (ILEG, 2018). Journalists need to consider the overall impact, the importance of accuracy, the potential harm caused by misinformation, and the public's right to be informed (Kweyu, 2023).

Balanced reporting on climate change ensures accurate and informed public discourse (Koga, 2023). In recent years, some media outlets have been criticized for providing false balance by giving undue attention to minority viewpoints that contradict scientific consensus on climate change (Koga, 2023). This can lead to the dissemination of misinformation and create confusion among the public. Reporting should also encompass the exploration of solutions, mitigation strategies and the efforts addressing climate change. By highlighting these aspects, journalists can inspire public engagement and encourage constructive discussions on how to tackle the issue effectively (Eide & Kunelius, 2023).

2.2.1 Current Narratives on Climate Misinformation

Climate change misinformation encompasses a range of themes and tactics. They include denying the existence of climate change by arguing that the climate is not changing or that any observed changes are part of natural variability (Koga, 2023), spreading conspiracy theories that, for instance, suggest that climate change is a hoax perpetrated by scientists, governments, or other powerful entities for their own ulterior motives and selectively choosing data points or studies that seem to support misinformed claims while ignoring the broader body of scientific evidence (Kingaby, 2023).

Other misinformation tactics include presenting a false sense of balance by giving equal weight to opposing viewpoints regardless of their scientific credibility, confusing the general public on the causes and

consequences of climate change, undermining the credibility of climate scientists by questioning their motives, integrity, or expertise including the propagation of personal attacks and attempts to discredit scientific institutions or organizations to cast doubt on the validity of scientific consensus (Lewandowsky, 2021). It also includes inflating the costs of mitigation measures and their impacts on jobs, livelihoods and economic growth (Denchak, 2022).

There are a number of studies that have investigated climate change information in East Africa. In 2020, the BBC World Service Trust conducted a study on public understanding of climate change in 10 African countries. The research revealed that while most Africans are aware that weather patterns are changing, their understanding of global climate change is still limited. A study by Andrea Hernandez (2023) revealed that climate change terminology is poorly understood and does not have standard translations in African languages. The study also revealed that rural women in East Africa face particular socio-cultural, economic and political barriers that limit their capacity to cope and adapt to the effects of climate change.

A report by King (2023) on exposing new trends in climate mis/disinformation at COP27 analysed over 850 advertisers. It revealed that a small cohort drove the majority of the false or greenwashed advertising on Facebook. It identified the common techniques like 'nature-rinsing', that distract and mislead audiences on net zero targets, as well as the denial of climate science and emotional messaging with components of climate change misinformation.

2.2.2 Best Practices to Combat Climate Misinformation

An overview of general reporting practices related to climate change misinformation in the region reveals that East African media outlets, including newspapers, radio stations, and television channels have been reporting on climate change-related issues (Mungai, 2021). Many of these outlets publish articles, reports and documentaries that raise awareness on climate change and its impact. However, the extent of coverage on climate misinformation specifically may vary. In recent years, fact-checking organizations like AMWIK (2018) have emerged in various countries across East Africa to verify and debunk misinformation, including climate-related misinformation. These organizations counter false claims, promote accurate information, and endeavor to hold accountable those who spread misleading content. Training journalists to improve their understanding of climate science and promote accurate reporting can be accomplished through collaborations between media organizations, NGOs and international development agencies (Bwire, 2019).

The growing influence of social media platforms has seen misinformation about climate change spread quickly. On recognizing this challenge, some organizations are working to monitor and counter climate misinformation online and press for platform accountability (UNESCO, 2018). These efforts promote reliable sources and raise awareness about the potential pitfalls presented by misinformation. Governments, NGOs and international organizations in East Africa also conduct awareness campaigns to educate the public about climate change and address misinformation (Apollo & Mbah, 2021).

A number of journalists deal with climate misinformation and disinformation by conducting in-depth investigations into the sources and funding behind climate misinformation and disinformation campaigns (Kweyu, 2023). By uncovering the motives and agenda of those who spread misinformation

and disinformation on climate change, these journalists expose vested interests and shed light on the tactics used to deceive members of the public (Global Disinformation Index, 2023). While covering climate change, some journalists consult reputable experts and professionals in the field of climate science who in turn provide accurate information and analysis on issues concerning climate change (Dupar, McNamara & Pacha, 2019).

Other journalists focus on the promotion of media literacy and critical thinking skills among members of the public. They identify mis/disinformation, evaluate sources and distinguish between credible information and mis/disinformation (Bwire, 2019). Journalists collaborate with scientific organizations on fact-checking initiatives to combat climate misinformation (AMWIK, 2018). These collaborations share resources, coordinate efforts, and amplify the debunking of mis/disinformation while raising awareness about climate change. Some journalists also actively engage with their audience, allowing them to receive feedback, respond to inquiries and address concerns through open dialogue. It is important to note that the fight against climate misinformation is an ongoing challenge, and journalists must continually adapt their strategies to address it (Lamprou et. al., 2021).

2.3 Gaps and Obstacles to Accurate Climate Reporting

Reporting on climate misinformation presents several challenges for journalists.

- Climate change is a complex scientific issue and reporting on it accurately requires a deep understanding of the subject matter (Cook, 2020). Misinformation distorts or oversimplifies scientific findings, challenging journalists to provide balanced and accurate reporting. Additionally, their lack of in-depth understanding of climate science makes it difficult to recognize and debunk climate misinformation. This can lead to the unintentional amplification of false information.
- Another challenge is the speed and virality with which climate misinformation can spread through social media and other online platforms. Journalists face the challenge of debunking false claims quickly to prevent their widespread dissemination.
- A report by the Institute of Strategic Dialogue (ISD) suggests that climate change has become a politically polarized issue in some regions (Deny, Deceive & Delay, 2022). Journalists reporting on climate misinformation face pushbacks and accusations of bias if their reporting contradicts popular narratives or challenges vested interests.
- Confirmation bias, where both news producers and consumers of news seek out information that confirms their existing beliefs, further exacerbates the problem by reinforcing misinformation and hindering objective reporting (ILEG, 2018).
- Given the complexity and long-term nature of climate change, media outlets often face challenges in allocating sufficient coverage and resources to the issue. Climate change can be overshadowed by other immediate and sensational news topics, resulting in limited public awareness and engagement.

3 Methodology

3.1 Research Design and Overall Research Approach

The study employed an exploratory cross-sectional research design, which is ideal when there is little or no evidence available on a certain topic. As outlined above, little is known on how climate misinformation interplays with journalists' realities in the East African region, hence the exploratory character of the design. The aim of such a design is to gain new insights that help establish further research and intervention areas (Burns & Bush, 2000). The study applied a mixed method approach, including an online survey, FGDs, and semi-structured interviews. This allowed the research team to identify patterns and trends in climate information reporting and complement them with qualitative insights.

3.2 Scope and Location of the Study

This study centered on climate change reporting and targeted journalists who are either actively covering the issue or expressing an interest in doing so in four East African countries, namely Kenya, Uganda, Tanzania, and Ethiopia. These countries were selected as ideal for an exploratory study because Internews and EJN have had a presence there for many years.

3.3 Sampling Strategies and Sample Sizes

Snowball sampling was used for the quantitative part of the research. The online survey link was distributed via EJN's local network of 2,700 journalists, EJN's social media channels, and EJN's newsletter. Respondents were encouraged to share the survey link with others to gather as many diverse responses as possible. In total, 468 valid responses were collected. Participants in FGDs were selected in a similar way, that is, the webinar was advertised through snowball sampling via EJN's network and other distribution channels to attract a diverse audience of regional journalists working on or interested in climate change reporting. The FGDs were then held as part of the webinar. Eight focus groups were held with a total of 68 participants (for focus group guiding questions, see annex 5). Fourteen key informant interviewees were chosen through a combination of convenient and purposeful sampling. The main goal of the interviews was to gain a more in-depth understanding of country specific trends and patterns that emerged through the survey, and to validate and triangulate the findings from the survey and FGDs.

3.4 Data Collection

The online survey using MS Forms was open for respondents between 16th July and 1st August 2023. The survey was available in English. Only journalists from Ethiopia, Uganda, Tanzania and Kenya were eligible to complete the survey, and were asked to indicate their country of residence at the start of the survey. To gather as robust results as possible, special effort was put into the validity and reliability of the survey.

For example, the survey was pre-tested for clarity by a sample of five journalists, and adjustments accordingly made before wider distribution. Moreover, a reliability test was applied to confirm the consistency.[1]

FGDs were held on 17th July 2023 as part of a webinar on climate misinformation for journalists in the region. 68 participants were divided into eight breakout rooms of between eight and 15 members each and the discussions were facilitated by Internews staff. Fourteen in-person interviews (4 in Ethiopia, 3 in Tanzania, 4 in Uganda, and 3 in Kenya) with climate reporting experts from each target country were also conducted in the first half of August 2023.

3.5 Data Analysis

Survey results were analyzed using statistical software, employing descriptive statistics such as frequencies and distribution levels. Where applicable, analysis of variance was used to assess variations and disparities across the four countries. Open responses were categorized and coded, and frequencies calculated.

The FGDs and interviews were recorded, and thematic quantitative and qualitative analysis conducted. Data was thematically categorized and coded, and frequency distribution calculated. This was complemented with a qualitative analysis that provided a more in-depth understanding to the emerging trends and patterns.

3.6 Ethical Considerations

Internews follows a strict 'do no harm' approach and various measures were taken to safeguard the safety, privacy and confidentiality of the study participants, for example, by giving FGD participants the choice to remain quiet if they did not want to be recorded. Informed consent was collected from interviewees. All information was stored securely in Internews' IT system.

3.7 Limitations

The study had several limitations. First, the limited time frame for the research prevented the researchers from reaching out to a more diverse group of respondents and larger groups of journalists. Second, the informal network used to recruit participants may have introduced a selection bias, as those without access to a mobile phone, internet, or who lack reading skills may have been excluded. Third, the study did not achieve an equal gender balance, even after targeted interventions. Finally, the language barrier posed challenges for data collection and interpretation, particularly in Ethiopia.

[1] The reliability of the survey was measured through the Cronbach's alpha reliability coefficient scale using the statistical software SPSS. The value of the alpha coefficient ranges from zero, which signifies no internal consistency, to one, which signifies perfect internal consistency. According to George and Mallery (2003) the alpha value of greater than 0.50 is suggested as being satisfactory and acceptable to test for the reliability of constructs. Whereas Nunnally (1978) recommends that the modest reliability of a construct should be 0.7. The Cronbach's alpha reliability coefficient was 0.82.

4 Findings

4.1 Survey Response Rate

The survey tool was developed on Microsoft Forms and shared electronically to journalists in East Africa through EJN platforms and work groups in Ethiopia, Kenya, Uganda, and Tanzania. A time frame of 2 weeks was set for collection of the responses. Tanzania had the highest participation while Ethiopia recorded the least participation (See Table 1).

Table 1: Survey response by country

Country	Number of valid responses
Kenya	132
Uganda	74
Tanzania	193
Ethiopia	69
Total	**468**

4.2 Demography of Journalists in East Africa

Demographic information was sought from the journalists regarding their gender, age, education, work experience, type of employment, type of media, content published, target audience and the language of their journalism. The purpose of this information was to determine the diversity of journalists reporting on climate in the region.

4.2.1 Distribution of Journalists by Gender

Findings on gender show that overall, 65% of the respondents were men while 35% were women (See Table 2). In Uganda, women journalists comprised only a quarter of the population surveyed. Similarly, in Ethiopia and Tanzania, the proportion of women journalists was a third of the population surveyed while the men formed two thirds of the population. The proportion of women journalists in Kenya was nearly equal to that of men.

Table 2: Distribution of journalists by gender

What is your gender?	Overall		Kenya		Uganda		Tanzania		Ethiopia	
	n	%	n	%	n	%	n	%	n	%
Man	302	65%	68	51%	55	75%	130	67%	49	71%
Woman	165	35%	64	49%	18	24%	63	33%	20	29%
Total	**468**	**100.0%**	**132**	**100.0%**	**74**	**100.0%**	**192**	**100.0%**	**69**	**100.0%**

4.2.2 Distribution of Journalists by Age

The age distribution of journalists surveyed shows that the majority (33%) were between 21 and 30 years old, followed by 44% between 31 and 40 years old, and 19% between 41 and 50 years old (See Figure 1). Only a small proportion were over 50 years old, with 3% between 51 and 60 years old and 2% more than 60 years old. The journalist population reporting on climate issues in Uganda and Ethiopia was slightly older than in Kenya.

