



Climate change journalism in South Africa: noticeable improvements, less than adequate

Enoch Sithole

Wits Centre for Journalism,
University of the Witwatersrand, Johannesburg, South Africa

Fojo study series editors:

Kersti Forsberg, Andreas Önnerfors & Kristoffer Holt

© Enoch Sithole



Fojo Media Institute at Linnaeus University, 2023

Cover photo: Chris Stenger, Unsplash

ISBN: 978-91-8082-010-3

https://doi.org/10.15626/fojo.s.202301

Table of Contents

Abstract	. 1
Executive summary	. 2
Abbreviations	. 4
Introduction	
Contribution toward SDGs	. 5
Scope of the study	. 6
Methodology	.6
Background	.8
Climate journalism in South Africa	
Climate change journalism in Africa1	1
Climate change communication in South Africa1	5
Climate change communication in Africa1	8
Socio-economic context of South Africa2	20
Mapping of contemporary media coverage of climate change in South Africa2	24
Stakeholder interviews2	28
Conclusions4	ŀ1
Discussion4	14
Recommendations4	ŀ5
References4	ŀ7
Appendix 15	56
Riography of Enoch Sithole 5	. 7

Abstract

The media coverage of climate change in South Africa is on the increase, although several issue requiring attention have been identified. These include i) the fact that media coverage is mostly influenced by events such as climate conferences and disasters; ii) a tendency to approach climate change as a beat, instead of incorporating it in other beats since the climate crisis impacts various issues, such as economics, health, politics, food security, agriculture, etc. This has often resulted in a scenario where some of the impacts of climate change are underreported; iii) most of the reporting is found in online media and sometimes behind paywalls; and iv) although showing some improvements, there is a reliance on stories from foreign news networks, something that might suggest that the climate crisis is not of local concern. Overall climate communication by key stakeholders such as the government and the business sector is particularly inadequate. Having conducted a mapping of media coverage by 11 publications and interviewed 42 key stakeholders, this study has made several recommendations which include the training of climate journalists and the conscientization of media houses to improve reporting on the crisis. Government, in particular, has been implored to engage in climate change communication to catapult societal discourse on the subject and improve media reporting.

Executive summary

This study on climate journalism and climate change communication in South Africa is part of Fojo Media Institute's sustainable journalism initiative. The study is meant to contribute to efforts to develop the concept of sustainable journalism, focusing on climate change, through gathering knowledge on media reporting on the climate crisis as well as the overall communication of the issue in the country.

The study was conducted using various research methods, starting with the reviewing of literature on the subjects of media coverage of climate change and stakeholder communication. Secondly, a mapping of contemporary media reporting between September 2021 and August 2022 was conducted. This exercise entailed reviewing articles that were published in 11 online news networks in the country. The publications were selected on the basis of their broadly being read by diverse audiences, including policymakers, business executives, and the general public. Semi-structured and in-depth interviews with key stakeholders, such as reporters, editors, businesspeople, civil society activists, and policymakers (civil servants and politicians) were conducted with 42 participants.

The results show that there is an improvement in the quantity and quality of media coverage of climate change compared to findings from previous studies. However, several issues requiring attention were identified from the mapping of the coverage by the 11 publications as well as the 42 stakeholder interviews. These include i) the fact that media coverage is generally influenced by events such as climate conferences and climate disasters; ii) there is a tendency of the media to approach climate change as a beat, instead of incorporating it in other beats since the climate crisis impacts various issues, such as economics, health, politics, food security, agriculture, etc.; iii) most of the reporting on climate change is found in online media; iv) the climate crisis is poorly communicated, with key stakeholders such as government, business, and the media being blamed the most for the inadequate communication.

The study recommends that i) a further study be conducted to establish the skills gap of climate journalism among journalists. This study would inform the conceptualisation of training programmes and other interventions to raise the skills levels of journalists; ii) the conducting of training courses to upskill journalists; iii) the holding of a climate journalism *indaba* (workshop) involving editors, senior newsroom staff, climate change activists and

policymakers working in the climate change space. This workshop would serve to discuss various issues that were raised in this study and would help unlock media coverage of climate change as well as the overall communication of the crisis in the country; iv) a call be made on the media houses in South Africa to devote adequate resources to the coverage of climate change; v) media houses be conscientized to focus their climate change editorial on local issues to limit reliance on foreign stories on the subject; vi) implore the media houses to avoid publishing climate change stories exclusively in internet platforms and behind paywalls, as a means to ensure maximum public access; and vii) a call be made to the government, scientists, businesses and civil society formations to communicate more systematically on climate change.

Keywords: climate change; journalism; media coverage; South Africa; communication

Abbreviations

AU African Union

CCAFS Climate Change, Agriculture and Food Security

CNN Cable News Network

DCES Developmental, Capable and Ethical State

HSRC Human Science Research Council

IPCC Intergovernmental Panel on Climate Change

MMA Media Monitoring Africa

NIDS National Income Dynamics Study

PCCC Pacific Climate Change Centre

Stats SA Statistics South Africa

SABC South African Broadcasting Corporation

USA United States of America

WFP World Food Programme

Introduction

This study is part of the Sustainable Journalism Partnership with a focus on climate change and the environment. It aims to contribute to efforts to improve climate change journalism in South Africa by i) reviewing existing literature on climate change journalism and overall communication in South Africa; ii) mapping of contemporary media coverage in the country; iii) examining how key stakeholders experience climate journalism; iv) what they think could be improved; and v) examining how key stakeholders perceive climate change communication in the country. Previous studies have painted a bleak picture of climate journalism and overall communication of the climate crisis in South Africa. Inadequate media coverage and poor communication have been mentioned as the reasons for the low climate change literacy in South Africa (see Chingwete et al., 2018). Needless to state, such poor literacy means that communities do not have adequate information to enable them to adequately respond to the climate crisis. It is hoped that this study will inform future actions to respond to the said inadequate media coverage and communication of the climate crisis in South Africa.

Contribution toward SDGs

This study, as well as the recommended future projects, would make a contribution to the following Sustainable Development Goals (SDGs):

- SDG 13: Take urgent action to combat climate change and its impacts. The project is aimed at encouraging media coverage of climate change as means to raise public awareness and help society respond to the crisis.
- SDG 16.10: Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements. This project is aimed at improving media coverage, thus ensuring public access to information about the crisis.
- SDG 17: Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development. The study recommends partnerships between donors, academics, and newsrooms to build a culture of media reporting of climate change.

Scope of the study

This research project encompassed the reviewing of previous studies on climate journalism and broad communication of the climate crisis in South Africa. The idea in this part of the study was to establish the features of climate change reporting and gather the views that scholars and other stakeholders have expressed on the subjects of climate journalism and overall climate change communication in the country. An analysis of previous studies enabled this project to establish the status of climate journalism and climate communication in South Africa. The second part of the study entailed the mapping of contemporary media coverage of climate change by reviewing articles published in some of South Africa's leading publications. The third part of the research comprised the conducting of 42 semi-structured and in-depth interviews with key stakeholders, namely reporters, editors, businesspeople, civil society activists, civil servants, and politicians. The overarching question in the interviews was: What do they think about the present media coverage of climate change, including related topics, and how do they think it could be improved? Other questions were added to tease out other views related to the subjects of media coverage and overall communication of climate change in South Africa.

Methodology

For this study, previous research on climate journalism and climate change communication in South Africa was reviewed. Some of the studies that were reviewed discuss the subjects in both South Africa and other countries on the African continent. Studies on the subjects on the continent were crucial to include since some of them discuss the issues at a broad continental level. The study analysed media coverage between September 2021 and August 2022 in 11 key publications as follows: News24 (33), Business Live (47), TimesLive (61), Independent Online (IOL) (67), Daily Maverick (45), Farmer's Weekly (27), Mail & Guardian (38), Financial Mail (36), Engineering News (33), SowetanLive (48), and the South African Broadcasting Corporation (SABC News online) (41). These are among the leading newspapers in the country. According to the allyoucanread.com website, News24 and TimesLive are the country's first and second-most-read news websites, respectively. IOL ranks third, SowetanLive, eight, the Mail & Guardian, tenth and the Daily Maverick twelfth. Famer's Weekly, Financial Mail and Engineering News were selected because they serve important niche markets in the climate change discourse. SABC News Online is the national public broadcaster's news website and

their inclusion in the study is meant to establish how the public broadcaster has covered climate change in view of its vast and diverse audience. Using the search words 'climate change' and 'global warming', the study picked articles as they came up during the online search. In the absence of a single database of climate change news articles in the country, a search was conducted on each of the 11 news websites. Some of the articles were behind paywalls and subscriptions were taken to access them. The numbers obtained from each publication might not be exhaustive of all the articles published during the period of the study (September 2021-August 2022) but were deemed sufficient to enable the study to make a comprehensive analysis in line with its objectives. The choice of the period of the study was calculated to enable the research to work with the most recent data. As it is discussed elsewhere in this paper, media coverage of climate change in South Africa has been evolving (see Ndong, 2020). Therefore, the broadening of the study period to include several past years would only be useful for historical purposes but not assist in determining the contemporary status, something that is key for this project. In any case, historical accounts of climate journalism in the country are contained in the literature here reviewed.

Furthermore, the study obtained contemporary views on the subjects by conducting 42 semi-structured and in-depth interviews with key stakeholders, such as reporters, editors, businesspeople, civil society activists, and policymakers (civil servants, and politicians). They were chosen for their positions in their organisations as well as their work with regard to climate change, journalism, or communication. Most of the participants requested anonymity, citing factors such as that they were not particularly authorised to speak on behalf of their organisations, or they were speaking off-the-cuff and expressing unresearched personal observations. Here are the name and positions of the participants who agreed to be named:

Media		
Name	Organisation	Position
Eric Naki	The Citizen	Political editor
Tony Weaver	Daily Maverick	Climate change writer
Fiona Macleod	Oxpeckers	Environmental journalist
Nozintombi Miya	SABC	Climate change journalist
Petro Kotze	Freelance journalist	Climate change journalist
Nthabiseng Nhlapo	News24	Women's Editor

Policymakers		
Name	Organisation	Position
Dhesigen Naidoo	Presidential Climate Change	Head of adaptation Commission (Pacific Climate Change Centre (PCCC))
General Bantu Holomisa	Member of Parliament	Member of the PCCC
Life Mahlaule	Emalahleni Local Municipality	Head of climate change
Sohana Singh	Ethekwini Metropolitan Municipality	Senior communication officer
Civil Society		
David Le Page	Fossil Free South Africa	Climate change activist
Academics		
Prof Anton Harber	University of the Witwatersrand	Journalism professor

In line with the aims and objectives of the probe, six questions were asked (see Section 7). The interviews were recorded and transcribed using the speech-to-text transcription system, Otter.ai. The exercise did not entail any quantification or comparison of the data, but a gathering of views and trends.

Background

Climate journalism in South Africa

Media reporting of climate change in South Africa has been the pillar of the communication on the climate crisis (e.g., Cramer, 2008; Shanahan, 2009; Tagbo, 2010; Smith, 2013; Johannessen, 2013; Shimhanda & Vivian, 2021). However, there has been relatively poor media reporting on the subject in South Africa compared to countries in the global north (Hase et al., 2021). When climate news is featured in the country's media, it's dominated by climate events such as international conferences and adverse weather (Shimhanda & Vivian (2021). This approach has attracted criticism because conferences, in particular, tend to address

international policy issues that do little to drive public awareness of climate change by ordinary people (Johannessen, 2013). On the other hand, the mainstream media in South Africa tended to source their climate change stories from international media networks (Tagbo, 2010; Batta et al., 2013; Elia, 2019), evidently reporting about the climate crisis abroad. Tagbo (2010) and Batta et al. (2013), found that African news media (including South Africa) reported less on climate change in the African context because most of the news articles were obtained from foreign news sources and reported from contexts of their own countries. This approach has been criticised in that it creates the impression that the climate crisis is not an issue of concern in African countries (e.g., Batta et al., 2013), hence there is no news about it. This is not conducive to encouraging local communities to take action against climate change.

The media's role in climate change communication is crucial because of its ability to reach vast numbers of people and being a "definer of reality" (Evans & Musvipwa, 2016, p. 199). On the other hand, public perceptions of climate change tend to be intertwined with media representations of the phenomenon (Mahl et al., 2020). Thus, researchers have usually gauged public perception of climate change by studying media reports on the issue. A 2020 Reuters Institute study of the sources of climate change information in 40 countries on all continents, found that most people depended on the media for news about climate change (Newman et al., 2020). However, there have been concerns that "regardless of the source of the information, recommendations for behavioural changes decreased individuals' willingness to take personal actions to reduce greenhouse gases, decreased willingness to support pro-climate candidates, reduced belief in the accelerated speed of climate change, and decreased trust in climate scientists" (Palm et al., 2020, p. 1).

