

Framing Environmental Issues in the Egyptian Press during COP27

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Abstract

The media's framing of environmental concerns and climate change issues is critical for moulding public perception, influencing policy, and inspiring action. The way that African environmental issues are framed in the Egyptian press at COP27 is a crucial topic for discussion to reflect the intricate interactions between solidarity, urgency, and realism. This paper discusses how the media constructs and embeds the environmental issues in the Egyptian media during COP27 by providing meanings, concepts, priorities, and explanations. There were 223 articles on sustainability, published between December 2022 and May 2023, were analysed. The authors employed discourse analysis to examine the concepts and semantics used in media coverage. Findings reveal that Egyptian media played a significant role in framing environmental issues within the context of hosting COP27, emphasising the challenges and opportunities for sustainability in Egypt. Water-related issues were a key focus, particularly water scarcity. Sustainability in education also emerged, addressing the role of technology, research, and workforce training in tackling climate change. Agriculture was emphasised and focused on sustainable practices and modern irrigation systems. Quality of life improvements were linked to sustainability through healthcare and social care. The cooperation theme concentrates on regional and international collaboration, particularly within Africa.

Keywords: climate change, COP27, media framing, sustainability, Egypt

1. Introduction

Africa is among the world's most climate-vulnerable continents. The effects of climate change on ecosystems, economies, resources, and infrastructure are disproportionately felt in African nations. This makes people more susceptible to the harmful consequences of climate change (Williams et al., 2023). Discussing climate change and sustainability increases public understanding of these urgent issues. Raising awareness can inspire people and communities to take action by fostering a stronger sense of understanding and concern. African media continues to provide scant coverage of climate change to provide a deeper insight into environmental issues, sustainability projects, and the challenges Global South countries face. Suppose Africa is to confront the issues posed by the changing climate. In that case, the media's role as a primary conduit for public knowledge and a purveyor of reality in climate communication is crucial (Evans, 2017). Environment and climate summits are an effective source for the media on issues, events, and initiatives whose topics can be covered. African governments need to use these chances to communicate about climate change to elevate public awareness of the issue and enhance media coverage (Sithole, 2023).

The paper explores how Egyptian media covered sustainability and environmental issues during the Cope 27 "United Nations climate summits held yearly for governments to discuss the processes to limit global temperature rise". And the frames through which these issues were presented. This was addressed by answering a primary question: How have Egyptian media presented environmental issues? This was explored through four sub-questions: What are the environmental and sustainability topics covered by these media? How are these issues framed? Who is the target audience? What are the challenges and solutions the media proposed? A total of 223 articles on sustainability-related topics were examined. These articles were published between December 2022 and May 2023. The paper reveals the role of media in

framing the environmental issues in Egypt in the context of hosting the COP27 conference to understand how the media assists in instigating the environmental challenges and chances and shaping public attitudes.

2. Theoretical Background

2.1 *Environment Challenges in Africa*

According to the majority of experts researching the possible effects of climate change, a large portion of Africa's population may be impacted by rising sea levels, altered rainfall patterns, greater temperatures, and increasing climate unpredictability (United Nations Development Programme, 2018; Serdeczny et al., 2016). It is necessary to anticipate that sectoral climate impacts and climate change will impact the people of Sub-Saharan Africa in several ways. Variations exist throughout the area. East Africa is more prone to experience flooding, which may cause infrastructure damage and health problems. According to projections, West Africa would face significant challenges in food production, such as decreased oceanic productivity. Food security will also be severely jeopardised, and jobs and human health will suffer. The most significant decline in precipitation is observed in South Africa, where there is also a drought risk (Serdeczny et al., 2016).

Although sustainability is the main emphasis of current African continental initiatives, sustainability is a key topic in African policy discussions (Williams & Adetuyi, 2022). Africa faces the most significant development obstacles and will find it particularly challenging to achieve the SDGs of the UN 2030 Agenda due to its comprehensive demographic dynamics, which will cause its population to quadruple over the next several decades. All African countries show critical challenges at the environmental level of sustainability. Expanding access to infrastructure and essential services in certain nations is challenging due to the high rates of extreme poverty, which limits sustainability's social and economic aspects. In some countries, conflicts and insecurity related to SDG have undermined social and economic advancement, endangering the institutional component (Moreno & Cueto, 2022).