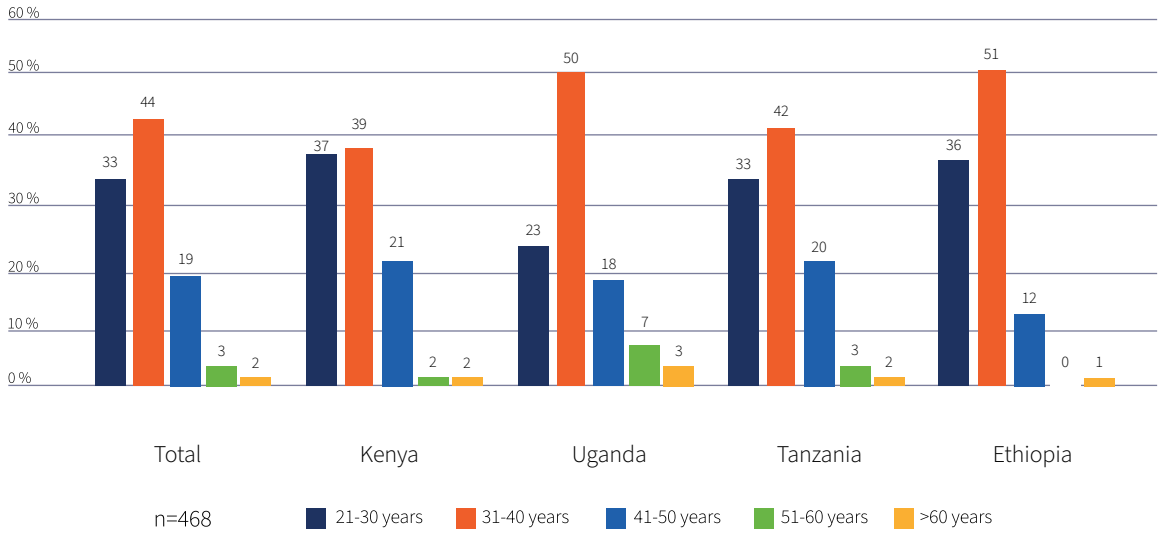


Figure 1: Distribution of journalists by age

4.2.3 Distribution of Journalists by Education

The survey results show that 3% of journalists had attained secondary school education level, 43% had diplomas, 39% had bachelor's degrees, 15% had master's degrees, and 1% had doctoral degrees (See Figure 2). Advancement in education level is an indicator of one's exposure to knowledge and current issues affecting their profession. A college diploma is the basic requisite training for a professional journalist, and most of the journalists surveyed had attained this level of education.

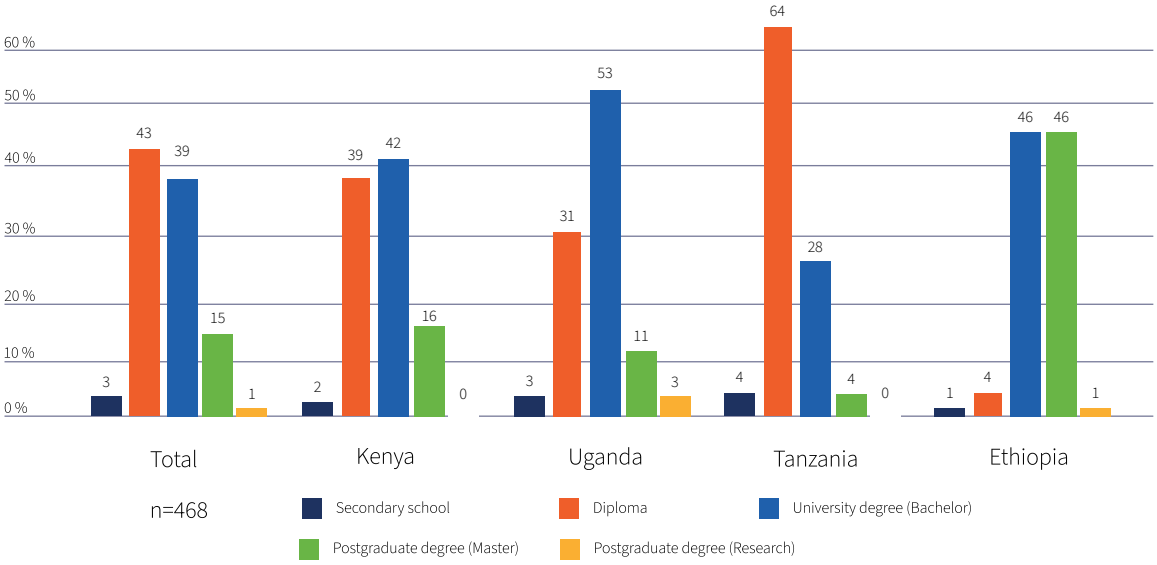


Figure 2: Distribution of journalists by education level

4.2.4 Distribution of Journalists by Work Experience

The findings show that 11% of journalists had worked for 1-2 years, 24% had worked for 3-5 years, 32% had worked for 6-10 years, and 33% had worked for more than 11 years (See Figure 3). The majority of journalists (33%) had worked for more than 3 years, suggesting that they had had sufficient experience to have interacted with information about climate change.

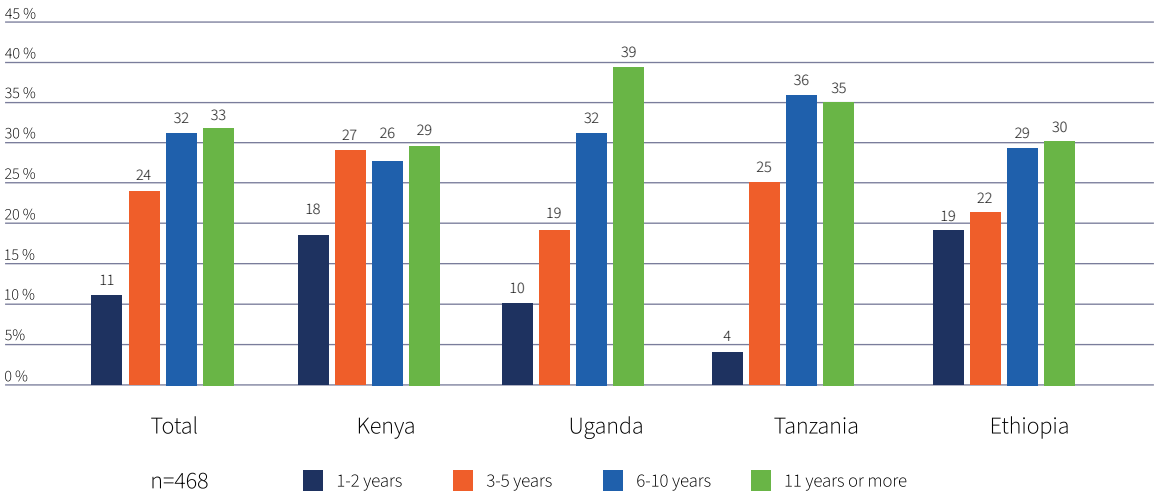


Figure 3: Distribution of journalists by work experience

4.2.5 Distribution of Journalists by Media Type

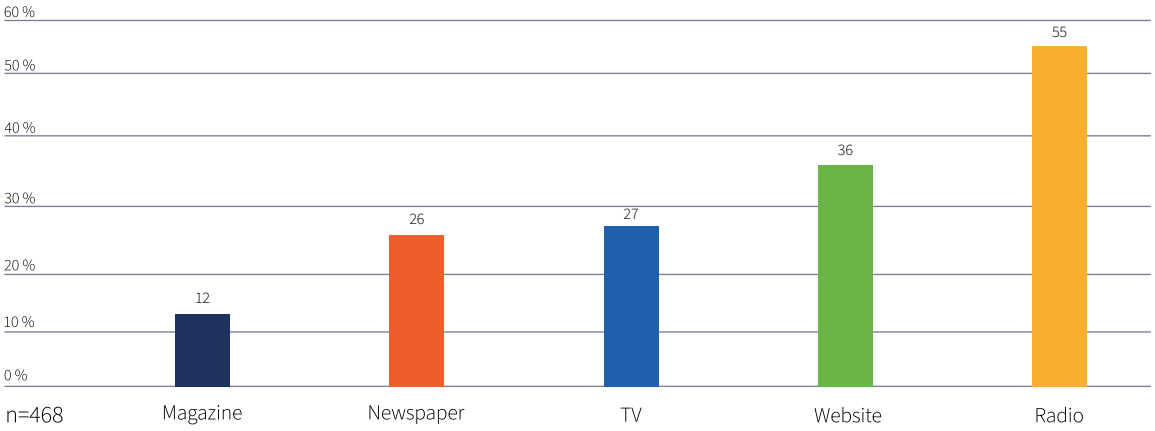


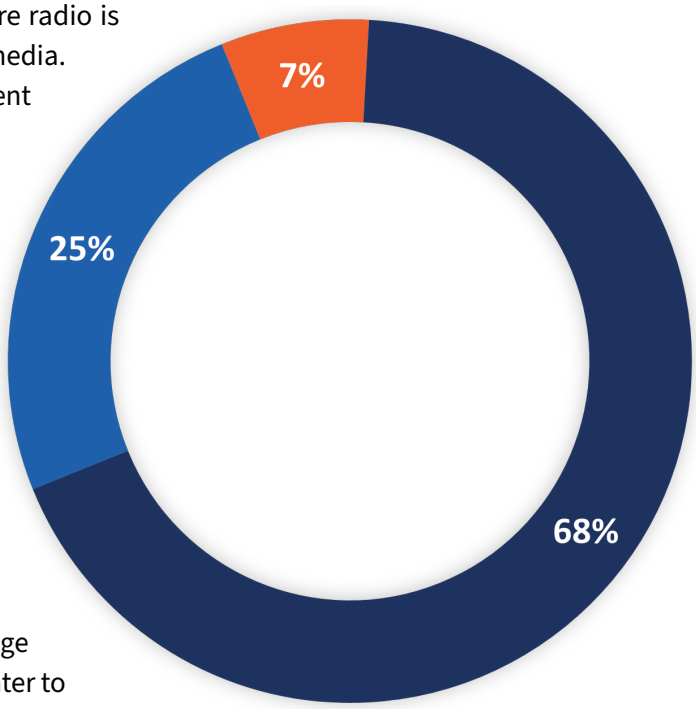
Figure 4: Distribution of journalists by media type

The study surveyed journalists in four countries to determine how they disseminated climate information. The findings showed that the most popular medium for climate change communication was radio, with 55% of journalists working in radio (See Figure 4). This was followed by digital stories on websites (36%), broadcast or TV (27%), newspapers (26%), and magazines (12%). There were no major variations across the four countries.

Key informants explained that the high use of radio was due to the fact that the majority of the general population in all four countries live in rural areas, where radio is the most accessible and affordable form of media. Television, on the other hand, is more prevalent in urban centers.

Key informants explained that the increasing availability of mobile phones and internet access has led to a rise in the use of websites and online media in the region. Newspapers and magazines are less accessed by the masses as a result. The arrival of television in the 1950s began the decline of newspapers as the most common source of daily news. The internet explosion in the 1990s further eroded newspapers' dominance as a source of news by providing people with a wider range of media choices. Additionally, magazines cater to specific niche audiences, and are often expensive.

The findings show that 7% of journalists published only offline content, 25% published only online content, and 68% published both offline and online content (See Figure 5). This suggests that climate-related stories are being disseminated on both offline and online platforms.



n=468

Figure 5: Distribution of journalists by media platform

4.2.6 Distribution of Journalists by Target Audience

The study found that 54% of the journalists had a national reach, 44% had hyper-local audiences, and 43% had local audiences (See Figure 6). Most journalists listed multiple or overlapping audiences. For example, a journalist employed in a newsroom might appear on TV, radio, and websites operated by the same media outlet in a given week. Some journalists also work as correspondents for international broadcasters like CNN, BBC, and Al Jazeera, while still maintaining a presence in local media outlets. These findings suggest that most journalists primarily serve their national and local audiences, and that regional and international reporting was practiced by only a quarter of their population.

The findings also indicate that 93% of the respondents were working journalists, while 10% were media house founders, 8% were publishers, and 1% were editors. This suggests that most of the respondents were actively engaged in the practice of journalism.