Several studies have also concluded that climate change journalism know-how in South Africa was poor, and this was detectable from the country's media's performance in reporting about the climate issue, which was inadequate (see Cramer, 2008; Shanahan, 2009; Tagbo, 2010; Bosch, 2012; Johannessen, 2013; Smith, 2013; Evans & Musvipwa, 2016; Mulaudzi & Kioko, 2020). More recent studies, however, have found that media coverage seemed to have been on the rise in recent years. Media Monitoring Africa (MMA), for instance, has reported a considerable jump in news reports about climate change from 2018. It found that in 2019, 8 870 articles were published in the country's newspapers, representing a substantial increase from the 4 885 carried in the previous year (Ndong, 2020). The count for the years 2014, 2015, 2016 and 2017 did not exceed 1 000 articles per year, according to data extracted from MMA's

internal monitoring tool, known as Dexter (Ndong, 2020). MMA's findings concur with findings by other researchers that media coverage of climate change tends to increase during the holding of conferences and other events on the subject. As an example, the MMA study mentioned the fact that President Cyril Ramaphosa received much coverage when he addressed the climate change issue at the G7 summit in 2019. The issue of climate change also dominated media reporting on the 7th Tokyo International Conference on Africa and the African Union (AU) summit in the same year. A rise in climate change activism had also contributed to the spike in media reporting (Ndong, 2020).

Although media coverage appears to be improving, concerns about its inadequacy continue to be voiced. South African climate journalist, Leonie Joubert, recently criticised the media, saying it had failed society: "We haven't warned society of the gravest existential threat in our 200,000 years as modern humans. We have failed to shape the public discourse in a way that is protective of everyone. We have largely turned a blind eye to the powerful polluters who have shaped our policies and economies to profit from the free use of our atmospheric space — a shared, global commons — while leaving the rest of us, and the environment, to pick up the bill" (Joubert, 2022).

In an investigation of the media coverage of the April 2022 floods in KwaZulu-Natal, which was reported to have been exacerbated by climate change (see Pinto et al., 2022), Mdaka (2022) found that two of the country's largest online news websites did not sufficiently report on the link between the floods and climate change. News24 and the Independent Online reported extensively about the floods between April and August 2022. The former carried 245 articles and the latter published 269. However, only 23 stories about the floods mentioned climate change as the cause. Mdaka (2022) remarked that it appeared the issue of climate change as the cause of the storms wasn't regarded as being very important. Considering that in spite of the vast number of articles on the floods, climate change was not mentioned in the majority of the stories. Where the articles mentioned climate change as the cause of the floods, they failed to discuss the genesis of the climate crisis and the measures needed to mitigate and adapt to the phenomenon. "This failure robs affected communities of the opportunity to understand the causes of their predicament. It makes it difficult for communities to prepare for future disasters through mitigation and adaptation" (Mdaka, 2022, p. 3).

Various reasons have been advanced for the poor reporting, including suggestions that climate change stories have been considered a "hard-sell", compared with, for instance, politics and

entertainment (Tagbo, 2010, p. 36). It has been suggested that this might change if the media reporting on the climate crisis highlighted sustainability possibilities presented by measures to address climate change. Lately, some media in the country has tended to adopt the opportunity frame, suggesting that addressing global warming has inherent opportunities for the economy and sustainable development. Newspapers that had been sceptical about climate action, such as Business Live, have since adopted the opportunity frame to characterise climate change as an opportunity for ampaient (see Business Live TV, 2022). Sithole (2022) found that resistance to action against the climate crisis had been softening since the country was promised money to finance a just transition from coal to a carbon-free economy (see Wadula, 2021). The newspaper's reporting seems to be moving from cautioning against hasty action to address climate change, to encouraging a move to renewable energy, as an opportunity for investment and sustainable development. "If people can be given news about how to deal with the energy crisis by using renewable energy; how to create new jobs in renewables; how to adapt their agricultural production, and entrepreneurship opportunities, they are most likely to see value in climate news," argued Naki. Thus, it is evident that climate change journalism could build a loyal audience if it reported on solutions to the climate crisis instead of events and disasters, some of which happen in distant countries and have little or no bearing on the lives of local people.

A summary of various studies of media coverage of climate change in South Africa would be as follows: i) lack of skills among journalists; ii) editors shunning climate change stories on the basis that are considered a "hard sell"; iii) the media relies on news stocks from foreign news agencies, claiming there are not enough climate change stories in the country to report on – although this could be a function of a lack of expertise to identify the said stories; and iv) media coverage is influenced by events such as climate conferences, disasters and reports of scientific findings. This leaves stories of day-to-day climate crisis experiences of local communities unreported.

Climate change journalism in Africa

Inadequate media coverage of climate change is not only a South African problem but a continent-wide crisis. Nwabueze and Egbra (2016) found that the media in Nigeria and Ghana, for instance, did not provide significant coverage of climate change issues. Having reviewed 844 newspaper editions in the two countries, there were only 37 stories on climate change from a total of 2 000 articles (Nwabueze & Egbra, 2016). These authors lamented the fact that the

coverage of climate change issues in Nigerian and Ghanaian media was "disproportionate to the level of threat climate change posed to the two countries and the African continent, as a whole" (Nwabueze & Egbra, 2016, p. 121). Their research concluded that African media had a significant amount of work to do in informing the public about climate change and its "adverse and deleterious" effects (p. 123). Having found that the media in Africa largely depended on foreign news agencies for their climate news coverage, they suggested that the continent's journalists should "wake from their slumber" and afford the public information on climate change issues so that there can be a success in the campaign against the scourge (Nwabueze & Egbra, 2016, p. 123).

In another region of the continent, East Africa, a study of media coverage of climate change in Uganda by Nassanga (2013) found that stories on the subject were not given priority by either field journalists or editors. Media professionals in that country found climate change to be a new concept, which made it difficult to understand the issues that are involved (Nassanga, 2013). In Tanzania, the media relies on climate change experts and daily events, such as community meetings and other social gatherings to obtain information about climate change (Siyao & Sife, 2021). According to these authors, journalists engage minimal use of other potential sources of information, such as libraries, printed materials, and internet websites, something that might affect the quality and quantity of climate change information published in the Tanzanian media. Elia (2019) studied media coverage of climate change in Tanzania and found that 49% of journalists reporting on the topic had not had any relevant training. The minimal training that had been provided was spearheaded by foreign agencies, which resulted in reporting that was toned towards the western view of climate change and reflected very little on the experiences of local communities (Elia, 2019). The study found that 77% of media houses lacked editorial policies on the coverage of climate change. Most of the reporting was on the impacts of climate change and adaptation measures (49,3%), followed by weather and climate trends (33,8%), while renewable energy and the link between climate and poverty were the least covered topics (Elia, 2019). In a further study, Elia (2021) found that climate change reporting in Tanzania was made difficult by editors who rejected climate change news, as well as journalists who lacked a grasp of scientific terms used in climate change communication.

The Kenyan media relied largely on foreign news agencies for its reporting on climate change (Environment and Natural Resources, 2016). The study also found that the majority of data cited in news articles was obtained from international scientific reports (31%), the country's

meteorological department (23%) and academic journals (11%). The local media also registered an increase in climate change coverage during international climate change events, as was the case during the Paris Agreement talks in November 2015 (Environment and Natural Resources, 2016). An earlier study by Atieno and Njoroge (2014, p. 7) found that climate change received low coverage in Kenya's media, with increased reporting being noticed when scientific findings were released, leading the local media to be "quick to flash out alarmist news". This led Atieno and Njoroge (2014) to question whether climate change was adequately represented in the country's mainstream media, or the media was merely reporting on sensational stories that attracted scores of readers in an effort to maximise sales. Kenyan media coverage of climate change is made difficult by a lack of journalistic capacity, conflicting priorities in newsrooms and inadequate funding to train and support journalists (Kalonge, 2020).

The issue of the African media relying on foreign media for their reporting is no trivial matter of mere academic concern because such coverage may have a negative impact on communicating climate change to Africans. This sort of coverage means that Africa's climate issues do not get to the continent's media news bulletins, clearing the way for issues from other countries to dominate. In this regard, Africa's climate issues are held as non-existent as far as the average media consumer is concerned. For instance, when America's Cable News Network (CNN) compiled its top 10 list of 2021's climate change disasters, none from Africa made the cut. If this list was to be relied upon in learning where the most severe effects of climate change were observed, the continent's people would have been left with the impression that none was in Africa, meaning that climate change was not a serious issue of concern on their continent. The CNN list, according to Ramirez et al. (2021), was made up of the following climate disasters, from least to most important:

- 10. Historic rain at Greenland's summit: Rain fell for the first time at the typically snowy summit of Greenland.
- 9. Texas deep freeze: An unusual winter storm swept across the central United States, disrupting electricity generation, and leaving some 4 million people without power.
- 8. Fatal floods across three continents: Destructive flash flooding ravaged parts of Western Europe (Germany and Belgium), China's Henan province and the state of Tennessee in the United States of America (USA), killing scores of people and destroying property.

- 7. USA re-joins the Paris Agreement: The USA re-joined the Paris Agreement following its withdrawal by President Donald Trump.
- 6. UN report: A 'code red': The UN's Intergovernmental Panel on Climate Change (IPCC) released AR 6.
- 5. A critical summit in Glasgow: COP 26 took place in Glasgow.
- 4. Hurricane Ida: Category 4 Hurricane Ida destroyed homes, uprooted trees and cut off power to more than a million customers in Mississippi and the already storm-ravaged state of Louisiana.
- 3. December tornado outbreak: A series of tornadoes tore through the Midwestern and South-eastern USA, uprooting trees, levelling homes and killed dozens of people.
- Pacific Northwest heat wave: An unprecedented heat wave in late June 2021 led to the death of hundreds of people in the Pacific Northwest and British Columbia, in the USA.
- Drought, wildfires and water shortages: Fires were experienced in California and two of America's largest water reservoirs, Lake Mead and Lake Powell, went dry, following a drought.

The list missed several climate change-inspired disasters in Africa, such as a crippling drought in the Grand Sud region of Madagascar, which has had a disastrous impact on agriculture, placing 28 000 people in food insecurity and 1.3 million requiring urgent assistance, according to the World Food Programme (2021). The list did not include a climate change-inspired drought that is ravaging northern Kenya's Wajir county, with 2,4 million people struggling to get food (Pietromarchi, 2021). The flooding in South Sudan, which displaced over 800 000 (McGrath, 2021), also did not make the CNN list. These and other omissions make the case for the continent's media to increase their reporting of climate events in their own countries, instead of relying on foreign news services. Such increased reporting would boost communication on the climate crisis in Africa and contribute to behaviour change by the continent's people.

Studies comparing media coverage in Africa and other parts of the world often reveal poorer reporting in Africa. For instance, Hase et al. (2021) reached this conclusion after a study of media coverage in 10 countries that included South African and Namibian newspapers, between 2006 and 2018. The countries polled were Australia, Canada, Germany, India, Namibia, New Zealand, South Africa, Thailand, the UK, and the USA. Articles in two

newspapers in each country were tallied, resulting in a corpus N=71 674. Namibian newspapers were found to have reported the least on climate change, with *Allgemeine Zeitung* and *The Namibian* only presenting 129 and 177 stories, respectively. In South Africa, 288 stories were found in the *Sunday Times* and 1 075 in *The Star*. Newspapers in fellow global south countries, India and Thailand, presented more articles compared to their African counterparts. India's *Hindu* and *Times of India* had 4 625 and 3 921, respectively. In Thailand, the *Bangkok Post* and *The Nation* presented 1 181 and 1 511 climate news stories, respectively. The six global north countries had much larger numbers of news stories compared to the global south countries. Hase et al. (2021) also found that the media in countries in the global north covered climate change more frequently and focused more on climate science, while the media in countries from the global south focused on the challenges and implications of climate change for society, particularly its impacts on lives and livelihoods.

Climate change communication in South Africa

This study looks into two interdependent scholarly subjects: climate change journalism and climate change communication. In scholarship, the latter is the umbrella field that encompasses several disciplines and sub-disciplines, such as public understanding of climate change, mass media coverage (climate journalism), strategic communication, and communication effects (Ballantyne et al., 2016). Climate change communication scholarship in South Africa is largely focused on studying media coverage of climate change (e.g., Cramer, 2008; Shanahan, 2009; Tagbo, 2010; Smith, 2013; Johannessen, 2013; Shimhanda & Vivian, 2021; Mdaka, 2022; Sithole, 2022). However, public understanding of climate change and public policy, which are sub-fields of climate change communication, have also been investigated in several studies. The BBC (2010), Chingwete et al. (2018), Mahl et al. (2020) and Roberts & Struwig (2021), for instance, studied public understanding of climate change, while Averchenkova et al. (2019) investigated climate policy in the country. The BBC (2010) study found that although most South Africans were aware of climate change, their understanding of the science was minimal. Some respondents conflated the terms 'climate change' and 'global warming' with 'ozone depletion' (BBC, 2010). Respondents, however, were able to associate the term 'climate change' with some of the impacts of the phenomenon, such as melting ice caps, rising sea levels, and hurricanes, among others (BBC, 2010). The study found that many South Africans did not regard climate change as having any particular relevance to their country or the African continent, but they are able to link it to domestic issues of concern, such as the loss of wildlife and increased flooding. South Africans further use the term 'climate change' as an umbrella expression that refers to the destruction occurring in their natural surroundings as well as to changes in weather and seasons, which they have been observing over several years of their lifetimes (BBC, 2010).