Mitigation strategies are needed to mitigate the climate change effects and lessen ecological and physical vulnerabilities (Mahgoob, 2023). Developing eco-friendly initiatives has become essential to lowering the risks brought on by climate change in the area. In order to lessen the risks associated with climate change—particularly sea level rise, coastal surges, and erosion—precautionary steps, enhanced early warning systems, and wave height measuring equipment are required. To work in concert with the appropriate authorities to raise public awareness of the threats that climate change poses to the environment (Abd El-Salam & Abo- EL-Fotouh, 2023). Reducing emissions quickly is still the key goal of climate summits to limit global temperature rise to less than 1.5 °C. The damage is already significant for Africa and other developing regions (Atwoli et al., 2022). Since its founding in 1995, COP27 is the fifth Conference of the Parties (COP) to be held in Africa (Atwoli et al., 2022). The suffering of frontline countries, especially those in Africa, must be the primary focus of the COP27 because, in an interconnected world, leaving nations vulnerable to environmental shocks breeds instability with dire ramifications for all governments (Zielinski, 2022).

2.2 *A Lesson from Egypt*

Egypt is a prime example of a developing nation that is highly susceptible to the effects of climate change, putting its social, economic, and environmental sustainability at risk. In addition, rising risks to national security brought on by population growth and greater demand for the already limited resource base are predicted to be exacerbated by climate change (Jungudo, 2022). El-Zouka (2024) confirms that intense action is required to combat climate change because, although developed countries are mostly to blame, poor developing nations bear the brunt of its effects; the researcher recommends assessing the degree of success of the various governments' responses to this issue to determine whether these responses are sufficient or if more action is required. The abovementioned recommendation is also emphasised by Zanaty (2023) who confirms that governments and other important stakeholders need to be urged to work together and adopt a consensus-building approach to successfully tackle climate change concerns.

Egypt can lessen the consequences of climate change and protect its biodiversity by encouraging sustainable practices like effective waste and water management. From an economic perspective, the green economy presents opportunities for employment development in industries that include sustainable agriculture, waste management, energy efficiency, and renewable energy (Vitale, Cupertino, Rinaldi & Riccaboni, 2018). This shift can promote innovation and technical developments in green technology while lowering unemployment and poverty rates. Additionally, the green economy may draw in capital and spur economic expansion, establishing Egypt as a pioneer in generating renewable energy (Muhammad, 2022).

Many researchers confirm that the Egyptian government is committed to achieving the Sustainable Development Goals (SDGs) by shifting to renewable energy sources (Yassen, Nam & Hong, 2020; Kassem et al., 2019; Vincenti, 2015). This includes the seventh target, cheap and clean energy, as well as other goals pertaining to air quality, global temperature, and human health. To achieve such sustainable goals, there is a need to allocate a sufficient budget to support sustainability

efforts (Eissa, 2020; Hussein & Pollock, 2019; Ashour & Ibrahim, 2018). In this regard, El Madbouly (2022) recommends that the financial regulatory authority should provide sustainable growth reports to attract new investors and increase international investment. Sustainable development is the goal of COP 27 and Vision 2030, which aim to mitigate the negative impacts of climate change. Achieving sustainable growth is considered a real challenge in Egypt (EL- Maksoud & Ahmed, 2022). Mostafa (2023) revealed that Egypt has several obstacles in its transition to a green economy. The biggest obstacle is finding sufficient funding from both local and foreign sources to finance the required infrastructure as well as R&D initiatives. A notable impediment to the country's endeavours to tackle climate change and improve its frameworks for climate governance is the accessibility and precision of data, in conjunction with insufficient finance and inadequate cross-sector collaboration. In this context, Al Sayed, Samir & Anwar (2021) recommend that alternative fiscal policies should be implemented to treat the drawbacks of the conventional approach. In addition, the generational accounts approach can be effective as it includes environmental considerations to achieve intergenerational justice more comprehensively than tax distribution justice.

Muhammad (2022) has confirmed that the Egyptian government needs to execute legislation effectively and coordinate activities across different government entities. A strong institutional structure and policy are required. Abdelmelek et al. (2022) tend to link sustainability problems to business procedures. Egyptian businesses are subject to specific rules. However, some people operate without the necessary licenses; they are not rigorously supervised. This gap opens the door for the existence of building structures that do not meet safety or sustainability requirements. Examining the global initiatives made in that area is crucial to filling in the gaps and fixing the flaws in the present Egyptian construction legislation.