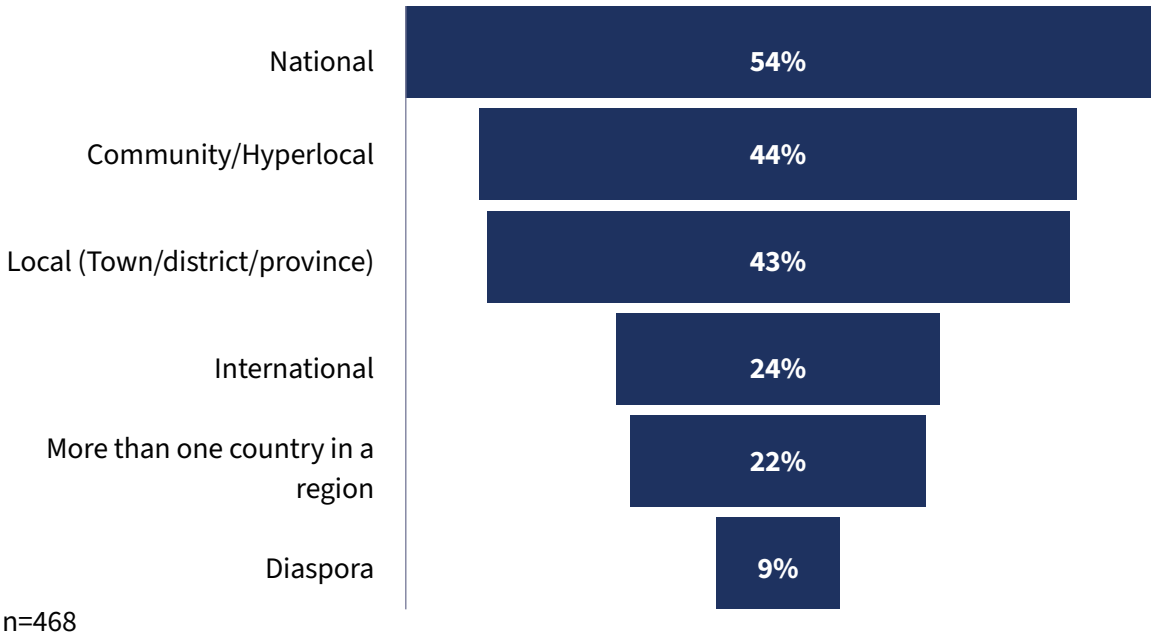


Figure 6: Distribution of journalists by target audience

4.2.7 Distribution of Journalists by Reporting Language

The respondents were asked to indicate the languages they reported in. Results indicate that 57% of the respondents reported in English, 54% in Kiswahili, 13% in Amharic and 15% in local languages (See Figure 7).

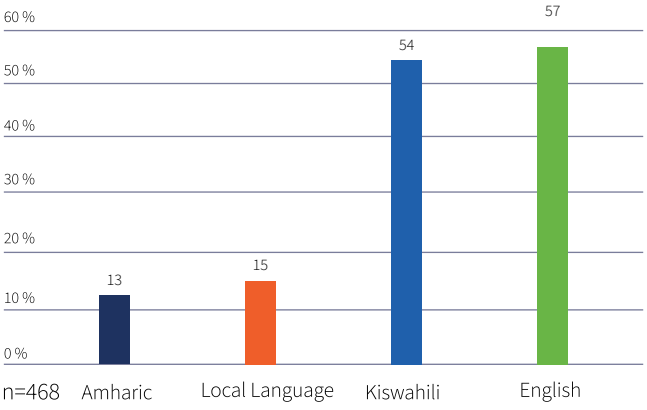


Figure 7: Distribution of journalists by reporting language

However, there are significant language variations in the respective countries as shown by the cross-tabulation and ANOVA statistics in Table 3.

Table 3: Reporting languages in East Africa

Language	Overall		Kenya		Uganda		Tanzania		Ethiopia		ANOVA	
	n	%	n	%	n	%	n	%	n	%	F	Sig.
Amharic	61	13%	0	0%	0	0%	0	0%	61	88%	51.612	.000
Kiswahili	255	54%	69	52%	4	5%	182	94%	0	0%	226.535	.000
English	268	57%	109	83%	66	89%	65	34%	28	41%	1005.457	.000
Local Language	68	15%	26	20%	30	41%	9	5%	3	4%	24.520	.000
Total	**468**	**100%**	**132**	**100%**	**74**	**100%**	**193**	**100%**	**69**	**100%**		

Amharic is the official national language in Ethiopia and is the language employed by 88% of the journalists surveyed from the country. It is rarely spoken in the other three countries. Kiswahili is the national and official language in Tanzania and thus the language of practice for 94% of the journalists surveyed there. Kiswahili is also a national language in Kenya and Uganda and is the language of practice for 52% and 5% of the journalists based in Kenya and Uganda respectively. Kiswahili is established as the most dominant regional language in East Africa and is the most widely spoken in sub-Saharan Africa (UNESCO, 2021).

On the other hand, English is the official language in Kenya and Uganda and thus the language of practice for 83% and 89% of the journalists based in Kenya and Uganda respectively. English is the language of practice for 34% and 41% of the journalists based in Tanzania and Ethiopia respectively.

Overall, 15% of the journalists report in local languages. There are numerous local languages in East Africa and there is a growing number of native radio and TV stations in the region, most of which are aired at the local and community level. In Kenya, 20% of the respondents practiced in local languages which they specified as follows: Gĩkũyũ, Dholuo, Luhya, Kalenjin, Kamba, Kinyore, Kisii, Kiembu, Kimeru, Kimaasai, Mijikenda, Ogiek, Somali and Taita languages. Similarly, 42% of the respondents in Uganda practiced in: Luganda, Luo, Acholi, Lhukonzo, Runyakira, Lumasaba, Lugbarati, Maditi, Runyankore, Rukiga, Runyoro and Rutoro languages. In Tanzania, 5% the respondents worked with Hehe, Kinga and Bena, Kiha, Kirundi, and Ngindo languages while 4% of those based in Ethiopia worked with Afaan Oromoo, Agewegha, Hemetegha, Tigregha, Gumuze, Tigrigna and Wolaitic local languages.

These findings show that most of the journalists in the four countries are multilingual and a sizeable number of them work in both national and local languages. Climate information is therefore likely shared with a varied audience in Kiswahili, English, Amharic and in all the above-mentioned local languages.

4.3 Climate Change Reporting Habits

The first objective of the study was to determine the climate change reporting habits of journalists in East Africa. Specifically, the researchers wanted to know whether journalists were reporting on climate change, whether they were reporting that climate change is real and caused by humans, and whether they felt the need to report on climate misinformation. To this end, respondents were asked to state the frequency with which they reported on climate change-related topics, their sources of information, and the perceived trustworthiness of their sources.

4.3.1 Frequency of Reporting Climate Change Topics

The study sought information from respondents on the frequency with which they reported on climate change-related topics in their respective media houses in the past 12 months. The study found that 20% of the journalists reported on a weekly basis, 17% on a fortnightly basis, and 27% monthly (See Figure 8). This finding implies that at least 64% of the journalists were reporting on climate change topics at least monthly, suggesting that it was a priority subject area for them. The study further found that 13% of the journalists reported on climate change on a quarterly basis, 6% on a semi-annual basis, and another 6% on an annual basis. This finding implies that climate-related topics were not a priority for at least 25% of the journalists. A further 11% of the respondents never reported on climate change.

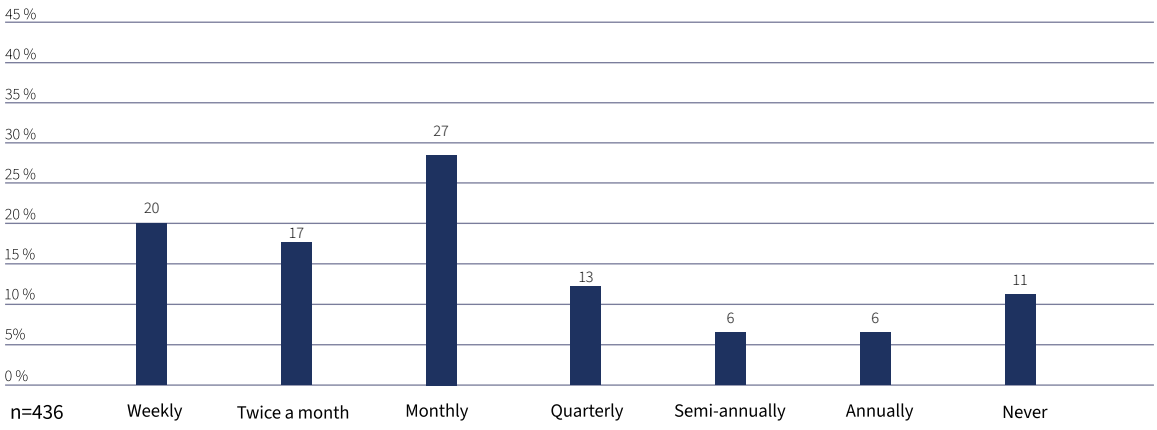


Figure 8: Frequency of reporting climate change topics

4.3.2 Sources of Climate Change Information

The respondents were asked to state their primary and secondary sources of information for climate-related topics. Results indicate that the most widely used primary source was information provided by the national or local government (19%), followed by information from scientists, researchers, scientific articles, and academic data sets (18%) (See Figure 9). Other widely used primary sources were climate-focused non-governmental organizations (15%), information provided by the journalists' local community, such as community leaders and religious leaders (14%), and information provided by international agencies and institutions such as the UN (14%).

Information from politicians and policymakers, climate-focused corporations/businesses, family and friends were only used by a very

small segment, less than 8% of the respondents. This finding implies that the primary sources of information were driven by governments and subject-area experts in the respective countries.

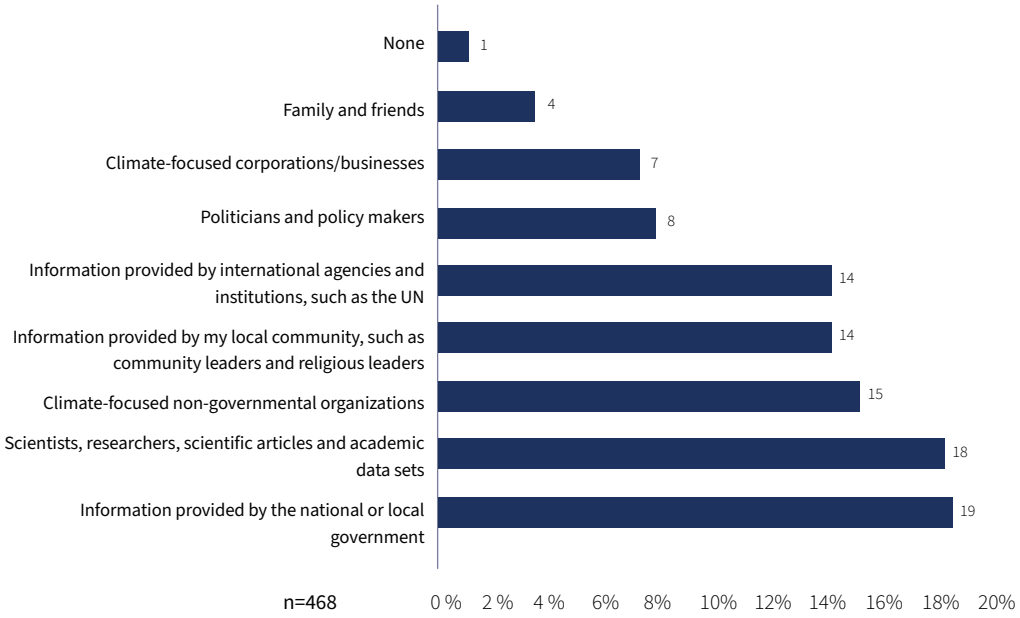


Figure 9: Primary sources of climate information

Findings on secondary sources of climate information indicate that social media and online platforms were the most used source of secondary information, as reported by 28% of the respondents (See Figure 10). Journalists also relied on other local news channels (both in English and local languages), community radio, and major news websites such as Al Jazeera, BBC, and CNN. This finding implies that social media and the internet were important platforms for both the dissemination and consumption of climate-

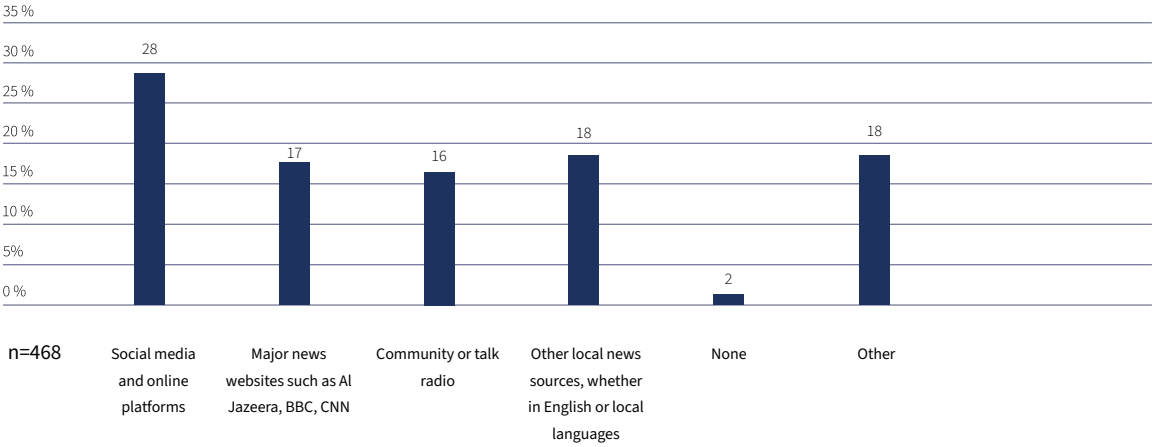


Figure 10: Secondary sources of climate information

related information.