The BBC (2010) study determined that the majority of South Africans tend to view climate change as a 'green' issue that only the wealthy could afford to worry about. Most South Africans that were polled had limited awareness of the potentially far-reaching social and economic consequences of climate change on their country with regards to issues such as migration, food export revenues, and tourism (BBC, 2010). Nonetheless, the study found that South Africans were well aware that their country and individual citizens contributed to global warming through their reliance on fossil fuels. However, they expressed reluctance to moderate their lifestyles to reduce carbon emissions, partly because they see little government or private sector leadership on the issue. Among the hindrances to a deeper understanding of climate change among ordinary people in South Africa, is the lack of indigenous terms to describe climate change and related subjects (see BBC, 2010). Undoubtedly, this makes communication and understanding of climate change difficult, if not impossible in some communicate climate change to ordinary people in indigenous languages.

Mahl et al. (2020, p. 802) decried that "we are a bit blind about it", suggesting that there was no concerted action to address climate change in the country. They found that most respondents in their study were convinced that climate change was real, although one respondent thought it could also be fake. High-income urban and rural communities have a good understanding of climate change, but low-income respondents answered that they had not heard about the crisis. Although there was an understanding of the anthropogenic causes of climate change, one respondent blamed it on overpopulation (Mahl et al., 2020). The study concluded that some findings were similar to results in other countries of the global south. The similarities include a limited understanding of the contribution humans make to climate change and a lack of serious concern about the crisis (Mahl et al., 2020). However, the study unearthed specifics about South Africa: communities share similar attitudes towards climate change and often identify its effects in their daily lives, yet they differ in their understanding of possible causes, effects, and the measures needed to mitigate or adapt to it. The researchers' speculation

for this divergence in perceptions may be explained by the socio-demographic composition of the South African society.

More recently, the Human Science Research Council (HSRC) found some signs of climate scepticism among the South African population, where 16% believed that there was no change taking place in the world's climate, and 23% did not believe that the changing climate would have any harmful consequences on the world (Roberts & Struwig, 2021). The same study found that only 9% of adult South Africans saw the environment as a top national concern. This may be driven by ignorance, which points to a serious crisis in communicating climate change in the country. Chingwete et al. (2018) also found that there was limited climate change literacy among the continent's citizens.

In a study examining climate change policy in South Africa, Averchenkova et al. (2019) argued that while the country had an elaborate process of consulting stakeholders during policy formulation, climate communication required urgent intervention to improve relationships between the government, private sector, and civil society. Further, there is a need to improve government communication on climate change with the general public. The study cited a respondent who argued that "there's a lot of work on policy design and scenarios, but there's very little to nothing that goes on in terms of getting people on the same page" (Averchenkova et al., 2019, p. 33). The study noted that the Department of Environmental Affairs had undertaken a public engagement programme in an effort to improve awareness and demonstrate the actions that individuals can undertake in fighting climate change and building support for government policies on the subject (Averchenkova et al., 2019, p. 33). However, they lamented that it had not been possible to gauge the success of this campaign in the absence of an evaluation study.

A further sub-field of climate change communication research in South Africa was explored by Evans et al. (2018), who examined the subject from the perspectives of communication effects and conceptual analysis. These authors explored theoretical perspectives, that they argued, would work towards climate change communication in the global south. They analysed various communication approaches used in communicating climate change and identified their strengths and weaknesses. Evans et al. (2018) proposed an integrated and structural participatory approach premised on the participation and empowerment of people. They argued

for what they termed the 'glocal' approach – meaning approaching climate change communication from both the global and local perspectives. This, they added, could advance a two-way exchange of knowledge and information between those in authority, communities, and other stakeholders.

The government appears to have paid little attention to climate change communication compared to HIV and Aids or the Covid-19 pandemic. The government has undertaken several communication campaigns for HIV and AIDS awareness (The New Humanitarian, 2006; Peltzer et al., 2012). Sithole (2021) observed that the government's oomph in fighting the Covid-19 pandemic was lacking in climate change. This is of great concern given the fact that the country is the continent's largest polluter (see Reuters, 2021a) and already experiences serious climate change impacts in the form of droughts, rising sea levels and floods (see Engelbrecht & Monteiro, 2021) and deaths associated with poor air quality as a result of the massive reliance on coal for energy (see Reuters, 2021b).

Climate change communication in Africa

Climate change communication scholarship in Africa has largely been quantitative in nature, using standardised methods that have certain limitations regarding the detail of their characterisations (Mahl et al., 2020). This charge has been supported by other researchers such as Suliman (2018), who also found that climate change communication is generally understudied on the African continent. Having studied research in 67 national and international journals covering the continent on the subjects of climate communication, climate change and agriculture, Oyedele (2015, p. 239) found that most studies relied on "probability sampling and first-level statistical analysis, with only two of 67 studies being theory-driven". Furthermore, Oyedele's research found trends showing that the existing research approach, design, and methods were "purely" elitist and quantitative, something that was regarded as being "grossly inappropriate given the socio-cultural, economic and demographic variables of most audiences on the continent" (p. 240).

Nigerian scholars have also conducted studies on climate change communication in their country, particularly within the sub-field of public understanding of the climate crisis. These studies include Adelekan and Gbadegesin's (2005) assessment of public perceptions of local and global impacts of the threat posed by climate change in the Ibadan metropolis of Nigeria. More specifically, their research assessed the level of knowledge of different climate matters

by residents of Ibadan. One crucial finding from the 453 respondents is that 64% regarded climate as a major factor that affected their socio-economic life, while the remaining 36% did not see the importance of climate change in their daily activities. Ekeka and Adikuru (2022) studied climate change communication in Nigeria and found deficiencies in the content of the messages that are emitted by the government and other stakeholders. They recommended that efforts be made by all concerned climate change bodies to review the content of the messages to ensure clearer and better understanding by the audience. This, they argued, would address the issue of communicating climate change intervention measures in an unclear and ambiguous manner. The government should ensure proper and full implementation of policies on climate intervention measures through its specialised agencies to ensure a successful implementation of mitigation and adaptation measures in the country (Ekeka & Adikuru, 2022). Some of the public understanding of climate change surveys have been conducted by Afrobarometer, a research institution conducting diverse surveys in Africa. Their November 2022 research found that on average across 20 African countries, only half (51%) of citizens were aware of climate change. While awareness is as high as 74% in Malawi, 73% in Mauritius, and 70% in Gabon, in Tunisia, only 22% of the population was aware of climate change (Afrobarometer, 2022). A literature review of media-based climate change communication in Africa by Okoliko and De Wit (2020, p. 63) found that there was growth and diversity in research in the field, but they also found a "pale picture" of communication efforts that were underway to get Africans to engage with climate change issues via the media.

According to Chari (2016), climate change remained misunderstood on the continent, where an information lacuna about the science of the subject persisted, due to socio-cultural, economic, and structural factors. Chari's view is that citizen engagement with climate change discourse was very minimal and awareness of its causes and risks remained marginal. Chari (2016) found that communication of climate change science on the continent could be better served by integrating indigenous communication systems that embrace existing local knowledge. Making the case for the usage of Knowledge Systems, Chari (2016) maintains that indigenous communication media had distinct characteristics that resonated with the lived experiences of the majority of the African people and would thus be more effective in communicating complex issues such as climate change. This argument might not be entirely valid because many of the continent's people also use the same media such as newspapers, radio, television, and digital platforms, as used in other jurisdictions with different cultures. This media is used

in other societal information and education campaigns, such as for instance, to fight the Covid-19 pandemic and HIV and Aids. No case has been made that the mainstream media has been inadequate in these campaigns. Therefore, it should be competent to communicate climate change. What appears to be lacking are not the methods and tools but political will from the relevant stakeholders.

Ogwezi and Umukoro (2020) explored public understanding of climate from a media coverage point of view and found that community and global efforts at mitigating climate change have been greatly influenced by the media's portrayal of climate change in Nigeria and other sub-Saharan African countries. Despite this, it has been generally acknowledged that journalists, especially in the developing world, were not sufficiently equipped to process and effectively communicate climate change information in a manner that would galvanise popular participation in climate change mitigation efforts (Ogwezi & Umukoro, 2020). This points to a lack of skills to mount an effective communication of the subject, rather than the absence of indigenous communication knowledge as argued by Chari (2016).

Most literature on climate change communication in Africa, generally, raises similar issues: i) poor media coverage, considering that this is a key communication tool; ii) reliance of the media on foreign news agencies for their reporting, which does not help much in communicating climate change to local communities in that they get the impression that the crisis is not of local concern; iii) media coverage influenced by extreme weather events and international climate change conferences, instead of daily experiences of local communities, leaving day-to-day climate experiences of communities unreported; iv) a general lack of basic awareness, where vast numbers of people in some countries, are simply not aware of the concept 'climate change' (see Afrobarometer, 2022); and v) a lack of skills among journalists to report on the climate crisis; vi) criticism that climate change communication scholarship on the continent focuses on climate events taking place in western countries and reported by the western media. This is regarded as an obstacle to the fight against climate change on a continent most vulnerable to the effects of global warming.

Socio-economic context of South Africa

It has been established in climate change communication scholarships that socio-economic factors do play a role in media reporting on climate change. In their study of 41 countries and

113 leading newspapers in those countries, Barkemeyer et al. (2017) observed several contextual factors that affect the relative levels of media coverage - either positively or negatively. One is unemployment, which was found to drive media attention to climate change in a country. Broadly speaking, the extent of climate reporting in the mass media is often informed by competing public concerns. On the other hand, factors that often influence a slump in coverage included economic recessions and political "inertia", which make it difficult to sustain the newsworthiness of climate change stories (Anderson, 2019, p. 2). In this regard, the media coverage of climate change in South Africa could also be understood in that context. Furthermore, while climate change has generally been regarded as a physical science issue, it is also acknowledged that it is a social science subject in that dealing with the crisis by finding solutions to the said social challenges it creates will require social interventions, over and above scientific, technological or economic measures. For Riedy (2016), the intractability of climate change from the natural science and economic responses perspectives leads to broader recognition that climate change is a social problem, in which issues of social justice, the social construction of knowledge, the influence of social norms, and the everyday social practices in which people engage are critical. Issues of a socio-economic nature are known to exacerbate communities' vulnerability to the effects of climate change hence Africa is reported to be more exposed because of underdevelopment. The World Bank Group (2021), for instance, suggested that climate change is deeply intertwined with global patterns of inequality, where the most vulnerable people bear the brunt of its impacts the most.

South Africa is one such example where the impacts of climate change are more severe because of the social crisis of poverty and inequality. While the country has made progress on various socio-economic fronts in an effort to overcome the inequality legacies of colonialism and apartheid, several challenges persist (Hlongwane, 2022). The country faces a number of socio-economic challenges, which include high unemployment, poverty, social inequality, high levels of crime, and limited access to public services (Hlongwane, 2022). The unemployment rate stood at 33,9% during the third quarter of 2022, while using the expanded definition of unemployed, which includes those who have stopped looking for work, unemployment sat at 44,1% (Stats SA, 2022). The state's statistics agency also found that the youth unemployment rate was at 46.5%. Grim as they look, the employment figures represent a slight growth from the first half of 2022 (The World Bank, 2022). Unemployment feeds into poverty, which has

reached levels not seen for more than a decade, while inflation has increased to a 13-year high (The World Bank, 2022).

Inequality is among the sources of most of the country's ills. The World Bank, for instance, noted that South Africa was the most unequal country in the world, with race playing a determining factor. The country's 10% of the population owns more than 80% of its wealth (Hlongwane, 2022). According to World Bank (2018), nearly half of the population was considered chronically poor at the upper-bound national poverty line of R992 per person per month, using 2015 prices. Furthermore, in addition to the chronically poor, poverty or the risk thereof, affects the "transient poor" segment of the population, which comprises people who run an above-average risk of falling into poverty in the case of any external shocks (Habiyaremye et al., 2022). The segment of non-poor but vulnerable to poverty consists of people who temporarily have their basic needs covered but face an average risk of slipping into poverty (Habiyaremye et al., 2022). When these two groups are added to the chronically poor, poverty is an ever-present threat for almost 76% of the population (The World Bank, 2018). More than 30 million people (55% of the population) lived in poverty at the upper-bound poverty line in 2015, while 13.8 million people (25%) lived in extreme poverty. An analysis of the National Income Dynamics Study (NIDS) poverty data suggests that eight out of 10 South Africans found themselves in a situation of poverty at least once between 2008 and 2015 (Schotte et al. 2018; Zizzamia et al. 2019). The percentage of the population living below the upper-middle-income-country poverty line fell from 68% to 56% between 2005 and 2010 but has since trended to move slightly upwards to 57% in 2015 and was projected to have reached 60% in 2020 (The World Bank, 2022).