Findings from FGDs demonstrated that the key sources of climate information include local community members, government sources, non-profits, local experts and UN agencies. Participants in FGDs explained that community elders and climate activist groups are custodians of information in their respective regions. Government reports from respective ministries and departments are also reliable sources because they are backed by the requisite government expertise. Participants also reported that non-profits and NGOs provide climate research reports and materials for their respective communities.

This information is normally disseminated by their communication and project officers. A participant in FGD stated, "I get climate information from local experts, who in this case are university lecturers. I also get other information from the internet." Other participants cited victims of climate change-related calamities like floods and drought as sources for their stories.

4.3.3 Trustworthiness of Climate Change Information

Journalists were asked to rate the trustworthiness of their primary and secondary sources of climate information. Findings in Figure 11 show that the most trusted primary sources were scientists, researchers, scientific articles and academic data sets, international agencies and institutions such as the UN and climate-focused non-governmental organizations. The three sources were rated trustworthy by more than 50% of the respondents. On the other hand, information from family, friends, politicians and policymakers was regarded as less trustworthy. Journalists were neutral regarding information provided by governments, local community and climate-focused corporations/businesses.

Findings show that the most trusted secondary source of climate information was international news websites such as Al Jazeera, BBC, and CNN, rated mostly trustworthy by 36% and very trustworthy by 17% of the respondents. The respondents were however more neutral regarding the trustworthiness of community radio stations, local news channels, social media and online platforms.

This finding implies that while respective governments were regarded as key primary sources of climate information, journalists did not trust them as much. Instead, information from scientists, researchers, scientific articles and academic data sets were regarded as trustworthy primary sources. International agencies and NGOs were also regarded as credible sources although they were not the most critical primary sources.

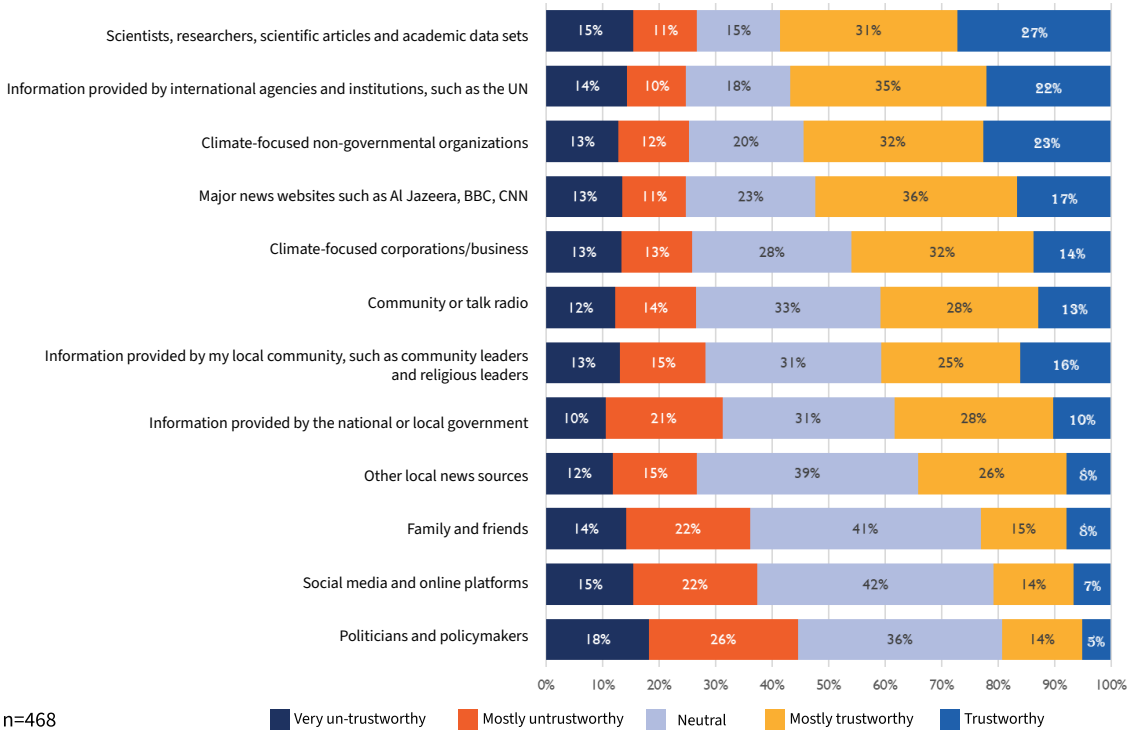


Figure 11: Trustworthiness of primary and secondary sources of information

Participants in FGDs revealed that climate information from long-established institutions is often considered reliable. Participants emphasized that institutions such as UN agencies and governments are typically accurate and credible. However, they noted that it is important to check the date the information was published. In the case of information provided by individuals, participants reported that they assess their knowledge and expertise, as well as their length of experience. The information provided by individuals is then cross-checked with other sources to determine its credibility. Some participants had this to say:

I tend to compare what the source or expert is telling me with what is being said elsewhere in other countries. If there are some similarities, then to me the source is factual and trustworthy.

When covering a climate story, I visit the affected area and talk to a number of people. I then compare this with information that has been provided by a credible institution or expert. If the two correlate, I proceed to process the story in detail.

Historically, the meteorological department has provided weather and climate outlook information, it is therefore very credible. Again, NGOs operating in arid and semi-arid areas have from time to time issued climate information guiding rain-dependent agricultural communities on when to plant various crops and on reduction of stocks for livestock keepers and pastoral communities. These NGOs are therefore credible as well.

4.3.4 Verification of Climate Change Information

Respondents were asked to state how they checked and verified information on climate change before sharing it with their audience. The results showed that overall, 65% of the journalists checked facts with scientific or academic sources (see Table 4). However, there were variations between the four countries, suggesting the presence of language and education barriers. The findings also showed that 56% of the journalists checked facts with CSOs, NGOs, and/or local community organizations. However, there were also variations between the countries.

Table 4: Information verification on climate change

Verification strategy	Overall	Kenya	Uganda	Tanzania	Ethiopia
I check facts with scientific or academic sources.	65%	76%	78%	51%	68%
I check facts with CSOs, NGOs and/or local community or-ganizations.	56%	65%	70%	51%	38%
I check facts by looking them up on the Internet and finding trusted sources there.	55%	67%	68%	45%	46%
I check facts with other journalists and media colleagues, including journalism networks.	48%	55%	60%	42%	40%
I would like to but don't know how to verify facts and information.	16%	11%	12%	21%	19%
I would like to but don't have time to verify facts and information.	6%	5%	4%	4%	16%
I don't need to check and trust my sources are providing accurate facts.	4%	2%	3%	6%	4%

Other findings show that 55% of the respondents check facts by looking them up on the internet and finding trusted sources there. Variations between countries can be attributed to the quality of internet infrastructure and connectivity in the respective countries. Additionally, 55% of the respondents check facts with fellow journalists and media colleagues, including journalism networks. The practice does not seem to significantly

vary between the countries. It was also established that 16% of the journalists lack the know-how to verify facts and information, while 6% lack the time and 4% say they do not need to check because they trust their sources to provide accurate facts. This finding implies that there is a proportion of journalists in all four countries that need training and capacity building on climate information and reporting.

4.3.5 Challenges Experienced in Accessing Trustworthy Information

The study sought to determine the challenges or barriers journalists face in accessing accurate and/or trustworthy information. Results from FGDs revealed that journalists face myriad challenges in climate reporting, including:

a. Limited access to credible and trustworthy sources

Journalists felt that much of the information on climate change, especially scientific information and research studies, is behind a paywall therefore inaccessible to reporters in the Global South. The freely available publications are old, contain outdated data, or focus on data from other geographical jurisdictions. Experts often refuse to talk about climate change while some so-called experts have no updated information on climate change issues. There are limited resources for fact-checking both verbal and published data. Some participants in FGDs stated:

Verifying the truth is challenging especially when experts have different opinions.

Getting experts to talk about climate change remains a big challenge, sometimes we end up asking environmental activists.

Sometimes even those experts from the government are not willing to give you information based on their findings.

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b. Data unavailability

There's a lack of credible climate data in the region and the data that is available is mostly outdated. Much of the information is clustered at the regional (continental), or country level but not localized to the local community level. It is hard to determine accurate numbers when reporting; for example, livestock deaths from a climate incident must rely on hearsay from the pastoralists. Local communities have information which may be true but is not verifiable scientifically. There is therefore a need to conduct and accumulate local research on climate change. Participants had this to say:

Sometimes it's very difficult for me as a journalist from Northern Uganda because we rely on weather information from the neighboring country, Kenya, but we get information on climate change from our government.

Except for key cities, getting weather information for remote towns and villages is very hard. Only satellite data can rescue us. I am not sure if any East African countries have sent a satellite to space. East African countries rely on satellite data from other countries, so we take what we receive as gospel truth whether it is true or not.

Government bureaucracy and information handling is an impediment to climate reporting. Officials give piecemeal or skewed information to make sure the government does not look bad, or junior officials wait for more senior officials to share information. At times the government contradicts itself, for example, one department encourages the planting of trees, and another opens forests to timber harvesting. Participants in FGDs stated:

One of the major challenges I face in accessing information on climate change is some sources like government officials declining to release certain sensitive information.

Government officers are not equipped and resourced enough to support the climate change initiatives. So, they are not able to disseminate their observations, findings and assessments. For example, in Kenya, weather stations are dilapidated. Their pieces of land and equipment are being grabbed by private developers or vandalized and the officers are helpless.

c. Subject complexity

Journalists observed that climate change was complicated subject to report on. An FGD participant stated:

Climate change is very complex. Climate terminologies such carbon emissions, carbon credits, carbon footprint, climate crisis, climate disinformation, climate vulnerability, are intimidating. Contextualizing scientific information for lay audiences can be a challenge. It requires a process to unpack the scientific material.

d. Journalism trends

Journalists highlighted that audiences prefer certain content on popular and sensational trends, not on climate change. An FGD participant summarized it as follows:

Climate information is not sensational, so it is not taken seriously until it's too late. In the new media space, it becomes difficult to sell a climate story. Climate information stories are taken more seriously when a catastrophe occurs, e.g., drought or excess rain.

4.4 Understanding and Perception of Climate Change

The second objective of the study was to determine the perceptions of journalists and their understanding of climate change. To achieve this, the respondents were asked to state their perceptions on climate change impacts, climate science, global warming, sea level rise, carbon dioxide emissions, the realities of climate change, proposed climate change solutions, net zero, availability of freshwater, and decarbonization. They were also required to state their motivation for climate reporting.

4.4.1 Journalists' Perceptions

The study sought to understand the perceptions of the journalists in East Africa regarding climate change impacts. A set of 15 global phenomena was posed to them and they were required to select which they perceived were impacted by climate change. The results are summarized in Table 5.

Table 5: Journalists' perceptions on climate change impacts

Phenomena	Overall	Kenya	Uganda	Tanzania	Ethiopia	ANOVA	
						F	Sig.
Droughts	68%	80%	76%	50%	87%	19.378	0.000*
Floods	63%	70%	76%	48%	80%	12.649	0.000*
Wildlife and biodiversity	59%	79%	82%	38%	55%	29.221	0.000*
Food supply	56%	76%	81%	30%	62%	38.64	0.000*
Livelihoods and the economy	54%	78%	80%	28%	57%	43.819	0.000*
Storms and extreme weather	53%	58%	60%	42%	70%	7.007	0.000*
Public health	53%	63%	68%	35%	65%	14.452	0.000*
Energy supply	44%	63%	61%	25%	44%	20.449	0.000*
Availability of fresh water	44%	59%	57%	26%	51%	15.466	0.000*
Migration	42%	58%	45%	24%	62%	18.945	0.000*
Heat waves	41%	53%	55%	20%	58%	21.492	0.000*
Gender equality	37%	50%	47%	25%	38%	8.726	0.000*
Earthquakes	35%	33%	35%	35%	41%	0.428	0.733
The ocean	35%	59%	34%	17%	39%	23.426	0.000*
Political stability and civil conflict	33%	51%	31%	20%	38%	12.559	0.000*

Findings reveal that a significant proportion of respondents acknowledged the impact of climate change on various aspects (See Table 5). Specifically, 68% believed that climate change affected droughts, while 63% recognized its influence on floods. A slightly smaller majority, at 59%, linked climate change to impacts on wildlife and biodiversity, whereas 56% identified a connection with food supply. Furthermore, 54% of respondents saw climate change as affecting livelihoods and the economy, while storms and extreme weather, public health, and energy supply were cited by 53%, 53%, and 44% respectively.

Results of the ANOVA (F =19.378, Sig. = 0.000) show that variations in the perceptions of the journalists in the four countries regarding the impact of climate change were significantly different from one another (Sig <0.05). The findings show major gaps and disparities in knowledge and in the perceptions of the journalists regarding climate change.

An FGD participant stated:

> *The greatest challenge we have as journalists is that we think we are experts on everything, and we can report confidently on anything whether verified or not. In any case if the information turns out to be untrue sometime in future, we just come back and update our stories and reporting.*

4.4.2 Journalists' Opinions on Climate Change

A set of 14 statements on climate change were presented to the respondents. They were required to indicate the level of their agreement with those statements. Their responses are summarized in Table 6.

Table 6: Journalists' opinions on climate change

Statement on climate change	Response	Overall	KE	UG	TZ	ET	ANOVA	
							F	Sig.
Climate scientists can't be trusted because they're biased	Agree	12%	8%	5%	19%	10%	5.054	0.002*
	Disagree	76%	82%	84%	68%	75%		
	I don't know	12%	11%	11%	12%	14%		
Scientists can't even predict the weather next week. How can they predict the climate in 100 years?	Agree	16%	12%	8%	22%	13%	6.098	0.000*
	Disagree	70%	78%	80%	60%	75%		
	I don't know	14%	10%	12%	18%	12%		
Climate has changed naturally in the past so what's happening now must be natural.	Agree	24%	20%	14%	35%	13%	10.708	0.000*
	Disagree	67%	79%	76%	52%	77%		
	I don't know	9%	2%	11%	12%	10%		
They changed the name from 'global warming' to 'climate change' because global warming stopped happening.	Agree	13%	5%	7%	23%	9%	16.981	0.000*
	Disagree	72%	89%	82%	56%	75%		
	I don't know	14%	6%	11%	21%	16%		

Statement on climate change	Response	Overall	KE	UG	TZ	ET	ANOVA	
							F	Sig.
Sea levels are rising but the pace at which they are rising is not accelerating.	Agree	23%	19%	26%	30%	12%	6.475	0.000*
	Disagree	49%	64%	51%	37%	49%		
	I don't know	28%	17%	23%	33%	39%		
Human carbon dioxide emissions are tiny compared to natural carbon dioxide emissions, so our influence is negligible.	Agree	23%	14%	19%	33%	19%	17.98	0.000*
	Disagree	51%	67%	65%	30%	64%		
	I don't know	26%	19%	16%	37%	17%		
There is no empirical evidence that humans are causing global warming.	Agree	16%	7%	14%	23%	13%	9.064	0.000*
	Disagree	76%	89%	77%	64%	81%		
	I don't know	9%	4%	9%	12%	6%		
Climate change is real but is the will of God and not so much affected by humans.	Agree	12%	5%	5%	19%	9%	6.856	0.000*
	Disagree	83%	89%	92%	75%	86%		
	I don't know	5%	5%	3%	6%	6%		
Climate change is a concept promoted by the Global North to take advantage of the Global South.	Agree	11%	8%	8%	14%	13%	3.273	0.021*
	Disagree	75%	83%	80%	68%	70%		
	I don't know	14%	9%	12%	18%	17%		
Proposed climate change solutions won't work.	Agree	14%	8%	12%	19%	12%	4.577	0.004*
	Disagree	78%	87%	77%	70%	81%		
	I don't know	9%	5%	11%	11%	7%		
Moving to net zero will be bad for the economy, taking away jobs and curbing growth and development.	Agree	25%	18%	26%	30%	28%	4.381	0.005*
	Disagree	51%	64%	54%	42%	51%		
	I don't know	23%	17%	20%	28%	22%		
The decreased availability of fresh water is not a result of climate change but the result of actions or conspiracies by political enemies.	Agree	12%	8%	9%	17%	12%	3.853	0.010*
	Disagree	79%	85%	86%	70%	83%		
	I don't know	9%	7%	4%	13%	6%		
Decarbonization will hold developing countries back while the West had no such constraints so it should rightly be our turn to burn fossil fuels and emit greenhouse gases.	Agree	22%	11%	26%	31%	14%	15.007	0.000*
	Disagree	61%	79%	65%	42%	72%		
	I don't know	18%	11%	9%	27%	13%		
Climate solutions will harm local communities and farmers.	Agree	26%	11%	20%	37%	33%	12.258	0.000*
	Disagree	69%	85%	78%	56%	64%		
	I don't know	4%	5%	1%	6%	3%		

The results reveal that 76% of the respondents trust climate scientists and believe that they are unbiased. However, 14% of the respondents do not trust climate scientists and believe that they cannot predict the weather accurately or predict the climate in 100 years. Nearly a quarter of respondents (23%) felt that climate change is natural, rather than caused by human activity. 12% of the respondents believed that climate change is real but is the will of God and not so much affected by humans. A few respondents (13%) believed that climate change proponents changed the name from 'global warming' to 'climate change' because global warming stopped happening. Similarly, 23% of the respondents responded that sea levels are rising but the pace at which they are rising is not accelerating.

It was noted that 23% of the respondents believe that human-caused carbon dioxide emissions are tiny compared to natural carbon dioxide emissions, so human influence is negligible. Similarly, 16% of the respondents posited there is no empirical evidence that humans are causing global warming.

Table 6 shows that there are major gaps and disparities in the opinions of journalists in East Africa about climate change. Only 11% of respondents believe that climate change is a concept promoted by the Global North to take advantage of the Global South. In contrast, 75% disagree and 14% are not sure. Similarly, 22% believe that decarbonization will hold developing countries back, while 25% believe that moving to net zero will be bad for the economy. And 14% of the respondents maintain that climate change solutions won't work. The risk of amplifying involuntary misinformation is high in the absence of credible information sources.

4.4.3 Journalists' Stance on Climate Reporting

The study sought to determine the stance of the journalists with regard to climate reporting. The respondents were asked to state whether they found any need to balance out climate change proponents with that of skeptics. Results show that 64% of the journalists felt the need to balance statements that climate change is happening and caused by humans with sources who are skeptical of these claims (See Table 7).

Table 7: Journalists' stance on climate reporting

	Response	Kenya	Uganda	Tanzania	Ethiopia	Total
When I report on climate-related topics, I need to balance sources who claim that climate change is happening and being caused by humans with sources who are sceptical of these claims.	No	27%	31%	10%	20%	20%
	Not sure	9%	5%	11%	10%	10%
	Yes	64%	64%	78%	70%	71%
Total		100%	100%	100%	100%	100%

4.4.4 Journalists' Motivation for Climate Reporting

The study sought to determine the motivation behind journalists' efforts to report on climate change. Results show that a majority of journalists (86%) want to sensitize communities on the harm caused by climate change and the solutions that would strengthen resilience, to help them make informed decisions (See Table 8). This was a priority among journalists in each of the countries surveyed. Similarly, 75% of the journalists in the region want to push for better laws and policies to take measures to reduce global warming. Overall, 61% want their governments to act against people involved in activities that destroy the climate. Results also show that 39% of the journalists want to warn their audience about the bad impacts that measures to address climate change will have for the economy while 8% want to expose climate change as a fake concept.

Table 8: Journalists' motivation for reporting on climate change

Motivation for reporting on climate change	Overall	KE	UG	TZ	ET	F	Sig.
I want to sensitize communities on the harm caused by climate change and the solutions that would strengthen resilience, to help them make informed decisions.	86%	96%	99%	76%	81%	13.438	.000
I want to push for better laws and policies to take measures to reduce global warming.	75%	86%	92%	62%	74%	13.024	.000
I want my government to act against people involved in activities that destroy the climate.	61%	64%	82%	60%	35%	12.487	.000
I want to warn about the bad impacts that measures to address climate change will have for the economy.	39%	36%	43%	40%	38%	.351	.789
I want to expose climate change as a fake concept.	8%	2%	7%	12%	7%	3.850	.010

4.5 Climate Mis/Disinformation

The third objective was to assess the perceptions of the journalists regarding climate mis/disinformation. To achieve this, the respondents were asked to explain their understanding of the terms and state how they spot inaccurate information. They were asked to share their experiences of sponsored information, counterinformation and intimidation in climate reporting. Findings are presented in the following sections.

4.5.1 Perceptions on Climate Misinformation

Journalists surveyed were asked to explain their understanding of the term "climate misinformation" in their own words. Here is a selection of their responses:

Climate change is a tool for the Global South to lobby finances from the Global North.

Climate change misinformation is the intentional spread of false or misleading information aimed at downplaying or denying the scientific consensus on anthropogenic global warming and its impacts.

Climate change is information that is not true.

Climate disinformation is the deliberate spread of false or misleading information about climate change, its causes, impacts, or solutions. It is a tactic used by individuals, organizations, or interest groups to create doubt, confusion, and skepticism about the scientific consensus on climate change.

Climate misinformation are myths people have concerning climate change and how they believe about such changes.

Climate misinformation can be described as telling lies about the concept of climate change.

Climate misinformation can be seen in the types of behavior and information which cast doubt on well-supported theories, or in those which attempt to discredit climate science, such as, climate impacts are not bad, climate solutions won't work.

Climate misinformation is when someone deliberately undermines as harmful the strategies in place intended to address climate change.

Deliberate stories created to distort facts or under-report the gravity of a climate related impact. For instance, "Shoddy works blamed as new bridge caves in", when in fact, it should be "Surging floods sweep away new bridge".

False information about climate change is shared by people who have no clue they are sharing falsehoods.

False information about effects of climate that may look true to the public.

I am not familiar with it.

I describe it as a menace which is supposed to be fought against.

I don't know what misinformation is.

It is an act of misleading people by feeding them false or inaccurate information as far as climate is concerned.

It is battling climate myths and fighting for the truth.

It's false information that is distributed by the people who don't know about what exactly it means.

Publishing climate stories that are either false or not scientifically backed to mislead the audience.

Climate change is the propaganda of the western countries.

This is the sharing of information that is false or incorrect. When someone deliberately spreads misinformation with the intent to mislead, we call it disinformation. Much of this intentionally misleading content about climate change or renewable energy is funded by a handful of industries, particularly the fossil fuel industry, and often conceived by conservative think tanks and front groups. Then various "influencers" help amplify it.

Unintentional spread of false or inaccurate information about climate change.

Unrealistic content which undermines the impact of climate change to suit an agenda in contravention to scientific findings on mitigation and adaptation.

Wrong or incorrect interpretation of information concerning climate change and related terms.

Findings show that there were many divergent views regarding what the term "climate misinformation" meant. While a section of the respondents understood the term, many were not sure. This finding implies that there is a general lack of information and capacity regarding climate misinformation among journalists in the region.

4.5.2 Perceptions on Climate Disinformation

Journalists surveyed were asked to briefly explain their understanding of the term "climate disinformation" in their own words. A selection of their responses is presented below:

A deliberate presentation of factually wrong information on climate change meant to mislead people.

A propaganda set to regulate and limit developing nations' economies.

Absence of information about climate.

Biased coverage where global leaders manipulate information.

Blaming the west and factories only.

Climate misinformation can be described as falsely publicizing efforts as supportive of climate goals that in fact contribute to warming or contravene the scientific consensus on mitigation or adaptation.

Climate disinformation is false information about climate change, that is deliberately intended.

Climate disinformation is a premeditated, and well-thought-out dissemination of fake information.

Climate disinformation is all kinds of information which are misleading about the climate.

Climate disinformation is creating misleading content against climate change.

Climate disinformation is degrading and distributing fake info using media platforms to a large audience.

Climate disinformation is the deliberate spread of false or misleading information about climate change, its causes, impacts, or solutions. It is a tactic used by individuals, organizations, or interest groups to create doubt, confusion, and skepticism about the scientific consensus on climate change.

Climate disinformation is the giving of wrong information to those who are already well enlightened about climate change issues.

Climate disinformation is when a writer/speaker deliberately uses wrong facts to de-campaign climate change efforts.

Climate disinformation and climate misinformation is the same thing.

Climate disinformation refers to the intentional spread of false or misleading information about climate change, often with the purpose of sowing doubt, confusion, or denial of the scientific consensus, and undermining efforts to combat climate change.

Climate disinformation refers to the process of relaying false information to others with the intent of misleading them or swaying their opinion.

climate disinformation will escalate the effects of climate change in communities.

Climate disinformation means climate change.

Climate misinformation is information that deliberately puts a false construction on the climate crisis.

Climate misinformation is when a person or entity tries to paint climate change as caused by natural processes unlike when humans are doing the exact thing to ruin the climate.