Despite continuing efforts by the government to address gender inequality in South Africa, women have not advanced as rapidly in terms of socio-economic empowerment and gender equality. Males were consistently better off than females when looking at indicators such as literacy, earnings, expenditure shares, and access to the most basic services. Males consistently had higher literacy rates (95,6%) when compared to females (94,0%) in 2017. When comparing the average monthly earnings for males and females by their different education levels, it is observed that, on average, females earned less than males across all educational levels. Females with no education earned 54,4% of the income earned by their male counterparts, while females with high school or tertiary educations earned 68,2% of their male

counterparts' average income. Similar to the no-education category, males with primary education earned almost double of what their female counterparts with the same educational attainment, while those that had a tertiary qualification were earning almost 1,6 times more than their female counterparts. This is a good indication that there are still huge disparities in the labour market between males and females, especially in terms of earnings for comparable levels of educational attainment.

Stats SA (2022a) further found that female-headed households made good progress regarding access to electricity from the main electricity supply as they surpassed access levels in male-headed households in 2010 and have since, remained higher. Access levels in male-headed households stayed fairly flat, increasing by only 3,1 percentage points between 2002 and 2017 while female-headed households saw their access levels improve by 14,3 percentage points over the same period. By 2017, female-headed households reported having 87,2% of a connection to the mains compared to 82,4% in male-headed households. Female-headed households improved at a faster rate in access to water, increasing from 60,0% in 2002 to 70,3% in 2017 (a 10,3 percentage points increase), while male-headed households achieved a 3,4 percentage points increase over the same period. There were no factors that explained this disparity.

A recently released report by Statistics South Africa reveals that South Africa has improved on social issues such as education, and some basic services. The report shows that between 2002 and 2017, there were improvements regarding school-going learners aged 6–18 years. School attendance rose from 91,3% to 96% and problems around access to textbooks, as reported by households, dropped from 24,3% to 5,9%. The increase in school attendance was boosted by the implementation of the 'no-fee' policy. The percentage of learners benefiting from the 'no-fee' policy rose from 0,3% to 64,8% by 2017.

Access to health care is of great concern. A large percentage of the population depends on the public health system to provide for its healthcare needs. According to Stats SA (2022a), there were very low levels of access to medical insurance across all population groups, more especially among black Africans. Black African and coloured-headed households mainly used public healthcare facilities, whereas Indian/Asian and white-headed households used private facilities. Rural areas saw a significant increase in improved sanitation by 40,1 percentage

points from 22,7% in 2002 to 62,8% in 2017, thus reducing the gap between rural and urban areas.

The economy has been on the recovery path following the effects of the COVID-19 pandemic, albeit more slowly than expected, growing by a mere 1,6% in the third quarter of 2022 (Stats SA, 2022b). Longstanding structural constraints, such as electricity shortages, are among the major constraints of economic growth. Important steps were taken in 2021 and 2023 towards addressing structural hurdles to growth over the medium term, including an increase in the licensing threshold for embedded electricity generation (Energy and Mines, 2022). Commodity prices remain important for South Africa, a net exporter of minerals, but a net importer of oil. Fixing structural issues and strengthening investment, including foreign direct investment, will be critical to propelling growth, creating jobs, and addressing poverty and inequality.

Mapping of contemporary media coverage of climate change in South Africa

In spite of complaints from scholars such as Dale McKinley (see McKinley, 2022) and journalist Leonie Joubert (see Joubert, 2022) that the South African media has not done a "good job" in reducing the deficit of climate change information among the country's population, data from the 11 publications reveal a marked increase in climate reporting compared with findings from studies in previous years. The reporting appears to be more constant, and the data appears to support the findings by Ndong (2020). The articles in all the publications exhibit several similar trends: i) reporting on climate change follows events, such as conferences and climate disasters, thus performing what Brüggemann (2017) called the default approach to journalism; ii) the news stories, in the main, talk to top end policy issues, address business matters that relate to the climate crisis and are less aimed at ordinary people. News24, Daily Maverick and Business Live, for instance, reported immensely on issues relating to the economics and finances of climate change. In News24, 17 out of the 33 articles addressed issues that had to do with money and business. Some examples include articles under the following headlines: SA is waiting for a climate finance bailout, but keeps pursuing 'dirty tech'; Civil unrest, climate change, spectrum and 4 other things troubling economic ministers; Sub-Saharan Africa needs as much as R725bn per year to adapt to climate change, says IMF; Minority of SA asset managers are serious about climate change, and some just pretend to be; Climate change has cost Southern Africa R640bn since 1980. In Business Live, which is a business publication, the reporting was even more slanted towards money. The Daily Maverick also followed a similar trend of aiming at top-end news consumers.

Furthermore, the publications had a considerably high number of articles drawn from foreign news agencies and reporting on international climate issues. Previous studies, such as Smith (2013), revealed even higher numbers of international articles. The numbers obtained in this study show an improvement in local articles, but these might have been boosted by the coverage of the April 2022 storms in KwaZulu Natal. Some articles, however, reported on international, not country-specific issues, such as IPCC reports. Most of the international, not country-specific articles, were posted in the World sections of some of the publications. The Sowetan, for example, ran an article under the headline A hotter planet means a hungrier planet, climate report warns, which was about an IPCC report, but was posted in their World section. This is not a trivial observation because placing articles in the World section might not be conducive to encouraging readers who do not have an interest in world affairs to read such articles.

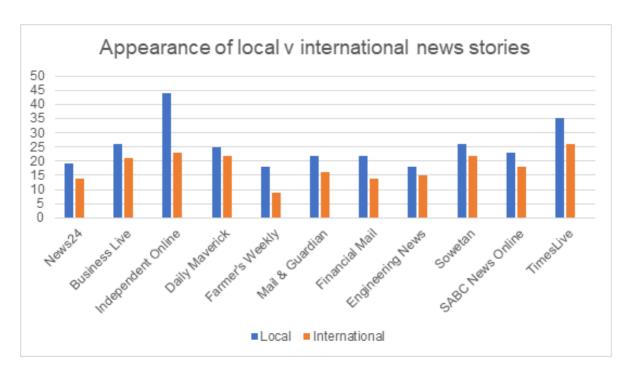


Figure 1: Comparison of local versus international articles in the sample publications.

The matter of local publications drawing a large number of climate change news items from foreign news agencies has been addressed by several researchers over the years (e.g., Tagbo,

2010; Smith, 2013; Johannessen, 2013) as being less helpful in raising climate awareness in local communities. During an interview for this study, Naidoo, lamented that: "There are several media houses that cut and paste from the global media, and they don't even bother to contextualize some of it ... That's problematic." As afore stated, the argument against reliance on foreign news about climate change is that if local communities learn more about climate change happening in other countries, they get the impression that it is not a problem in their own country, and they need not take responsive action. Indeed, Schweizer et al. (2013), Hu & Chen (2016), Gislason et al. (2021) Khadka et al. (2021) and the Royal Town Planning Institute (2021) have advanced the view that the notion of climate change is best understood by individuals if communicated from a local perspective. Schweizer et al. (2013) have added that climate change communication tends to resonate with audiences when: i) it is aligned with cultural values and beliefs; ii) it is meaningful to the target audience; and iii) it empowers audiences to embark on a particular action. Furthermore, Schweizer et al. (2013) stressed that climate change would resonate with audiences when, among others, it was communicated to people who have experienced or are expected to experience its effects. Therefore, reporting on climate events in other countries would have less value compared to reporting on the crisis in the country. Reporting from a local perspective enables audiences to understand that the crisis would potentially affect them. This is not to say that climate events happening in other countries should not be reported locally, but it is critical to strike a good balance since climate change is both a global and local issue. The ultimate test is whether the reporting helps in raising awareness about the crisis and encourages response.

Another noticeable feature in the analysed news articles is reporting that is largely influenced by events such as conferences and climate disasters. TimesLive, for instance, carried 23 out of 61 articles on event-related issues and 18 out of 61 related to climate disasters. As afore discussed, relying on events such as conferences in reporting on climate change has been criticised on the grounds that conferences tend to discuss top-end policy issues instead of addressing day-to-day issues of local communities. Having analysed media reporting on COP17, which was held in Durban, South Africa, in 2011, Johannessen (2013) found that most of the articles were on international policy issues and lamented that nothing was reported about climate change as it related to the city or the KwaZulu-Natal province.

Also worth noting is the fact that some of these publications placed their articles behind paywalls. This is largely the case with Business Live, Mail & Guardian, Financial Mail and TimesLive, to a limited extent. Needless to state, paywalls mean that access is restricted and only those who can afford to pay can access the news. Although the consumption of online news in South Africa appears to be on a constant increase, the numbers of paid subscribers still seem very low. MyBroadband (2021) reported on the numbers of readers of several online news networks as shown in Figure 1, which unfortunately do not disclose which are open and which are on paywalls. However, other sources have revealed that the number of paying subscribers does not appear to be as high. News24, for instance, moved some of its content to a paywall in 2020 and it had only signed up 31 000 paying subscribers in nine months (Gupta, 2021). Juxtaposed with the publication's total online readership of 12.5 million, the paying subscribers' numbers are considerably low. In terms of climate change news, it would mean millions of people missing out on climate stories behind the paywall.

Table 1: Top online publishers in South Africa

Publisher	Media company readership	Publications	Readership
24.com	18.30 million	News24.com	12.50 million
		Businessinsider.co.za	1.74 million
		Netwerk24.com	1.67 million
		Soccerladuma.co.za	1.51 million
		Kick Off South Africa	1.23 million
		Dailysun.co.za	1.21 million
Arena Holdings	8.67 million	Timeslive.co.za	5.58 million
		Sowetanlive.co.za	2.09 million
		Businesslive.co.za	1.47 million
Independent Online	7.31 million	lol.co.za	5.88 million
		Dailyvoice.co.za	0.59 million
		Isolezwe.co.za	0.73 million
Broad Media	6.62 million	BusinessTech.co.za	5.32 million
		MyBroadband.co.za	1.81 million
		TopAuto.co.za	0.23 million

Caxton CTP	5.91 million	Citizen.co.za	2.63 million
		Guzzle.co.za	0.64 million

Source: (MyBroadband, 2021).

Encouraging in the reporting by most of the publications is the fact that they tended to extensively cover stories about scientific findings on the climate crisis. For instance, most of them carried articles referencing scientists' warnings of an impending catastrophe in KwaZulu-Natal before the April 2022 deluge. Citing scientists, News24 reported that Climate change, warming oceans could lead to tropical storms in KwaZulu-Natal. Business Live reported that Researchers say KwaZulu-Natal will see more tropical cyclones. Some publications reported extensively on scientific reports about some of the impacts of climate change on health. To reference a couple, the Independent Online reported on the link between climate change, excessive heat and maternal and the health of new-born babies, citing a Unicef report. Farmer's Weekly reported that Karoo's biodiversity threatened by climate change, citing a report from the International Union for Conservation of Nature. By and large, the reporting shows immense improvement in both quantity and quality of the news stories compared to previous research findings. There is, however, a noticeable absence of articles on the ongoing local effects of climate change such as the drought in the western parts of the country. Furthermore, reporting on the just transition, tended to be dominated by news of the money to be spent on the project, but lacked the voices and experiences of communities that would be directly affected. A general impression of the articles on the climate crisis is that they appear to be aimed at elite news consumers as they address the subject largely from policy and economics points of view.

Stakeholder interviews

One of the key components of this study was to survey the views of stakeholders on media coverage of climate change as well as communication on the crisis in South Africa. The stakeholders were divided into two groups, with one comprising journalists and editors and the other made up of policymakers, climate scientists, businesspeople, and civil society activists. There was a level of enthusiasm from civil society groups and scientists to talk about the issues. Corporate representatives, in particular, displayed immense reluctance to take part in the survey. The five that took part, asked for anonymity and their views were generally too broad and evasive. The views expressed by the respondents were very diverse, but quite a

number of them would not address the questions asked but express broad views about climate change. It was evident that some respondents did not have any clear views on the subjects of the study. For instance, some blamed corruption for poor media coverage and communication of climate change. Others simply argued that they were not experts on the subject therefore they would not want to advance any positions. Hereunder, follows a summary of some of the most incisive views of the respondents based on the following questions:

Question 1: all stakeholders

What do you think about media coverage of climate change in South Africa? Do you think it's adequate?

Naki, believed that the media reporting on climate change was far from inadequate, considering the problems that the climate crisis was causing to South Africans. While there was an improvement from previous years, he said, a lot more could be done. Weaver said "it's sort of how long a piece of string is, because there are so many different types of media" doing all sorts of coverage. His publication, he said, had created a section called Our Burning Planet, which was dedicated to climate change coverage and was "at the cutting edge of climate change and climate crisis reporting". Compared to about five years ago, he said, the coverage has improved and the acceptability of climate news by audiences has also improved.