Climate misinformation means exposing it as a fake concept or saying it does not have impact on human lives.

Communicating and circulating wrong and unconfirmed information about climate change.

False information intended to mislead people or propaganda on climate issues especially from government institutions.

I do not understand the term 'climate

disinformation.'

I don't know anything about it.

Lack of knowledge pertaining to climate change.

Providing misleading information for political gain e.g., we must import foodstuffs because what is produced here is of lower quality.

Non-factual news about climate change.

Not providing adequate information to help people understand climate change.

Some people believe that even global warming is a matter of lies prepared by a gang of certain people with the aim of profiting by getting money from other countries outside the continent of Africa, others think that climate change is a conspiracy to make money, through suppression of black rights and freedom.

Refers to deceptive or misleading content that undermines the existence of impacts of climate and misrepresents scientific data.

Responses on climate disinformation also show numerous divergent views and levels of understanding among journalists. A few journalists stated that they understood the meaning of the term, but several respondents said that they didn't know its meaning. Some equated disinformation to misinformation. These findings imply that there is a lack of capacity about climate disinformation among journalists in the region.

4.5.3 Confidence in Spotting Inaccurate Climate Information

The study sought to determine the confidence of the journalists in the detection of inaccurate information. Findings show that 45% of the journalists fully agreed and 36% mostly agreed that they had confidence to spot inaccurate information on climate change, including its causes and impacts of extreme weather, drought, floods and changes in disease patterns and measures to address climate change. The findings seem to suggest that a substantial segment of the journalists in the region, regardless of gaps in knowledge, are confident about their abilities to identify climate misinformation.

This finding contradicts earlier findings in Section 4.4 which indicated that journalists openly acknowledged significant gaps in knowledge regarding climate change. The contradiction suggests that journalists in the region are confidently reporting on a matter that they lack knowledge on and thus are highly susceptible to both misinformation and disinformation.

Table 9: Confidence in spotting inaccurate climate information

Level of agreement	Overall	Kenya	Uganda	Tanzania	Ethiopia	F	Sig.
Fully agree	45%	42%	46%	48%	43%		
Mostly agree	36%	40%	43%	32%	32%		
Neither agree nor disagree	11%	16%	8%	10%	10%	1.765	.153
Mostly disagree	3%	1%	3%	4%	6%		
Fully disagree	4%	2%	0%	7%	9%		
Total	**100%**	**100%**	**100%**	**100%**	**100%**		

4.5.4 Organizational Sponsorship of Climate Information

The study sought to determine whether climate information was receiving any organizational sponsorship in the region. The respondents were required to state whether they had been approached by any organizations to promote any particular climate change-related information in the past 12 months. The results are summarized in Figure 12.

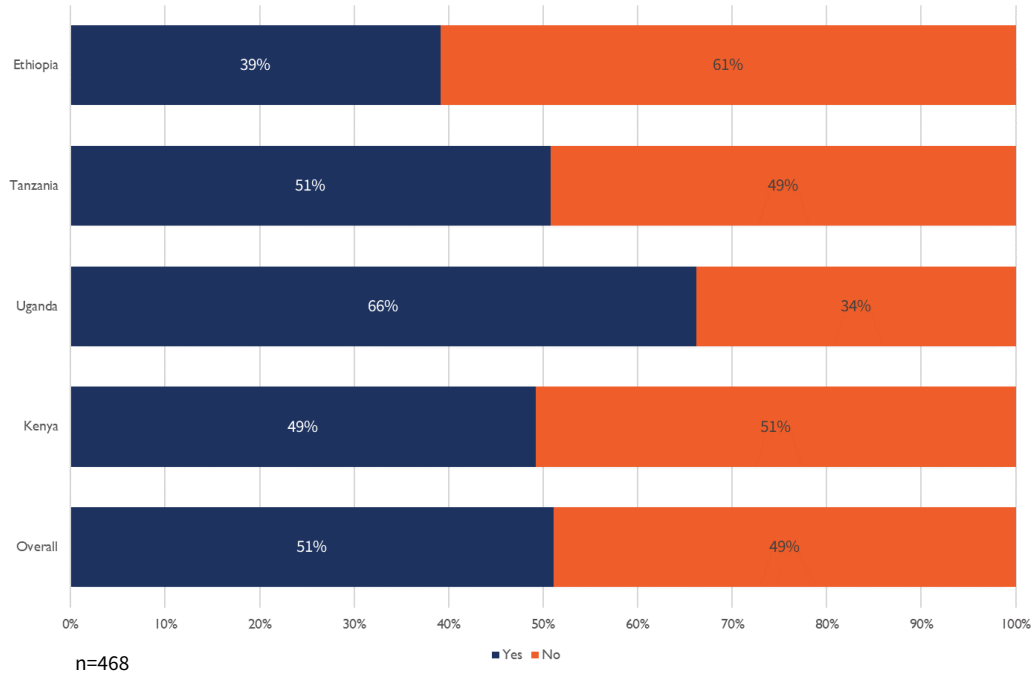

Figure 12: Organizational sponsorship of climate information in the past 12 months

Results indicate that over 51% of the journalists in the region have been approached by organizations to promote climate change-related information. (Please note that these could include press releases, tipsheets and requests for coverage from a wide range of organizations and are not necessarily instances where journalists have been invited to spread mis/disinformation). The key themes included in the climate change-related information that journalists received include:

a. General awareness of climate change

Promoting awareness on climate change.
Information on how communities can be involved in controlling climate change.
Avoiding cutting down of trees was the major information to community.
Biodiversity conservation, food sovereignty, extractive and fossil fuel dangers, social justice.
Airing stories and developing radio programs on climate change, indigenous tree planting and green energy campaigns.
I was asked to promote the concept of agroecology.
I was encouraged to report on the impact of climate change on small-scale farmers.
I was encouraged to promote the planting of bamboo trees along River Nya Mwamba in Kasese, Uganda.
It was about growing trees in the boundaries of tea plantations and how this can be beneficial to the farmers and their land. (Having written this, I am no longer sure this is climate information).

b. Promotion of policies

I have been encouraged to promote the UN 2030 SDG 13 (the Paris Club Agreement, African Climate Policy Centre (ACPC) strategy with UNECA, African Development Bank climate change policy, African Union Climate Change policy, East African Community Climate Change Policy,

IGGAD Climate Change strategy, Uganda climate smart agriculture policy, Kampala city climate change strategy, Uganda national climate change policy, and East African Community Climate Change Master Plan.

c. Promoting specific projects

Tree planting, but for the organization's own benefit. The organization has a model where they collect money from people around the world and use it to buy seedlings, which they plant in locations they decide, mostly in India.

I was approached to write a feature article on plastic waste dumping in the Indian Ocean, with its adverse effects to the marine life and tourism. https://www.standardmedia.co.ke/article/2001450725/incomes-dwindle-as-ebbing-plastic-wastes-clog-fish-breeding-tourist-attraction-sites

[I was asked to write about] electric vehicles and motorbikes to combat emissions and environmental pollution.

I was encouraged to promote "Mbale Greening Campaign" on radio and write stories aimed at planting over 1 million trees in the region.

Lift of the logging ban in Kenya.

The Ethiopian Ministry of Agriculture encouraged me to promote climate information related to the Green Legacy Initiative campaign to plant 6 billion trees across the country this year.

To protect water sources as Iringa is dependent on Ruaha River for economic activities, to address the impact of deforestation as the region is rich with tree plantations, in general to protect environment for the well-being of animals and human beings.

Issues about the East African Crude Oil Pipeline (EACOP), the endangered River Rwizi, forests, and other endangered biodiversity in western Uganda and Uganda as a whole.

It was about COP27: mitigation, adaptation, finance and collaboration. The headline agreements from the conference were the establishment of a loss and damage fund and finalizing the details to implement the Santiago Network. It was also the first time food security was recognized.

To show how the extraction of Uganda's oil an ecological sensitive Albertine Graben may lead to destruction of the ecosystem there and raise further impacts of climate change. In other words, their message was to keep oil in the ground in order to prevent the escalation of climate change.

4.5.5 Organizational Countering of Climate Information

The study sought to determine whether there were any attempts to counter climate information in the region. The respondents were therefore required to state whether they had been approached by any organizations to counter any climate change-related information in the past 12 months. The results were as summarized in Figure 13.

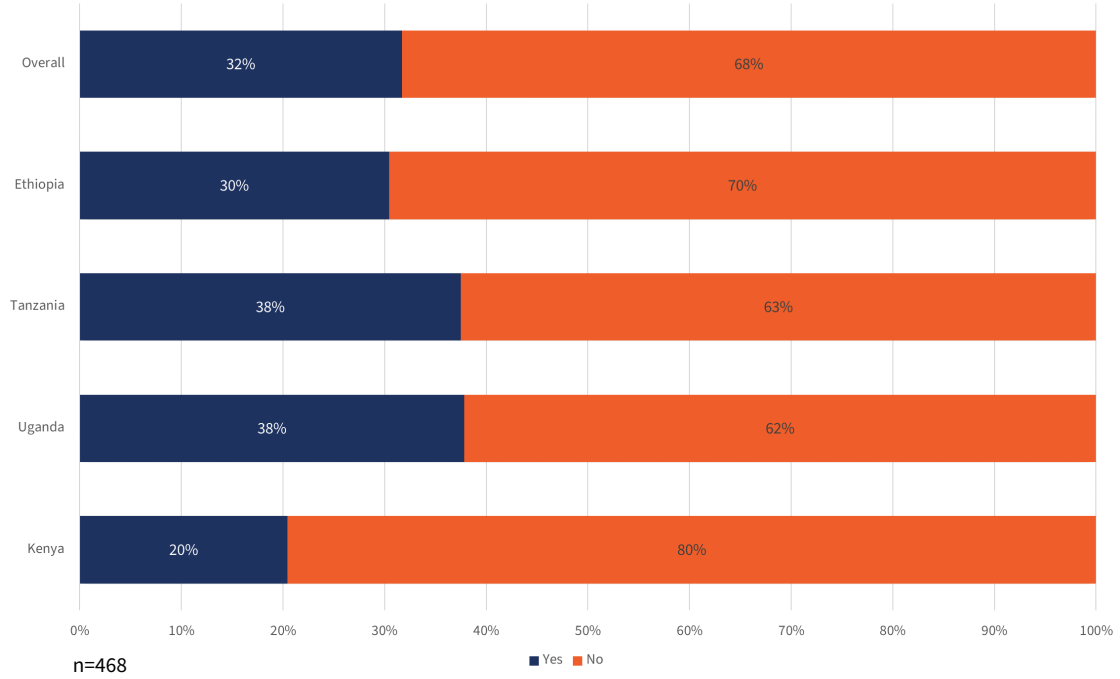

Figure 13: Organizational countering of climate information in the past 12 months

Overall, 32% of the journalists in the region have within the last 12 months been approached by organizations to counter climate-related information. (Please note that these could include press releases, tipsheets and requests for coverage from a wide range of organizations and are not necessarily instances where journalists have been invited to spread mis/disinformation).

The key themes in the information journalists were requested to counter included:

a. Countering general misinformation

Debunking climate change misinformation and disinformation such as climate change is fake news, and climate change is the West's problem.

Climate change only affects the poor in remote areas.

Locals in Northern Uganda have been destroying indigenous Afrizela and Shea Nut trees for large commercial charcoal and timber production. They argued that government officials are engaged in the practice while depriving them of their resources. I had to write news stories to empower them to report such errant officials to be brought to book for their actions.

b. Countering specific projects and policy decisions

I was approached to counter the information on Lake Victoria seaweed being caused by waste products.

I was encouraged to push back against alleged cleaner types of fuel like clean coal, gas as opposed to promoting fully green types of energy.

In an interview, a key informant noted:

Climate change is a complex and pressing issue that has garnered significant attention in recent years. It is a topic of concern for various organizations, institutions, governments, and individuals worldwide. Given the magnitude of the problem, it is not surprising that different groups may approach organizations or institutions to counter specific climate change-related information.

4.5.6 Harassment and Intimidation in Climate Reporting

The study sought to determine whether journalists in the region encountered harassment and intimidation while reporting on climate-related issues in the past 12 months. The results are summarized in Table 10.

Table 10: Harassment incidents in climate reporting in the past 12 months

Harassment incidents in climate reporting	Overall	Kenya	Uganda	Tanzania	Ethiopia
Never	75%	89%	62%	73%	64%
1-3 times	19%	11%	30%	16%	30%
4-6 times	4%	0%	5%	7%	1%
7-9 times	1%	0%	1%	2%	3%
10 times or more	1%	0%	1%	2%	1%
Total	100%	100%	100%	100%	100%

Overall, 75% of the journalists in the region experienced no incidents in the last 12 months, however, 11% of journalists in Kenya, 30% in Uganda, 16% in Tanzania, and 30% in Ethiopia said they experienced harassment and intimidation. The extent of the intimidation experienced is summarized in Table 11.

Table 11: Type of intimidation experienced in climate reporting in the past 12 months

Type of Intimidation	Overall	Kenya	Uganda	Tanzania	Ethiopia
Verbal abuse	42%	40%	74%	22%	48%
Legal threats	14%	0%	19%	20%	8%
Online harassment	36%	60%	26%	25%	52%
Threat of physical violence	25%	27%	33%	25%	12%
Threat to do harm to family or friends	13%	7%	19%	12%	12%
Threat of professional consequences (such as damage of reputation)	18%	27%	19%	16%	16%
Tax threat or other type of government harassment	7%	0%	7%	10%	4%
Other	7%	0%	7%	10%	4%

Of the 25% who said they experienced harassment or intimidation, 42% said they experienced verbal abuse, 36% encountered online harassment, 25% met threats of physical violence, 18% were threatened with damage of reputation, 14% experienced legal threats, 13% received threats to harm family members and 7% faced tax threats. These observations confirm that climate journalism can be a risky undertaking for reporters in the region.

4.5.7 Bribery Incidents in Climate Reporting

The study sought to determine whether the journalists in the region experienced instances of bribery and inducement while reporting on climate issues in the past 12 months. The results are summarized in Table 12.

Table 12: Awareness of instances of bribery and inducement in climate reporting

Instances of bribery and inducement	Over-all	Kenya	Uganda	Tanzania	Ethiopia
Yes – I was subject to it	5%	1%	4%	6%	10%
Yes – I'm aware that it happened to others	21%	8%	35%	24%	19%
I don't know	14%	9%	11%	18%	13%
No	61%	82%	50%	52%	58%

A small percentage of journalists (5%) reported experiencing instances of bribery and inducement for or against any climate change-related information. Almost a quarter of journalists (21%) were aware that it had happened to others. Table 12 shows that these incidents were more prevalent in Uganda, Tanzania, and Ethiopia than in Kenya. The climate-related information involved in these instances includes:

Factory pollution.

How government officials and leaders are involved in charcoal businesses.

To cover up for the ongoing destruction of Bugoma Central Forest Reserve in Western Uganda, how oil extraction is good for Uganda and forego the environmental costs it is likely to cause.

There is a river in an area in Nanyuki County that has been polluted. The youth took it as their responsibility to clean it up. They were arrested for trying to clean up and some people were bribed to keep quiet about it.

Some journos who tried to report on the invasion of big farmers and block the flow of Great Ruaha River in Mbarali District were threatened not to report the story.

4.5.8 Participation in the Prevention of Climate Mis/Disinformation

The study sought to determine whether journalists were actively participating in the prevention of climate mis/disinformation. The respondents were therefore required to state whether they participated in reporting on instances of climate mis/disinformation in the past 12 months. The results are summarized in Table 13.

Table 13: Participation in reporting of climate mis/disinformation

Enquiry	Response	%
Within the last 12 months, have you reported on instances of climate misinformation?	Yes	32%
	No	63%
	I don't know what climate misinformation means	5%
	Total	100%
Are you currently reporting on instances of climate disinformation?	Yes	33%
	No	60%
	I don't know what climate disinformation means	7%
	Total	100%

Findings reveal that 32% of the journalists reported on instances of climate misinformation within the past 12 months. Similarly, 63% reported instances of climate disinformation within the past 12 months. The findings therefore imply that about a third of the journalists in the region felt they were participating in uncovering climate mis/disinformation through their reporting.

Earlier findings in Section 4.4 established that the journalists had glaring knowledge gaps on the subject of climate change. Findings in Section 4.5 indicated that journalists' understanding of the terms "climate misinformation" and "climate disinformation" varies. Based on findings in Table 13 it is likely that the journalists' recognition of and resistance to mis/disinformation as it relates to the sources, impacts and solutions to climate change are most probably inadequate, and that they are susceptible to counter-information, intimidation and attempts at bribery.

4.6 Key Obstacles in Climate Reporting

Interviews with key informants established that the main obstacles that hinder the effectiveness of climate change reporting include:

Insufficient coverage:

There are few journalists specifically focusing on climate change which can result in a lack of comprehensive coverage. Many aspects of the issue may remain unexplored or underreported, leaving the audience with an incomplete understanding. Climate reporting often revolves around disaster narratives that are presented as shock stories. These events are frequently perceived as acts of nature rather than being substantiated by scientific data. This divergence can hinder comprehensive understanding and urgency in addressing climate challenges.

Generic narratives:

Many climate change stories adopt a global perspective, focusing on overarching trends and international agreements. While these narratives are essential, they might not resonate with local audiences who are more interested in understanding how climate change directly impacts their communities.

Lack of access to experts:

Accessing credible climate experts and researchers can be challenging and hinder accurate reporting. Many government institutions have these experts, but many are unwilling to talk to journalists. They treat climate reporting with suspicion, and they think journalists do such stories for money. Meteorological agencies are based at the national capital, making it difficult for journalists outside the city to access any information. Only NGOs are willing to provide such information, including their research findings.

Absence of training opportunities:

There are no training opportunities on climate change for journalists in the region.

Lack of specialization among journalists:

Most of the journalists are reporting about everything and anything. In the process, they allocate more time to breaking hard news stories that are easy and quick to cover. Editors sometimes reject climate story pitches stating that their media outlets are not focusing on climate issues. Climate change is not high on the agenda of many newsrooms. The prominence of politics has long overshadowed climate change in news coverage, resulting in infrequent appearances of climate-related stories on the front pages or limited space in broadcast, print, and online media.

Absence of strong alliances:

There are few alliances between diverse stakeholders, such as the media, climate actors, and policymakers. This is another obstacle. Collaborative efforts are essential to amplify the reach and impact of climate reporting.

Funding and budget limitations:

Climate change reporting often demands substantial resources for research, fieldwork, travel, and storytelling. Limited budgets can result in a lack of comprehensive climate coverage. Many media houses are financially constrained and unable to provide adequate resources to support their journalists in seeking out climate stories. Poor public interest in climate change stories when they are produced results in lower income for their media houses. Many journalists work on a voluntary basis and so they prioritize events-based news stories which they are sure would be compensated.

Security issues involved with travel:

There are often security issues associated with travel to conflict zones, which creates challenges for journalists to cover climate stories in those areas

4.7 Training Needs on Climate Mis/Disinformation Reporting

The study sought information from respondents on whether they would be interested in receiving training on identifying climate mis/disinformation and on reporting on climate change. The results are summarized in Table 14.

Table 14: Interest in training on climate mis/disinformation

							ANOVA	
Training needs		**Overall**	**KE**	**UG**	**TZ**	**ET**	F	Sig.
Would you be interested in receiving training on how to identify – and report on – climate mis/ disinformation?	No	3%	1%	0%	5%	3%	2.385	.069
	Yes	97%	99%	100%	95%	97%		
	Total	100%	100%	100%	100%	100%		
Would you be interested in receiving training on how to improve reporting on climate change in general?	No	1%	0%	0%	3%	1%	2.191	.088
	Yes	99%	100%	100%	97%	99%		
	Total	100%	100%	100%	100%	100%		

5 Conclusion and Recommendations

5.1 Conclusion

Climate reporting in East Africa is still in the early stages of development. There exists an active pool of young, well-educated and experienced journalists. However, many of the journalists lack knowledge of climate change which is essential for journalists aiming to effectively cover this complex and critical issue. Few journalists specifically focus on climate change, which can result in a lack of comprehensive coverage. Many aspects of the issue remain unexplored or underreported, leaving the audience with an incomplete understanding.

Accessing credible climate experts and researchers is a challenge. It hinders accurate reporting, thus creating room for mis/disinformation. Journalists can bridge the gap between complex climate science and public understanding, fostering informed discussions, advocating for policy changes, and shaping public opinion to drive positive action.

Current climate reporting largely adopts a global perspective, focusing on overarching trends and international agreements. While these narratives are essential, they might not resonate with local audiences, who are more interested in understanding how climate change directly impacts their communities in a language and context with which they can easily relate. There are underlying concerns that climate change is an avenue for the Global North to exploit the Global South and as such, there is a need for transparency and inclusivity in reporting to dispel those fears.

Governments are critical stakeholders in climate reporting in the region. They control meteorological departments and thus control access to climate data. In some instances, they regulate travel to some regions, in the process limiting information gathering of climate stories. They hold significant stakes in the media houses, thereby controlling narratives aired on climate change to avoid unfavorable portrayals. These scenarios create room for misinformation and disinformation. Successful climate reporting therefore does often require cooperation from governments.

Climate programmes are slow in attracting commercial sponsors. Funding for climate change reporting is low and inadequate. As such, climate stories are not financially viable and thus not a priority for media houses. The occasional sponsors of climate stories usually have a corporate interest and therefore control what is being aired, thus giving room for mis/disinformation. Climate change reporting

often requires substantial resources for in-depth research, travel, data collection, and interviews. Securing adequate funding to support comprehensive coverage can be difficult, especially when media houses are facing financial challenges. It is not possible for the journalists to discern whether the sponsors of climate information stories they broadcast are practicing mis/disinformation or not.

In the absence of credible information sources, the risk of reporting inaccurately on the science of climate change or disseminating involuntary misinformation is high. Two-thirds of the journalists said that they balanced their stories by including sources who explain that climate change is happening and being caused by humans, as well as sources who are skeptical of these claims. The need for capacity building is high, as evidenced by the findings which reveal that 97% of journalists are interested in training on how to identify and report on climate mis/disinformation, while 99% are interested in receiving training on how to improve reporting on climate change in general.

5.2 Recommendations

Based on the findings of the study, the following recommendations are made.

Recommendations for Journalists

i. Journalists should enhance their capacity to report on climate change and to detect and analyze information about climate change through study and training. Additional training specifically on climate mis/disinformation and on countering its effects would also be helpful.

ii. There is huge scope for more enterprise reporting on climate change, whether it's examining the impacts, looking at solutions, or investigating the drivers of greenhouse gas emissions.

iii. Journalists should collaborate with one another to integrate climate change into broader stories – not just about the weather, but also about how climate change is affecting business, politics, society, etc. – ensuring more comprehensive coverage.

iv. Journalists should establish relationships with climate experts in order to access accurate and credible information on climate change, and this could also lead to more and better data journalism on the subject.

v. Journalists should focus on localized stories that highlight the impacts of climate change on specific communities and express them in local languages that their local audiences can understand and relate to.

vi. Journalists should highlight local initiatives, adaptation strategies, and success stories that provide practical examples of addressing climate challenges.

vii. Journalists should incorporate diverse perspectives, including indigenous knowledge and local expertise, to provide a well-rounded view of climate issues.

viii. As with any subject these days, climate journalists need to master the techniques of multimedia journalism and improve distribution of their stories through traditional and social media channels.

Recommendations for Journalist Networks

i. Journalist networks need to establish relationships with climate experts and research institutions, ultimately creating a reliable network for journalists to access accurate information. In the process, a database with contacts of climate experts could be established to which journalists can easily refer.

ii. Journalist networks need to organize climate-related conferences, workshops, and events to connect with experts and establish relationships over time.

iii. Journalist networks can seek assistance from climate organizations or NGOs that have capacity in climate journalism.

iv. Journalist networks should strengthen alliances that foster collaborations between African practitioners, thought leaders, and climate experts to ensure diverse and comprehensive climate reporting in the region.

v. Journalist networks need to amplify key African voices and elevate key African perspectives and experiences to provide a well-rounded understanding of climate impacts and solutions in the region.

vi. Journalist networks need to promote local reporting, hence shifting from a reliance on foreign wire services such as Reuters, CNN, and Al Jazeera among others, to investing in African wires that authentically convey the African climate narrative without bias.

vii. Journalist networks need to identify opinion leaders, that is, identify influential figures who can represent African voices and shape the climate narrative, fostering better journalistic understanding and reporting.

Recommendations for Media Houses

i. Media outlets need to organize training for their journalists, or at least allow their journalists to participate in such trainings, to enhance their capacity for climate journalism, including countering climate mis/disinformation.

ii. Media houses need to enhance the capacity of their editorial teams to integrate climate reporting into their day-to-day reporting on other content, building climate expertise into their teams reporting on politics, business, finance, energy, society, etc.

iii. Media houses can also create dedicated climate sections (e.g., on print, broadcast and online media) perhaps in collaboration with science desks, allowing specialized journalists to cover the issue more extensively. This does take resources, admittedly, and there can be trade-offs between this approach and the above recommendation (ii) to integrate climate coverage into other beats.

iv. Media houses need to pursue collaboration between media outlets, experts, NGOs, and governmental bodies to ensure a well-rounded and comprehensive coverage of climate change issues.