Macleod thought media coverage of climate change in the country was not adequate. "There is a lot of interest around these issues when big meetings such as the COP27 that's currently taking place in Egypt." The just transition was also getting some interest from the media because of the investment associated with the plan, said Macleod. "Suddenly, there is a sort of a large amount of reportage, but in between, it sort of pulls away." Miya believes that although the coverage cannot be regarded as being adequate, the media in South Africa reports on climate change stories as they happen. "Are all climate change issues covered on a daily basis? Certainly not. Are climate change issues covered to the scale that certain other issues are being covered? Certainly not. But when there are climate change issues, let's take, for example, the recent issue in the Wild Coast where Shell wanted to do seismic surveys (see SABC News, 2022), that issue was covered adequately." The media could do more, in Miya's view.

The view that the media is doing its best in reporting about the climate crisis is also shared by Kotze, who argued that coverage had picked up substantially in the past few years. Kotze said news about climate change in South Africa was also covered extensively by foreign media, which was accessible in South Africa through the internet. An avid radio listener, Kotze lamented the fact that there was very little news about climate change on radio, most of it was found on online news sites such as the Daily Maverick and News24, she said. "I very rarely hear anything related to climate change on the radio news, in particular, unless it's related to a disaster... Unless there's a crisis unfolding somewhere." Kotze's remarks are in line with arguments already made in this study that climate change reporting in the country is largely on online media and behind paywalls in some publications. Needless to restate, this does not facilitate public access to information about climate change.

For Prof Harber, the question can be answered by another question: "Are all South Africans fully alerted and informed about how climate change is going to affect us? Not how it affects other countries, how it's going to affect us? My answer to that would be 'no'. "The media is not playing its role in saying to ordinary people, to politicians, to everyone: 'you need to pay attention to this, it's going to have an impact on our country. Our economy, our people, everything, pay attention'. There are some outlets making an effort, but where we fall short is in making it interesting and accessible to ordinary people. 'How does it affect you?' We don't have enough of that." He said the media was reporting on scientific jargon often from climate conferences, without finding the language and stories that make people "sit up and think about it". Nonetheless, he said there were some exceptions. Nhlapo was also of the view that the coverage was not adequate, it was in need of much improvement. She said: "It's not enough. In general, I think there is a lot that could be done."

Stakeholders in policymaking were generally of the view that media coverage of climate change was less than adequate, although some acknowledged it was on the rise. Mahlaule said different types of media covered climate change differently. Local media was shallow, while national radio, for instance, had a better quality. This contradicts Kotze's take that radio reported less on climate change. Online media had a more detailed and quality coverage, he said. Singh answered the question with an emphatic "no". "No. I think more needs to be done to educate communities at the grassroots level. It needs to be more frequent, almost like a sustained campaign."

Naidoo said various factors around the subject of climate change had helped catapult media coverage, which he said showed some signs of improvement. He gave the example of COP17, saying it was covered extensively by the media. There were various factors that were influencing media coverage, he said. These included the fact that climate change had become a reality to many people as its effects were everywhere "for everyone to see". The releasing of scientific reports by the IPCC, for example, the work of the PCCC and the debates around the just transition, were among the factors that influenced media coverage. "There's a peak of media coverage. Yes, it's possible that this will fall away because all of these issues play in the limelight, and then other issues take over. It's also possible that it will continue going up." General Holomisa, who is also the leader of the parliamentary party, the United Democratic Movement said the media coverage was not quite adequate because most of the news on climate change was found on online platforms. Reporting on these platforms meant that ordinary people, particularly in rural areas, who do not have access to online technology would not access the information. Holomisa believed that if the state was to come up with a public awareness campaign, this would encourage the media to cover the issue more. As earlier stated, the government has not implemented any communication campaign on climate change (see 4.3)

Civil society organisations were also of the view that coverage was on the rise, but there was much room for improvement. Le Page was of the view that "the reporting of climate change in South Africa is improving. There is a positive trend". However, he said, the amount of climate reporting was not nearly sufficient, given the extent of the crisis. The insufficient reporting gave rise to the conceptualisation of the slogan 'climate news every day', said Le Page. "The next problem is a structural one, which is that climate coverage all too often is stuck away in a category by itself, separate from the main concerns and issues of the day, and it's not sufficiently integrated into the main news. The signal that is sent to the public is that 'this is somehow a secondary set of issues, and the real issues are corruption and economic growth or the lack of, and so on and so forth. Climate is something you can think about afterwards, if you have time', which is really not the case, at all." Another activist, who requested anonymity, decried that journalists in the country's media lacked an understanding of the issues involved in climate change, thus they covered it poorly, which put audiences off. "The issue is not with

the public (not welcoming climate news), it's because it is so badly reported that you don't follow what they are saying, so you prefer not to read it."

Question 2: journalists and editors

It has been suggested that climate change stories "don't sell", meaning they are not attractive to audiences. Is this your experience, and what could be done to change this?

Weaver said he was aware of the argument that climate change stories were not attractive to media consumers, but he thought the media had a responsibility to report on climate change in the public interest because it affected every sphere of life. "It impacts everything: food security, poverty, jobs, the economy, politics – it's the framework that informs everything." In his view, news about policy conferences is attractive to audiences as are reports about potential or actual climate disasters. However, audiences get bored quickly with policy issues because they tend to be elaborate, he argued. Miya had some understanding of the argument that climate change stories in the media "don't sell". "A lot of climate change issues, to be brutally and bluntly honest with you, don't resonate with people. They resonate with people when they are directly affected by climate change issues." Miya believed there should be a paradigm shift in the way climate change is handled by all sections of society in South Africa, which would positively impact media coverage of the subject. The climate change story can't resonate with people if it keeps on being about big policy issues such as net zero emissions, for instance, argued Miya. The story needs to be linked to day-to-day issues affecting individuals. "Why is it important for Mandla (name of a person) to care about global warming, or South Africa reaching net zero by 2025 (sic) if he is struggling to find a job and feed his family? It's not that the stories don't sell. It's that these are stories that are not necessarily resonating with ordinary South Africans. And I truly believe that it's not just the journalist's job to conscientize people about climate change issues. This is a national issue. There needs to be a paradigm shift on how the topic of climate change is centered in our daily conversations, as South Africans." Miya said Covid-19 was made to become an issue that involved everyone in society and the same could be done with climate change.

For Harber, the country's newsrooms have simply not taken the issue seriously. "Let me just ask one thing, first: How many of our media have an environmental or a climate change editor? There are very few. It's one of the biggest stories that's relevant to people." Harber said the real

skill in covering climate change is in finding stories. Climate change, he added, impacts on the daily lives of ordinary people, and it was essential that journalists in various news beats were made aware that they can report about climate change in their own beats. "It's a bit like covering the economy, you can't leave it to economics journalists. You have to say: 'if you're a sports writer, how is it going to fit in sport? If you are a political writer, what impact does it have on politics?" Media owners and editors had to invest in training their reporters on climate change journalism, said Harber, adding that it was not good enough to say that climate stories "don't sell" because there is an obligation and duty to make sure the issue is covered. "We hear the same thing about covering Africa: 'Oh, we know we should do but our readers aren't interested.' Well, if readers aren't interested, we are failing."

The issue of how the media reports on climate change was also discussed by Nhlapo, who said there was little effort on the side of the media to report on the issue in such a way that was appealing to ordinary members of society. "Climate change has been portrayed (in the media) as something so high brow, so technical, very distanced from our everyday lives." News stories about climate change need to be made to resonate with the daily lives of ordinary people, she argued. "If we were to bring a bit of the human element to it, and bring it home to people, they would be interested... Instead of telling somebody about the ozone layer, tell them about how a drought may cost them financially in their private pockets." Stories about the billions of rand that are needed to move the country to carbon neutrality were "too much for an ordinary person to absorb", opined Nhlapo. Kotze believed the task for journalists was to find the kind of stories and angles that fitted particular publications and their audiences. In her experience, as an international freelance journalist, she constantly got assigned to cover climate stories for diverse publications. "I'm looking for climate change stories all the time, because I know I can sell them."

Question 3: stakeholders outside the media

Does the news you get from the media on climate change and related subjects make you understand the issues involved?

Most stakeholders answered this question in the affirmative, although lamenting the fact that the way the news is presented might not help ordinary citizens to understand climate change issues. Several issues were pointed out as potentially hindering public understanding of climate change. Le Page pointed to an HSRC survey that found that only 20% of South Africans understood that climate change is caused by human activities, specifically the releasing of greenhouse gases from primarily the burning of oil, gas, and coal (see Roberts & Struwig, 2021). "We really need to have that more regularly unpacked and to have it more explained so that people properly understand what it means, who is responsible. I think there is a big gap that sits in the way climate is reported." Singh concurred, saying although the news had sufficient detail for her to understand the issues, "more needs to be done about explaining the basics. The focus is often on industry impacts, environmental degradation, environmental advocacy, and activism".

For Naidoo, any coverage is good coverage, since it gets the issue "in a much more heightened way in the public domain, because for far too long, the climate change issue has been hidden under the carpet". "If I have to be a little bit critical about the coverage, it's because it tends to concentrate on the sensational aspects - the flood aspects, the drought, the catastrophic warning aspects. That's understandable because that is how you capture people's attention. But what needs to follow through fairly quickly, once you have got the people's attention, is (reporting on) all of the strategies and the work plans that are being developed, that will actually empower people to take control of their own situations with regards to climate change. And there is not a lot of that in the media." Naidoo mentioned the coverage of the April 2022 floods in KwaZulu-Natal as an example. The deluge created immense devastation including the death of some 450 people and the disappearance of about 40 others, he said. The story of the floods received adequate media coverage, but immediately following the floods "a whole bunch of work has been done around analysing the disaster and building resilience plans to ensure that the next flood event is much less impactful than this one". The media, he said, has not covered news about this work. "It's not in the public domain, in any way. I don't expect it to enjoy the same level of interest as the catastrophe, but the coverage can be proportionate, because it's not good enough to report on news scaring people about climate change, it's good that you bring the awareness so you don't create a paralysed people that say: 'oh, what can we do with these catastrophes?" Naidoo's view can be backed by findings by Mdaka (2022) who found the mentioning of climate change in news articles about the floods in KwaZulu Natal reached a peak shortly after the incident but waned within a few months (see 4.1).

Question 4: all stakeholders

What sort of news do you think would make audiences change their behaviour in response to climate change, e.g., policy, climate disasters, future impacts, opportunities?

There were two most salient answers to this question from the majority of respondents: i) news warning about impending climate disasters and ii) news about opportunities that certain actions against the climate crisis can accrue to individuals, communities, and businesses. As a municipal official, Mahlaule preferred news about impending disasters to enable both the local government and communities to take precautionary measures. The same view was shared by several other respondents, but some decried the fact that previous media reports about imminent disasters tended to be alarmist without telling communities what to do to mitigate the effects of the said impending disasters. Naki would prefer more stories about opportunities, since they would help people deal with the energy crisis in South Africa by, for example, opting for renewable sources of energy. Entrepreneurs would learn about business opportunities offered by technologies used to mitigate climate change, he said.

Weaver believes the climate change story needs to evolve to the climate crisis story. Unlike Europe and other parts of the world, argued Weaver, in South Africa there is a very rich wildlife with large sectors of the population dependent on subsistence agriculture. "If there's a catastrophic climate event, and that starts to affect the biodiversity, the wildlife, the crop cycle, food security, etc., that immediately starts affecting prices. In this instance, an abstract concept (such as climate change) starts becoming practical, impacting directly on people's lives. Then it becomes real, it becomes part of the need for awareness." Media reporting needs to tie day-to-day issues with climate change. Any news consumer, including individuals and businesses, could benefit from this sort of reporting, said Weaver. Businesses, for example, could learn about renewable energy stocks. If the news does not advance solutions, consumers cannot remain interested. "Otherwise, people ask: 'what can we do with all this information about climate change?""

As a freelance journalist, Kotze said editors, who assign her stories, were looking for stories that offered solutions to the climate crisis. "They're looking for examples of where people on the ground are finding solutions to create a future life in the midst of the impacts of climate change." Stories about technology that have the potential to ameliorate the impacts of climate

change are in big demand from the publications Kotze writes for. Research-based articles are also a big seller, said Kotze. A scientist, who asked to remain anonymous, said media reporting should focus on important issue locally, such as ways in which climate change impacts upon people's lives on an everyday basis. These would mainly be issues to deal with energy production as the country is affected by frequent power outages, for instance. "Here, the energy generation and supply systems are very fragile, and it is wholly carbon dependence. So, in terms of decarbonisation of the economy and moving away from fossil fuels, production of energy is a very important issue," said the anonymous scientist. Other climate change-related issues that should be reported on to encourage behaviour change include water security, said the scientist. The country, he said, had problems with water availability and that has to do with rainfall, floods and droughts that are associated with climate variability. He said all of these problems are amplified by climate change and have big implications for people's everyday lives. There are issues that are directly related to climate change such as the frequency and the magnitude of incoming cyclones from the Indian Ocean, which give rise to big storms and floods, particularly in the northeast of the country. The media, he said, should be engaging with these types of issues as a way to ground these "hypothetical ideas about climate change in people's everyday lives because these are the things that people experience".

The media would be helpful in encouraging behaviour change if it reported on information that educates members of the public to mitigate the effects of climate change. These could include planting trees around their homes to help prevent the destruction of homes from storms, opined Holomisa. Le Page believes media reporting should concentrate on all the issues with a particular emphasis on opportunities that would emanate from efforts to fight climate change. "The issue of opportunities is often underestimated and so, those who resist making the kinds of systemic changes that we need to manage the climate crisis properly, often pointed to the costs of dealing with climate change, primarily the costs of transforming our infrastructure and energy systems. Those costs are discussed without talking about the upside benefits, mainly having a liveable planet still in the (next) decades and in the long-term. There are also enormous economic benefits that we stand to get from having lower and more stable energy prices. For example, as we move away from fossil fuels, which are often extremely variable in cost and often extremely high, we move away from the kinds of instabilities that come from being dependent on unpleasant regimes like Russia and Saudi Arabia for our energy reserves."

that deaths from pollution created by the burning of fossil fuels would be reduced, said Le Page. "Just on the public health benefits alone, if we mustered a response to the fossil fuels industry that was similar to the public health spending that we pulled together for Covid-19, we would be able to fix climate change very quickly. But we are not doing that because we over-overestimate the costs of making these changes and greatly underestimate the future benefits of doing so."

For Naidoo, the media should cover all aspects of climate change because it reports to a diverse audience but focusing on the impacts of climate change on the lives and livelihoods of individuals should be prioritised. "I think the one component will be around the various ways in which climate change actually affects your life as an individual, as an ordinary citizen. It affects you physically; it affects your health; it affects your psychological status; it affects your livelihood; It affects your physical wellbeing... The difference between being so many meters from a riverbank as opposed to living a kilometer away, makes a big difference." General awareness about the climate crisis would help in encouraging behaviour change, in Naidoo's view. Opportunities, be they economic or of bettering the lives of individuals, have a great potential to encourage a positive response to the climate crisis. With regards to the economy, Naidoo indicated that "we are going to be ramping up other mines in this country around lithium and copper, and aluminium and vanadium. These are higher value metals (than coal) that require the basic operation of mining skills that we already have in the country". However, there will be a need for some reorientation, which is something the media could focus on, he said. The just transition that is already under way in the country would be a continuous news story that Naidoo believes could encourage action. "The transition can be really positive. It can actually create more jobs than we currently have. The transition can organise for more business enterprise development than we currently have. And this is really important for people to know, to understand and to agitate for the changes that need to happen around the state."

Question 5: all stakeholders

What do you think could be improved in media coverage of climate change in South Africa?

The answer to this question was largely contained in answers to previous questions, with only a couple of additions. Nhlapo said although climate change wasn't covered adequately, efforts in many newsrooms to increase the reporting on the subject were a step in the right direction that

was likely to bear fruits. She gave the example of her employers, New24, who were setting up a climate change desk. Although welcoming various efforts to improve coverage, Nhlapo decried the fact that several news stories on climate change were behind paywalls in some newspapers, including News24 and Business Live, among others. That creates a problem, she said, because no matter how important the news on climate change might be to everyone, many people could not afford paying for subscriptions. That makes climate news to be the preserve of a few that can afford to pay.

Le Page said journalists could partner with civil society organisations to access training that would empower them to understand and subsequently cover the climate story adequately. "I think we need to educate journalists a lot better. We also need to persuade editors, who are the kind of key gatekeepers, and news editors to bring a different lens to this issue, because often there are journalists who are doing great reporting but, as I pointed out earlier, that great reporting is stuck away on the environment pages or in the climate section, and not given the headline attention it deserves."

The cost of covering climate change news was raised as a possible hindrance to adequate reporting, in the face of shrinking resources in various newsrooms. The participants did not have any specific suggestions on how this could be overcome.

Question 6: all stakeholders

Outside media reporting, what do you think about the overall communication of climate change in South Africa by key stakeholders, i.e., policymakers, business sector and civil society activists?

Several respondents were of the view that climate change is poorly communicated by all stakeholders in South Africa. Respondents from the media largely blamed other stakeholders for the poor media reporting on the subject, saying they as the key sources that should inform media coverage, their poor communication means that the media is starved of climate news. Miya, for example, said communicating climate change was a societal issue, not just a media issue, and the media would be all keen to report on the conversations on the subject taking place in society. "It's not just the media's role to tell people about climate change, because most of the time if we (the media) are telling people about climate change issues or climate change

stories, it's often after the fact, it's after something has happened." With the general answer from all respondents being an emphatic 'no', some stakeholders blamed others for the problem.

Scientists thought government and business as well as other powerful formations in the country should be leading in the effort to communicate climate change. Speaking anonymously, one scientist said: "The problem is that in our society and in our politics, generally, everything is top dominated and that has led to people who are in positions of power in the country, whether that's in industry, or government, being slightly arrogant and ignoring what is going on on the ground, ignoring problems that people have on a day-to-day basis. There is an unwillingness to deal with climate change related issues (from people in authority), yet we know from research, globally, that climate change impacts on the most vulnerable people in society. People in charge, in both governments and industry, are not adequately engaging with the impacts of climate change upon the most vulnerable people and the poorest people in society."

Another anonymous scientist though that the scientific and academic communities couldn't do more than they are doing in communicating climate change. He said their role was to research and reveal the data about global warming. From there, he said, other formations, such as the media, government and civil society should disseminate the information to the public. "We (the scientists) communicate our findings to the government, the media, business and civil society, thereafter it's their task to take that information to the public," said the scientist. He added: "Take the issue of IPCC reports - they are produced by scientists from all over the world and handed to the UN and member governments. Some governments put the report in the shelf and don't communicate what its contents to the public. What can scientists do about that? The UN releases press statements announcing the findings with a summary that the media can comfortably use, because we are mindful that the report is full of scientific terms that some journalists might not be familiar with, but some media don't report about it. Only a few in South Africa reported about it (IPCC AR6) last year. It's difficult for scientists, actually, frustrating."

Respondents representing policymaking structures, who have largely been blamed for the inadequate communication, were in agreement that climate change was poorly communicated in South Africa. Holomisa thought the communication was dominated by headlines in the newspapers reporting on controversies. "The minister of minerals and energy says, 'we need

this, or we don't need that', then there are lobbyists who say 'no you need to move fast from fossil fuels to the world of renewables. So, what you are seeing right now is (that) we are not yet at a stage where we can come up with a consolidated programme to educate people because there is no consensus emerging on how to move towards renewable energy, etc." The war between Russia and Ukraine has also complicated the messaging about moving away from fossil fuels to renewable energy because western countries that have been promoting this transition are now procuring even more coal from us for their energy needs, "yet here they tell us to stop" (using coal). Issues such as this complicate communication about climate change in the country, said Holomisa.

Mahlaule and Naidoo pointed out to the confusion that is generated by contradictory messages from President Ramaphosa and minerals and energy minister, Gwede Mantashe, saying it made communication on the issue even more difficult. The fact that the minister tends to contradict what the president says about the just transition, for example, is for Mahlaule a source for concern. He said the media picked on that, thus creating confusion among members of the public. Naidoo agreed the contradictory statements between the president and the minister were counterproductive to the effort of communicating climate change, but thought they showed a positive side of democratising the debate about climate change. He though the president was taking a lead in communicating climate change positively "but even then, there is a counterpoint with the minister of minerals and energy, who gets as much media time as the president does on this issue and talks about it in the other direction. And he does it very frequently. In fact, he doesn't miss a chance on that". Naidoo thought government climate change communication was ramping up, but he lamented the fact that the corporate sector was lagging behind. "The World Economic Forum global risk register for 2022 says that the top three risks to the global economy are all related to climate change. But you don't get a reflection of that conversation in any kind of adequate way in the business sector, not just the media, but in the way they (the corporate sector) communicate." He praised some of the country's big banks which he said had made statements about the changes in their investment strategies around energy, saying it was good communication, but he thought there had to be a lot more. He thought the country's academic community was doing its bit by being very actively involved in the climate crisis space. Civil society, such as labour organisations, were actively involved in the just transition processes but Naidoo was concerned that "you don't see much in the way of communication to the membership of the unions around these issues. It tends to stay in the hierarchy".

Singh thought civil society did most of the advocacy and that their role in raising awareness of the climate crisis needed to be commended. Corporate sector communication on the issue did not impress her as she thought "businesses will only communicate if they are doing something to mitigate the impact of their operations on the environment. While it is good that they are taking a step in the right direction, one has to wonder if it's enough". She thought the government was doing its best but lamented the fact that "the wheels of government always turn too slowly".

Conclusions

There was a high level of enthusiasm among participants from civil society groups and scientists who took part in the study. Journalists and policymakers also displayed some enthusiasm, although some appeared defensive of their sectors. Corporate representatives displayed immense reluctance to take part in the survey. The five that took part, asked for anonymity and their views were generally too broad and evasive. The views expressed by the respondents were very diverse, but quite a number of them would not address the questions asked but expressed broad views about climate change. It was evident that some respondents did not have any clear views on the subjects. For instance, some blamed corruption for poor media coverage and communication of climate change. Others simply argued that they were not experts on the subject, and they would not want to advance any positions. Broadly, the study found that while media coverage of climate change in South Africa has been on the rise in recent years (Ndong, 2020), it remains inadequate. This study made findings similar to previous studies with regard to the improvement in media coverage. Overall communication on the crisis by other key stakeholders has been found to be lacking (see BBC, 2010; Mahl et al., 2020) and this study found no signs of improvement.

For Question 1 'What do you think about media coverage of climate change in South Africa? Do you think it's adequate?' almost all respondents agreed that the media coverage was inadequate, but there were improvements. This assertion was backed by both the literature review (see Ndong, 2020), for instance, and the data this study found while mapping coverage in 11 online publications (see Section 6). By and large, the articles reported on climate

conferences, disasters (impending and actual) and reports of scientific findings. There was a noticeable lack of articles reporting on the effects of climate change such as the ongoing drought in the western parts of South Africa. Reporting on climate effects largely followed disasters such the KwaZulu Natal floods, which were covered as breaking news. This means the media largely followed breaking news and did not report on daily experiences of communities or other activities to mitigate or adapt to climate change. This point was made strongly by Naidoo in Section 7 of this report. In spite of the improving coverage, dependence on articles from foreign news agencies persists. Naidoo decried the fact that the usage of foreign articles went to the extent of some media cutting and pasting articles from foreign publications without giving the local context of the content.

Answering Question 2 'It has been suggested that climate change stories "don't sell", meaning they are not attractive to audiences. Is this your experience, and what could be done to change this?' there was a broad acceptance that this might be so, but several views were expressed. Some participants felt that some climate news did not resonate with some audiences, particularly those who faced challenges of unemployment and poverty. These challenges made them become more concerned with their plight than the climate change debates, it was said. Other participants were of the view that if the reporting did not resonate with audiences, it was a function of poor journalism. Coverage, they argued, should be made relevant to audiences by reporting on climate issues that are related to audiences' day-to-day living issues. These could be droughts affecting agricultural yields and leading to higher food prices, for example. Furthermore, it was suggested that climate news would resonate with most audiences if it highlighted opportunities that are presented by new technologies that are used to address climate change, such as renewable energy. Climate news should also be made to empower people to take control of their lives which are changing as a result of global warming, it was argued.

In Question 3, they were asked: Does the news you get from the media on climate change and related subjects make you understand the issues involved? While nearly all respondents said they understood the news about climate change in the media, most said it was likely that the majority of the citizenry might not fully understand the content of climate news. It was suggested that reporting should highlight the causes of climate change so as to enable audiences to understand the need to respond by changing their behaviour. It was also suggested

that the media should not stop at reporting about climate disasters but should also cover measures such as policies and other interventions to mitigate future climatic events.

The answers to Question 4 were similar to the answers to Question 2. It was added that the media should handle the climate change story as a "climate crisis" story to emphasise the fact that global warming was an existential crisis. This would make audiences take the issue more seriously and respond with behaviour change and other measures.

In Question 5, 'What do you think could be improved in media coverage of climate change in South Africa?' the participants noted that some media houses such as the Daily Maverick and News24 were ratcheting up their climate coverage by creating special desks in their newsrooms. It was suggested that the practice of placing climate news articles behind paywalls was detrimental to the quest to communicate climate change to ordinary citizens because most would not afford to pay subscriptions. The fact that climate change was largely covered by online media was in itself less helpful because some of the most vulnerable communities in rural areas had no access to the internet. Suggestions were made that journalists should team up with civil society formations to access training on climate change, which would empower them to report on the subject with more confidence.