Recommendations for Funding Organizations

i. Funding organizations are encouraged to allocate more resources to climate journalism for the training of both core teams of reporters in climate change and of journalists in other beats who need expertise, as well. This would support journalist networks in the region to provide in-depth and sustained coverage of the issue.

ii. Funders are encouraged to provide funding and technical support for meteorological departments in the region to enable them to improve their capacity to provide necessary data for climate reporting in a timely and accessible manner.

iii. Funders should provide grants or funding for climate reporting projects in the region. This can support ambitious investigative, collaborative or data-based efforts, but in many cases even supporting just basic daily coverage is warranted. They cannot rely on the market (i.e., commercially funded media) to provide these public information services.

iv. Funders should provide grants or funding for innovative programs that allow climate journalists to learn and gain the experiences they need by attending key conferences and summits, attending skills-based workshops (for instance, in using social media or mobile journalism), and participating in other events that help them to build their practice and network with key stakeholders.

5.3 Suggestions for Further Studies

Based on the findings of the study, there is a need to establish the exposure of various media audiences (urban/rural) to climate information and to ascertain their climate information needs and gaps. Governments and climate experts in the region are key stakeholders in the climate reporting process. There is a need therefore to ascertain their perceptions and views on the dissemination of climate information and to find out the roles they believe journalists, media houses and networks should play in the process.

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Appendices

Appendix 1: Survey on Climate Change Reporting Field Tool

Internews is conducting a research study about the current conditions for climate change reporting in East Africa. We are eager to hear from journalists in the region, as we seek to learn more about reporters' capacity, resources, and knowledge to report accurate and high-quality climate-related information. Based on your responses, we will better understand how to support a wider network of climate journalists. This survey is in English, consists of 70 questions and should take no longer than 20 minutes to complete.

Please note:

Participation in this research is completely voluntary and can be completed anonymously.

The information you share will be treated with the utmost confidentiality and stored within our secure IT system.

Many thanks for taking the time to complete our survey and share your experiences with us.

SECTION 1: Demographic Information

1. What is your current country of residence?

Ethiopia

Kenya

Uganda

Tanzania

None of the above

2. What is your gender?

Woman

Man

Other

3. What is your age?

20 years or younger

21-30 years

31-40 years

41-50 years

51-60 years

61 years or older

4. What is your highest level of education?

Secondary school

Diploma

University degree (Bachelor)

Postgraduate degree (Master)

Postgraduate research (PhD)

5. How many years of experience do you have working as a journalist?

1-2 years

3-5 years

6-10 years

11 years or more

6. Type of media (check all that apply)

Newspaper

Radio

TV

Magazine

Website

7. Your type of employment/affiliation:

Staff

Volunteer

Freelance for multiple outlets

8. The content I publish appears mainly:

Online

Offline

Online and offline, both

9. Who is the main target audience for your content (check all that apply):

Community/hyperlocal

Local (town/district/province)

National

More than one country in a region

Diaspora

International

I don't know

10. I am based in the capital

Yes

No

11. What is your current position (check all that apply)?

Editor

Publisher

Business/Operations

Founder

Other (Please specify)

12. In what language(s) do you usually report (check all that apply)?

English

Swahili

Amharic

Local language (Please specify)

SECTION 2: Climate change reporting habits

13. In the last 12 months, how often did you report on climate change-related topics?

More than once a week

Weekly

Twice a month

Monthly

Six times a year or less

Never

14. Which of the following primary sources do you commonly use when reporting on climate change (check all that apply)?

Scientists, researchers, scientific articles and academic data sets.

Information provided by international agencies and institutions, such as the UN.

Information provided by the national or local government.

Information provided by my local community, such as community leaders and religious leaders.

Family and friends.

Politicians and policymakers.

Climate-focused non-governmental organizations.

Climate-focused corporations/businesses.

None

Other (Please specify)

15. Which of the following secondary sources do you commonly use when reporting on climate change (check all that apply)?

Social media and online platforms

Major news website such as Al Jazeera, BBC, CNN

Community or talk radio

Other local news sources, whether in English or local languages

None

Other (Please specify)

16. Please specify other secondary sources

17. In your opinion, how trustworthy are the following primary sources providing information on climate change (choose for each source whether they are trustworthy, neutral, not trustworthy)?

Information Source	Trustworthy	Neutral	Not Trustworthy
Scientists, researchers, scientific articles and academic data sets			
Information provided by international agencies and institutions, such as the UN			
Information provided by the government			
Information provided by my local community, such as community leaders and religious leaders			
Family and friends			
Politicians and policymakers			
Climate-focused non-governmental organizations			

18. In your opinion, how trustworthy are the following secondary sources providing information on climate change (choose for each source whether they are trustworthy, neutral, not trustworthy)?

Information Source	Trustworthy	Neutral	Not Trustworthy
Social media and online platforms			
Major news website such as Al Jazeera, BBC, CNN			
Community or talk radio			
Other local news sources			

19. Do you verify and check facts and information on climate change? If so, how? (Check all that apply)

I don't need to check and trust my sources are providing accurate facts.

I would like to but don't have time to verify facts and information.

I would like to but don't know how to verify facts and information.

I check facts with scientific or academic sources.

I check facts with CSOs, NGOs and/or local community organizations.

I check facts with other journalists and media colleagues, including journalism networks.

I check facts by looking them up on the Internet and finding trusted sources there.

I check facts by contacting political and community leaders.

20. Which of the following do you think climate change is expected to have impacts on? (check all that apply):

Storms and extreme weather

Floods

Droughts

Availability of fresh water

Heat waves

Earthquakes

Public health

Livelihoods and the economy

Gender equality

Food supply

Migration

Political stability and civil conflict

Wildlife and biodiversity

The ocean

Energy supply

SECTION 3: Climate change understandings and perceptions

21. Climate scientists can't be trusted because they're biased.

Agree
Disagree
I don't know

22. Scientists can't even predict the weather next week. How can they predict the climate in 100 years?

Agree
Disagree

I don't know

23. Climate has changed naturally in the past so what's happening now must be natural.

Agree
Disagree
I don't know

24. They changed the name from 'global warming' to 'climate change' because global warming stopped happening.

Agree
Disagree
I don't know

25. Sea levels are rising but the pace at which they are rising is not accelerating.

Agree
Disagree
I don't know

26. Human CO2 emissions are tiny compared to natural CO2 emissions, so our influence is negligible.

Agree
Disagree
I don't know

27. There is no empirical evidence that humans are causing global warming.

Agree
Disagree
I don't know

28. Climate change is real but is the will of God and not so much affected by humans.

Agree
Disagree
I don't know

29. Climate change is a concept promoted by the Global North to take advantage of the Global South.

Agree
Disagree
I don't know

30. Proposed climate change solutions won't work.

Agree
Disagree
I don't know

31. Moving to net zero will be bad for the economy, taking away jobs and curbing growth and development.

Agree

Disagree

I don't know

32. The decreased availability of fresh water is not a result of climate change but the result of actions or conspiracies by political enemies.

Agree

Disagree

I don't know

33. Decarbonization will hold developing countries back while the West had no such constraints so it should rightly be our turn to burn fossil fuels and emit greenhouse gases.

Agree

Disagree

I don't know

34. Climate solutions will harm local communities and farmers.

Agree

Disagree

I don't know

35. When I report on climate-related topics, I need to balance sources who claim that climate change is happening and being caused by humans with sources who are skeptical of these claims.

Yes

No

Not sure

36. When I report on climate-related topics, my goal(s) is/are the following (check all that apply):

I want to sensitize communities on the harm caused by climate change and the solutions that would strengthen resilience, to help them make informed decisions.

I want to expose climate change as a fake concept.

I want to warn about the bad impacts that measures to address climate change will have for the economy.

I want my governments to act against people involved in activities that destroy the climate.

I want to push for better laws and policies to take measures to reduce global warming.

Other

SECTION 4: Climate Mis/Disinformation

37. How would you describe “climate misinformation” using your own words – Please write your response in one sentence (open response):

26. How would you describe “climate dis information” using your own words – Please write your response in one sentence (open response):

38. Do you agree with the following statement?

I feel confident that I can spot inaccurate information surrounding climate change, including about its causes and impacts of extreme weather, drought, floods and changes in disease patterns, and measure to address climate change.
Fully agree
Rather agree
Neither agree nor disagree
Rather disagree
Fully disagree

39. Within the last 12 months, have you been approached by an organization or institution to promote any particular climate change related information?

Yes
No

40. In your own words, what was the climate information you were encouraged to promote?

41. Within the last 12 months, have you been approached by an organization or institution to counter any particular climate change related information?

Yes
No

42. In your own words, what climate information were your encouraged to counter?

43. Within the last 12 months, how many times have you been harassed/threatened for reporting on climate change related information?

Never
1-2
2-5
6-10
More than 10 times

44. If you answered that you have been harassed/threatened, what did this harassment/threat look like?
Verbal abuse

Legal threats

Online harassment

Threat of physical violence

Threat to do harm to family or friends

Threat of professional consequences (such as damage of reputation)

Tax threat or other type of government harassment

Other (please specify)

45. Are there any corporations/businesses in your country that are keen on promoting climate information, for example through advocacy, press releases etc.?

Yes
No
I don't know

46. What are the names of these commercial organizations?

47. Within the last 12 months, were you aware of instances of bribery and inducement for or against any particular climate change related information?

Yes – I'm aware that it happened to others
Yes – I was subject to it
No
I don't know

48. In your own words, what particular climate change information was that?

49. Within the last 12 months, have you reported on instances of climate misinformation?

Yes

No

I don't know what climate misinformation means.

50. Are you currently reporting on instances of climate disinformation?

Yes
No
I don't know what climate disinformation means.

51. Would you be interested to receive training on how to identify – and report on – climate mis/disinformation?

Yes
No

52. Would you be interested to receive training on how to improve reporting on climate change in general?

Yes
No

END OF THE SURVEY

Thank you for your participation.

Appendix 2: Focus Group Discussions Tool

Discussion Questions:

1. How do you get information about climate change when you are reporting a story, and from where?
2. How do you evaluate the accuracy and/or trustworthiness of the information you receive? What makes something trustworthy?
3. What challenges or barriers do you face in accessing accurate and/or trustworthy information for your reporting?

NOTE-TAKING WORKSHEET:

Content	Notes
Review consent information, share definition of mis/dis and preview questions using the provided slides	
Lead group discussion on question 1	
Lead group discussion on question 2	
Lead group discussion on question 3	
Wrap-up and final thoughts	

Appendix 3: Key Informant Interview Guide

Discussion Questions:

1. How do you get information about climate change when you are reporting a story, and from where?
2. How do you evaluate the accuracy and/or trustworthiness of the information you receive? What makes something trustworthy?
3. What challenges or barriers do you face in accessing accurate and/or trustworthy information for your reporting?

Interview grid for Climate misinformation in East Africa project: Interview with KIIs		
Interviewer's name: Notetaking: Date: Interviewee name: Position/Organization/Background:		
Introduction: - Hello! We are currently working on a research project that examines the needs of journalists in East Africa and the challenges they face while reporting on climate change, and how they could be better equipped to access accurate information, spot false information, and report more effectively on climate change to the public. - Inform about how the interview data will be used: We plan to record but only to help with notetaking. We will delete the recording once the framework is developed. • Do you give your consent for recording? YES/NO • Do you give your consent for using data anonymously in report? YES/NO - You should express yourselves freely, and you have the right to not answer any questions you feel uncomfortable with. You are also free to end the interview at any time. - Inform how interview will be structured: • An introductory warm up question • Then we want to touch on two main topic areas – Challenges and needs of journalists reporting on climate change and how they deal with competing information.		
Topic	**Questions/Keywords**	**Interviewer's notes**
Warm up questions	What is your current role, and how do you work on climate change?	
	How important do journalists in your country consider climate change?	

Interview grid for Climate misinformation in East Africa project: Interview with KIIs		
Topic	**Questions/Keywords**	**Interviewer's notes**
Challenges	In your view, what are the biggest challenges faced by journalists who want to report on climate change?	
	what role does digital infrastructure such as internet availability and access to online data and information play in effective climate reporting?	
	Are there active attempts from some organizations or institutions to prevent or hinder climate action or climate change reporting? Follow up question if answer is yes: which organizations and what tactics, what areas of climate change do they focus on (RE, net zero, drought etc)	
	What are the main obstacles that hinder the effectiveness of climate change reporting?	
Needs	How can these obstacles be addressed or overcome?	
	What do journalists need to effectively deal with competing or conflicting information where it's unclear whether it's accessing accurate information or mis/ disinformation on climate change?	
	How can climate change information be effectively communicated to the general public?	
	What would need to change so journalists feel better equipped and more able to accurately report on climate change?	