On the matter of overall communication of climate change by stakeholders other than the media, which was raised in Question 6, 'Outside media reporting, what do you think about the overall communication of climate change in South Africa by key stakeholders, i.e., policymakers, business sector and civil society activists?' the overwhelming response was that key stakeholders such as the government and the private sector fared dismally. The government, in particular, was accused of failing to communicate issues such as the IPCC reports, thus denying the public crucial information about the climate crisis. While the media has been blamed for failing to publicise IPCC reports (see Friedman, 2021), the participants felt it was the duty of the government to spearhead such communication. The business sector was accused of communicating on the subject only in instances where they propagandised their own climate initiatives. There was a link established between inadequate media coverage and poor government and business sector communication. It was suggested that if these key stakeholders were keenly communicating on climate change, the media would improve its coverage, reporting on the said communication. Contradictory messages between the president

and the minister of mineral resources and energy were pointed out as counter-productive to the effort of communicating climate change.

Discussion

The literature review in Sections 4 and 5 as well as the mapping of contemporary media coverage in Section 6 have given a clear indication of the status of climate journalism and overall communication of the climate crisis in South Africa. The participants discussed the issues as outlined in Section 7 and reduced to findings in Section 8. The main takeaways from this study are that while there is an improvement in media coverage, there is a need for more, given the centrality of climate change in the lives of South Africans. The improvement will come from more training and the raising of the consciousness of journalists and editors to have the necessary skills to cover climate change and to treat the climate story as an important one. The literature review in this study mentioned findings by Elia (2019), which revealed that climate journalism training was inadequate in Tanzania and was one of the causes of poor coverage of climate change. The same could be said about South Africa where there is no known climate journalism training programme.

The fact that climate stories were reported to feature more in online platforms than print and broadcasting media was mentioned as an impediment to access by ordinary people who have no access to the internet. This was anecdotally mentioned by the participants, but the study has not been able to verify the correctness, or otherwise, of the claim. This problem is exacerbated by the fact that some content on online platforms is behind paywalls, which compounds the limitation of access. The country's media captains should take note of this deficiency because the story of climate change should be accessible to as many audiences as possible.

The issue of climate news not resonating with audiences was approached in different ways by different participants. Some saw it as a function of poor reporting of climate news by journalists, where the stories did not cover issues that mattered to audiences. Other respondents found it to be a function of the fact that climate news was often packed with policy and scientific issues that did not attract the attention of some audiences. Be it as it may, the media has an obligation to lead in agenda-setting in their reporting. The media plays a critical role in influencing the focus of the public's attention to important issues of the moment (McCombs, 2008). On the other hand, media consumers tend to believe what they get from the media

(Mahl et al., 2020). Günay et al. (2021) argued that because of the media's agenda-setting power, the news media is an important source of information for individuals and collectives about scientific issues, people, and events. Indeed, Weaver argued that by reporting on climate change, the media would be rendering a public service whether the stories "sell" or not.

With regard to the overall communication of climate change, it is clear that the key stakeholder, the government, has a lot to do. As suggested by the participants, a concerted campaign to raise public awareness would boost media coverage and multiply the tools for communicating climate change. It's a serious indictment that in the face of the devastating impacts of climate change, as seen in KwaZulu Natal following the April 2022 storms and the ongoing drought in the western parts of the country, the government continues to pay lip service to communicating the climate crisis. The British government's Department of Communities and Local Government has asserted that it was the role of the government "to create a community that is well informed about climate change and thus able to make globally responsible choices" (UK Department of Communities and Local Government, 2006, p. 3). Climate change is a global problem with wide-ranging impacts, thus it is essential (for governments) to communicate its messages successfully to different stakeholders, including residents and opinion formers (UK Department of Communities and Local Government, 2006).

In the context of the Sustainable Journalism Partnership, this study has attempted to map out the status of climate journalism in South Africa and the steps needed to improve media coverage in the country. The findings point to the need to implement various initiatives to improve the intellectual ability of journalists and editors to handle the climate story. The recommendations hereunder discuss some of the steps.

Recommendations

Based on the literature review, the contemporary media coverage of the climate crisis and the views expressed by the participants, a few actions should be considered in the effort to improve media coverage and overall communication of the climate crisis in the country. With the lack of skills in climate journalism having been raised in both the literature review and the data, it is proposed that i) a study be conducted to establish the skills gap of climate journalism among journalists. This study would inform the conceptualisation of training programmes and other

interventions to raise the skills levels of journalists; ii) the conducting of training courses to upskill journalists; iii) the holding of a climate journalism *indaba* (workshop) involving editors, senior newsroom staff, climate change activists and policymakers working in the climate change space. This workshop would serve to discuss various issues that were raised in this study and would help unlock media coverage of climate change as well as the overall communication of the crisis in the country; iv) a call be made on the media houses in South Africa to devote adequate resources to the coverage of climate change; v) media houses be conscientized to focus their climate change editorial on local issues to limit reliance on foreign stories on the subject; vi) implore the media houses to avoid publishing climate change stories exclusively in internet platforms and behind paywalls, as a means to ensure maximum public access; and vii) a call be made to the government, scientists, businesses and civil society formations to communicate more systematically on climate change.

The matter of the cost to finance climate change coverage was raised as a possible hindrance to media coverage, but no concrete suggestions were made. Based on previous experiences of covering issues such as public health that were considered expensive to report on, it is recommended that partnerships between donors and media organisations be established where the former could meet the salary costs of climate change reporters in selected newsrooms for a period of 24 months. This would help inculcate the culture of climate journalism and might have a lasting effect where newsrooms could keep the sponsored journalists as well as the climate beat.

References

Adelekan, I.O. & Gbadegesin, A.S. (2005). Analysis of the public perception of climate change issues in an indigenous African city. *International Journal of Environmental Studies*, 62(1), 115-124.

Afrobarometer. (2022, November 4). *Afrobarometer's new country cards document Africans' demand for action on climate change* (Press Release). Retrieved on 30 January 2023 from https://www.afrobarometer.org/wp-content/uploads/2022/11/News-release-Afrobarometers-new-country-cards-document-Africans-demand-for-climate-action-4nov22.pdf

Anderson, A.G. (2019). Climate change communication in the United Kingdom. *Oxford Research Encyclopedia of Climate Science*. Retrieved on 22 November 2022 from https://pearl.plymouth.ac.uk/bitstream/handle/10026.1/12182/Anderson%20Climate%20 Change%20Communication%20in%20the%20United%20Kingdom%20Final.pdf?seque nce=1&isAllowed=y

Atieno, L. & Njoroge, J.M. (2014). Climate change impacts representation in Kenya's news media. *European Journal of Business and Social Sciences*, 3(8), 7-20.

Averchenkova, A., Gannon, K.E. & Curran, P. (2019). Governance of climate change policy: A case study of South Africa, 1-39. Retrieved on 30 October 2022 from file:///C:/Users/Users/User/Downloads/GRI_Governance-of-climate-change-policy_SA-case-study_policy-report_40pp.pdf

Ballantyne, A.G., Wibeck, V. & Neset, T. (2016). Climate change communication: What can we learn from communication theory? *Climate Change*, 134-73.

Brakemaker, R., Figge, F., Hoepner, A., Holt, D., Kraak, J. M. & Yu, P.- S. (2017). Media coverage of climate change: An international comparison. *Environment and Planning C: Politics and Space*, 35 (6), 1029-1054.

Batta, H.E., Ashong, A.C., & Bashir, A.S. (2013). Press Coverage of Climate Change Issues in Nigeria and Implications for Public Participation Opportunities. *Journal of Sustainable Development*, 6, 56.

BBC. (2010). Africa Talks Climate. Research report: South Africa. *BBC World Service Trust*. Retrieved 30 October 2022 from https://assets.publishing.service.gov.uk/media/57a08b02ed 915d622c000a43/08-South-Africa-Talks-Climate.pdf

Business Day TV. (2022, June 29). Watch: Opportunities of just transition of liquid fuels value chain. *Business Day*. Retrieved 18 September 2022 from <u>WATCH</u>: Opportunities of just transition of liquid fuels value chain (businesslive.co.za)

Chari, T. (2016). Rethinking climate change communication strategies in Africa: the case for indigenous media. *Indilinga African Journal of Indigenous Knowledge Systems*, 15(2), 1-15.

Chingwete, A., Dryding, D. & Dessein, V. (2018). Afrobarometer Round 7 Survey in South Africa, 2018. *Plus 94 Research*, 1-90. Retrieved 18 September 2022 from https://afrobarometer.org/sites/default/files/publications/Summary%20of%20results/saf_r7_sor_13112018.pdf

Cramer, C.M. (2008). The Framing of Climate Change in Three Daily Newspapers in the Western Cape Province of South Africa. (Degree of Master of Science). Stellenbosch University. Cape Town. South Africa.

Ekeka, I. & Adikuru, C.C. (2022). Climate Change Communication in South East Nigeria: Analyzing Perspectives. *International Journal of General Studies*, 2 (1), 7-22.

Elia, E.F. (2019), Media coverage of climate change information in Tanzania. *Global Knowledge, Memory and Communication*, 68(4/5), 258-274.

Elia, E.F. (2021). Journalists' Awareness and Understanding of Climate Change in Tanzania. *International Journal of Communication*, 15, 22-40.

Energy and Mines. (2022). New 100MW Licensing Threshold To Unleash \$3.8B Renewables Spend By South African Miners. *Energy and Mines*. Retrieved on 20 September 2022 from New 100MW Licensing Threshold To Unleash \$3.8B Renewables Spend By South African Miners – Energy And Mines

Engelbrecht, F. & Monteiro, P. (2021). The IPCC's latest assessment report on the climate crisis: Five 'take-home' messages for South Africa. *Daily Maverick*. Retrieved on 18

September 2022 from https://www.dailymaverick.co.za/article/2021-08-16-the-ipccs-latest-assessment-report-on-the-climate-crisis-five-take-home-messages-for-south-africa/

Evans, H.C. & Musvipwa, K. (2016). News Media Coverage of Climate Change: Perspectives from South Africa and Zimbabwe. *Africa Institute of South Africa*, 199-2013. Pretoria.

Evans, H.C., Dyll, L. & Teer-Tomaselli, R. (2018). Communicating climate change: Theories and perspectives. In Leal Filho, W., Manolas, E., Azul, A.M., Azeiteiro, U. & McGhie, H. (eds.), *Handbook of Climate Change Communication*. Springer, 107-122. Switzerland.

Friedman, S. (2021, August 23). Mainstream Media ignore the end of the world. *New Frame*. Retrieved on 3 February 2023 from https://www.newframe.com/mainstream-media-ignore-the-end-of-the-world/?fbclid=IwAR15grDwYGZyiaDkMGknzeUxxFqrCMTJIe10Q936Vl0Dl-D4ayyqDqEezn0.

Gislason, M.K., Galway, L., Buse, C., Parkes, M. & Rees, E. (2021). Place-based climate change communication and engagement in Canada's Provincial North: Lessons learned from climate champions. *Environmental Communication*, 15(4), 530-545.

Günay, D., İşeri, E., Ersoy, M. & Elega, A.A. (2021). Media Framing of Climate Change Action in Carbon Locked-in Developing Countries: Adaptation or Mitigation? *Environmental Communication*, 1-15.

Gupta, N. (2021). How South Africa's News24 garnered 31K paying subscribers in 9 months. World Association of News Publishers. Retrieved on 22 November 2022 from How South Africa's News24 garnered 31K paying subscribers in 9 months - WAN-IFRA

Habiyaremye, A., King, N.A. & Tregenna, F. (2022). Innovation and socio-economic development challenges in South Africa: An overview of indicators and trends. *SARChI Industrial Development Working Paper Series WP* 2022-03, 1-75.

Hase, V., Mahl, D., Schafer, M.S. & Keller, T.R. (2021). Climate change in news media across the globe: An automated analysis of issue attention and themes in climate change coverage in 10 countries (2006–2018). *Global Environmental Change*, 70, 102353, 1-12.

Hlongwane, T. (2020). Key Socio-Economic Challenges In South Africa. Mahlako: Balancing growth. Retrieved 22 November 2022 from Key Socio-Economic Challenges in South Africa – Mahlako A Phahla Investments

Hu, S. & Chen, J. (2016). Place-based inter-generational communication on local climate improves adolescents' perceptions and willingness to mitigate climate change. *Climatic Change*, 138, 425-438.

Khadka, A., Li, C.J., Stanis, S.W. & Morgan, M. (2021) Unpacking the power of place-based education in climate change communication. *Applied Environmental Education & Communication*, 20(1), 77-9.

Kalonge, J.O. (2020). Challenges and Opportunities for Increasing Media Coverage of Climate Change in Kenya. *Communication, Society and Media*, 3(2), 111-125.

Johannessen, J. (2013). Climate change, poverty and climate justice in South African media: The case of COP17. *Southern African Journal of Human Rights*, 29(1), 32-60.

Joubert, L. (2022, October 13). Climate collapse – how the Fourth Estate has failed society. Daily Meverick. Retrieved on 30 October 2022 from https://www.dailymaverick.co.za/opinionista/2022-10-13-climate-collapse-how-the-fourth-estate-has-failed-society/

Mahl, D., Guenther, L., Schäfer, M., Meyer, C. & Siegen, D. (2020) "We are a Bit Blind About it": A Qualitative Analysis of Climate Change-Related Perceptions and Communication Across South African Communities. *Environmental Communication*, 14 (6), 802-815.

McCombs, M. (2008). The Agenda-Setting Role of the Mass Media in the Shaping of Public Opinion. *University of Texas*, 1-21. Austin.

McGrath, M. (2021, August 9). Climate change: IPCC report is 'code red for humanity'. *BBC*. Retrieved on 30 October 2022 from https://www.bbc.com/news/science-environment-58130705 McKinley, D.T. (2022, August 7).

Mulaudzi, R. & Kioko, J. (2020). Content analysis of South African Sunday newspaper coverage of the Durban and Copenhagen climate change conferences. *Studies in Media and Communication*, 8(2), 34-40.

MyBroadband. (2021). South Africa's most popular news websites revealed, *MyBroadband*. Retrieved on 18 November 2022 from South Africa's most popular news websites revealed (mybroadband.co.za)

Nassanga, G.L. (2013). African media and global media discourse. Implications for Sustainable Development. *Open Society Repository Communication and Journalism*, e23050451, 1-17.

Ndong, J. (2020). Climate change: Agenda setters in media coverage. Media Monitoring Africa, 1-10. Retrieved on 18 September 2022 from <a href="https://eraidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https://araidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https://araidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https://araidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https://araidnbmnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https://ar

Newman, N. (2020). Digital news report 2020. Oxford: Reuters Institute for the Study of Journalism, 5-39. Retrieved 18 September 2022 from Journalism, Media and Technology Trends and Predictions 2020 (ox.ac.uk).

Nwabueze, C. & Egbra, S. (2016). Newspaper framing of climate change in Nigeria and Ghana. *Applied Environmental Education & Communication*, 15(2), 111-124.

Ogwezi, J.O. & Omukoro, E.S. (2020). Climate change communication in Nigeria: Towards proffering sustainable alternatives. International Journal of Psychosocial Rehabilitation, 24(9), 5235-5259.

Okoliko, D.A. & De Wit, M.P. (2020). Media(ted) Climate Change in Africa and Public Engagement: A Systematic Review of Relevant Literature. *African Journalism Studies*, 41(1), 65-83.

Oyedele, O.J. (2015). Climate change communication research: Trends and implications. *African Journal of Sustainable Development*, 5(1), 239-255.

Palm, R., Bolsen, T. & Kingsland, J.T. (2020). 'Don't Tell Me What to Do': Resistance to Climate Change Messages Suggesting Behavior Changes. *American Meteorological Society*, 1-24.

Peltzer, K., Parker, W., Mabaso, M., Makonko, E., Zuma, K. & Ramlagan, S. (2012). Impact of National HIV and AIDS Communication Campaigns in South Africa to Reduce HIV Risk Behaviour. *The Scientific World Journal*, 384608, 1-6.

Pietromarchi, V. (2021, November 17). 'We will all die': In Kenya, prolonged drought takes heavy toll. *Aljazeera*. Retrieved 18 September 2022 from https://www.aljazeera.com/news/2021/11/17/we-will-all-die-in-kenya-prolonged-drought-takes-heavy-toll

Pinto, I., Zachariah, M., Wolski, P., Landman, S. Phakula, S., Maluleke, W.... Dipura, R. (2022). Climate change exacerbated rainfall causing devastating flooding in Eastern South Africa. *World Weather Attribution*. Retrieved on 30 October 2022 from www.attribution.org) scientific-report.pdf (worldweatherattribution.org)

Ramirez-Villegas J, Ghosh A, Craparo A, Thornton P, Manvatkar R, Bogart B, Läderach P. (2021). Climate change and its impacts in Southern Africa: A synthesis of existing evidence in support of the World Food Programme's position paper for the 2021 Food Systems Summit. CCAFS Working paper No. 358. CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Retrieved on 18 September 2022 from https://cgspace.cgiar.org/handle/10568/114114

Reuters. (2021a, September 23). South Africa adopts more ambitious emissions target before climate summit. *Reuters*. Retrieved on 18 September 2022 from https://www.reuters.com/world/africa/south-africa-adopts-more-ambitious-emissions-target-before-climate-summit-2021-09-22/

Reuters. (2021b, November 4). The cost of coal in SA: dirty skies, sick kids and 5 000 deaths a year, according to leaked report. *Reuters*. Retrieved on 18 September 2022 from https://www.news24.com/fin24/economy/south-africa/the-cost-of-coal-in-sa-dirty-skies-sick-kids-and-5-000-deaths-a-year-according-to-leaked-report-20211104

Riedy, C. (2016). Climate change. *Blackwell Encyclopedia of Sociology*. Retrieved on 18 September 2022 from https://onlinelibrary.wiley.com/doi/abs/10.1002/9781405165518. wbeos0737 on 1 February 2022

Roberts, B. & Struwig, J. (2021). National results: Attitudes towards the Environment. Developmental, Capable and Ethical State (DCES) research division: *Human Sciences Research Council (HSRC)*. Pretoria.

Royal Town Planning Institute. (2021). Place-based approaches to climate change: Opportunities for collaboration in Local Authorities. *Royal Town Planning Institute*, 1-29. SABC News. (2022, September 22). More court battles loom regarding seismic survey along the Eastern Cape wild coast. SABC News. Retrieved on 31 January 2023 from More court battles loom regarding seismic survey along the Eastern Cape wild coast - SABC News - Breaking news, special reports, world, business, sport coverage of all South African current events. Africa's news leader

Schotte, S., Zizzamia, R., and Leibbrandt, M. 2018. A poverty dynamics approach to social stratification: The South African case. World Development 110: 88–103.

Schweizer, S., Davis, S. & Thompson, J.L. (2013). Changing the conversation about climate change: A theoretical framework for place-based climate change engagement. *Environmental Communication: A Journal of Nature and Culture*, 7(1), 42-62.

Shanahan, M.S. (2009). Media coverage of climate change in non-industrialized countries. In Boyce, T. and Lewis, J. (eds.), Climate Change and the Media. *Peter Lang*, 5, 145-251. New York.

Shimhanda, M.N. & Vivian, B. (2021). Media coverage of climate change in Namibia and South Africa: A comparative study of newspaper reports from October 2018 and April 2019. *ResearchGate*, 1-10.

Sithole, E. (2022). The nature of climate change communication in South Africa – its past, political and socio-economic undertones. (Unpublished manuscript). University of the Witwatersrand.

Siyao, P.O. & Sife, A.S. (2021). Sources of climate change information used by newspaper journalists in Tanzania. *IFLA Journal*, 47(1), 5-19.

Smith, S. (2013). Climate change and South Africa: A critical analysis of the national climate change response white paper and the push for tangible practices and media-driven initiatives. *Global Media Journal: African Edition*, 7(1), 47-66.

Stats SA. (2022a, August 23, 2022). *Quarterly Labour Force Survey (QLFS) – Q2:2022* (Press release). Retrieved 18 September 2022 from Quarterly Labour Force Survey (QLFS) – Q2:2022 | Statistics South Africa (statssa.gov.za)

Stats SA. (2022b). South African GDP grows by 1,6%. *Stats SA*. Retrieved on 30 January 2023 from South African GDP grows by 1,6% | Statistics South Africa (statssa.gov.za)

Suliman, L. (2018). A Review of Environmental News Reporting in South Africa: Case Studies on Climate Change and Energy, Fracking, and Acid Mine drainage. (Degree of Master of Science). University of the Witwatersrand, Johannesburg.

Tagbo, E. (2010). Media coverage of climate change in Africa: A case study of Nigeria and South Africa. *Reuters Institute Fellowship Paper*, 1-39.

The New Humanitarian. (2006). Government pressured to review HIV/AIDS communication strategy. *The New Humanitarian*. Retrieved on 30 November 2022 from https://www.thenewhumanitarian.org/news/2006/08/25/government-pressured-review-hivaids-communication-strategy.

The World Bank. (2018). Overcoming Poverty and Inequality in South Africa: An Assessment of Drivers, Constraints and Opportunities. *The World Bank*. Retrieved 18 September 2022 from World Bank Document

The World Bank Group. (2021). Climate Risk Profile: South Africa. *The World Group Bank*. Retrieved on 18 September 2022 from https://climateknowledgeportal.worldbank.org/sites/default/files/2021-08/15932-WB_South%20Africa%20Country%20
Profile-WEB_0.pdf on 1 February 2021.

The World Bank. (2022). The World Bank in South Africa. *The World Bank*. Retrieved on 18 September 2022 from https://www.worldbank.org/en/country/southafrica/overview

UK Department of Communities and Local Government. (2006). Climate Change Communication Strategy: A West Sussex Case Study. Retrieved on 18 September 2022 from http://www.espace-project.org/part1/publications/reading/WSCCClimate Communications% 20Strategy.pdf.

Wadula, P. (2021, November 5). South Africa secures R131-billion in pledges to kickstart just transition. *Mail & Guardian*. Retrieved on 30 October 2022 from PressReader.com - Digital Newspaper & Magazine Subscriptions

World Food Programme. (2021). WFP Madagascar country brief. *WFP*. Retrieved 30 October 2022 from https://docs.wfp.org/api/documents/WFP-0000134430/download/?ga=2.213439316.1559559865.1640626223-1363598799.1640626223

Zizzamia, R., Schotte, S., and Leibbrandt, M. 2019. Snakes and ladders and loaded dice: Poverty dynamics and inequality in South Africa, 2008–2017. UNU-WIDER Working paper 2019/25. Helsinki.

Appendix 1

Research questions

Question 1: all stakeholders

What do you think about media coverage of climate change in South Africa? Do you think it's

adequate?

Question 2: journalists and editors

It has been suggested that climate change stories "don't sell", meaning they are not attractive

to audiences. Is this your experience, and what could be done to change this?

Question 3: stakeholders outside the media

Does the news you get from the media on climate change and related subjects make you

understand the issues involved?

Question 4: all stakeholders

What sort of news do you think would make audiences change their behaviour in response to

climate change, e.g., policy, climate disasters, future impacts, opportunities?

Question 5: all stakeholders

What do you think could be improved in media coverage of climate change in South Africa?

Question 6: all stakeholders

Outside media reporting, what do you think about the overall communication of climate

change in South Africa by key stakeholders, i.e., policymakers, business sector and civil society

activists?

56

Biography of Enoch Sithole

Enoch is a journalism lecturer at the Wits Centre for Journalism at the University of the Witwatersrand.

At the time of this study being published, he had just submitted his PhD thesis for examination in which he researched climate change communication in South Africa.

Enoch entered the field of journalism in 1988 when he joined the now-defunct *New Nation* newspaper as a cadet journalist. He went on to report on education, health, politics and investigative journalism, culminating with the positions of political editor and senior assistant editor.

At the dawn of democracy in South Africa, in 1994, Enoch left journalism to join communication and became head of communication of the Constitutional Assembly.

He joined broadcasting in late 1995 when he became manager for public policy at the South African Broadcasting Corporation (SABC). He went on to occupy the positions of general manager of corporate communication, marketing and public affairs; senior general manager of the audience services division and chief executive of the news division.

In 2000, Enoch ventured into the private sector, working as a media business consultant. He rejoined journalism in 2004 when he was appointed editor of Mpumalanga News and publisher of Mpumalanga Mirror. Enoch then worked in the communication agency sector, occupying the positions of managing director of PR Dynamics and Chief Executive of Fuse Communication (Africa).

Between 2006-2013, Enoch worked for various entities under the now-defunct Sisulu Media. Among others, Enoch was part of the Sisulu Media Group's Urban Brew Studios that established South Sudan Television in 2008-2010. Before joining Wits, Enoch worked as business development director for Oomph Out of Home Media.

Enoch was the inaugural winner of the Courageous Journalism Award in 1992.

The follwing titles have been published in the Fojo study series:

2023.01: Climate change journalism in South Africa: noticeable improvements, less than adequate, by Enoch Sithole.



The media coverage of climate change in South Africa is on the increase, although several issue requiring attention have been identified. These include i) the fact that media coverage is mostly influenced by events such as climate conferences and disasters; ii) a tendency to approach climate change as a beat, instead of incorporating it in other beats since the climate crisis impacts various issues, such as economics, health, politics, food security, agriculture, etc. This has often resulted in a scenario where some of the impacts of climate change are under-reported; iii) most of the reporting is found in online media and sometimes behind paywalls; and iv) although showing some improvements, there is a reliance on stories from foreign news networks, something that the climate crisis is not of local concern. Overall climate communication by key stakeholders such as the government and the business sector is particularly inadequate. Having conducted a mapping of media coverage by 11 publications and interviewed 42 key stakeholders, this study has made several recommendations which include the training of climate journalists and the conscientization of media houses to improve reporting on the crisis. Government, in particular, has been implored to engage in climate change communication to catapult societal discourse on the subject and improve media reporting.

ISBN:978-91-8082-010-3