Ead et al. (2022) have confirmed that Egypt faces several environmental challenges, especially concerning how people interact with the environment and natural resources. Public education on environmental concerns in general and climate change in particular has become imperative given the critical link between environmental conservation and development and Egypt's major environmental problems. Effective environmental education is essential to provide pupils with the knowledge and skills necessary for long-term sustainability.

Furrer, Mostofi & Spinler (2022) have confirmed that Egypt is creating its first all-encompassing national climate change strategy, called 2050, which outlines the many approaches and policies to take. This plan aims to improve knowledge management, scientific research, technological transfer, and climate change awareness. Decision-makers, governments, researchers, and organisations may all observe how climatic factor fluctuation makes specific organisations susceptible. Therefore, it is necessary to create mitigation and adaptation methods in the future. The researchers recommend using a system dynamic model to encourage large corporations and organisations to invest in clean energy sources like biomass technology and renewable energy to mitigate the effects of climate change.

Burning fossil fuels is the primary cause of global warming, which in turn leads to the release of greenhouse gases (GHGs), among which is carbon dioxide (CO₂), a major pollutant of the environment. Egypt heavily relies on fossil fuels for many critical sectors, which means that the emissions of harmful gases will continue to rise, and efforts to enhance sustainability will be useless (Youssef et al., 2021). Egypt must lower CO₂ emissions to improve environmental quality while maintaining a sustainable economic growth rate. Salman & Ismael (2023) recommend significant implications for government, business, and academia to face climate change and enhance sustainable practices as follows: Attaining a more equitable financial system and fully utilising digital financial services to improve environmental quality requires creating inclusive digital financial policies by Egyptian legislators; Egypt's objective of digital transformation requires bolstering its information and communications infrastructure; reducing carbon emissions, foreign direct investment (FDI) in Egypt has to move from heavy industries to Fintech and the ICT sector; addressing digital financial inclusion to achieve a cleaner environment and foster sustainable economic growth. Instead of enacting distinct policies for financial inclusion and economic growth, new regulations combining digital finance and the real economy must be created; encouraging investors to utilise renewable energy is essential for improving the environment and converting to green energies and utilise energy more efficiently, authorities should develop green growth policies and amend all existing rules and regulations; meeting the goals of the 2030 Agenda for Sustainable Development, which centre on climate change and more inclusive economic growth, the government must work harder to diversify the energy mix and boost funding for renewable energy projects. This includes adding new renewable energy sources to the mix and increasing investments in renewable energy projects.

2.3 Framing the Environmental Issues

Media Framing Theory offers a framework for understanding how media narratives are constructed, how issues are prioritised, and how key figures and themes are portrayed. This theory posits that media organisations actively shape the public's perception and understanding of societal problems by selectively emphasising certain story elements while minimising others (Entman, 1993). In literature, the theory of framing takes its cue from the field of media effects, which

points to the belief that all journalistic and media content attempts the social construction of knowledge and/or reality at some level. Theory attempts to explain or measure the power and influence of media on the semiotic approach, the cultural studies approach, and the social representation or construction of reality (Grazzini, Rodrigo, Aiello, & Viglia, 2018).

The potential of the framing concept lies in the focus on communicative processes. Communication is not static but rather a dynamic process that involves frame-building and frame-setting (De Vreese, 2005). The centrality of frames in media lies in the fact that they shape public opinion about certain events and issues, and the media utilise them in their attempt to construct reality (Borah, 2011). Framing processes play a crucial role in triggering media hypes through mechanisms such as frame amplification, frame expansion, frame alignment, and problematisation. Frame setting occurs when communicators select frames that resonate with those already ingrained in the social consciousness of the audience (Güran & Özarslan, 2022).

Media are vital social institutions that shape and reflect culture, politics, and social life. They play a central role in constructing people's realities through framing and serve as the primary source of understanding the world for much of society, often replacing traditional religious and social institutions (Nambiar, 2014). The mass communication concept of gatekeeping is related to agenda setting and framing. Framing theory is based on the idea that specific events are brought to light by the media and given a context. The media shapes public opinion and brings particular subjects to the public's attention (Cramer, 2008). The underlying idea of this theory is that the public is subjected to a filter on the information that the media disseminates. Media coverage is essential for raising awareness, promoting policy change, and fighting climate change worldwide (Chand, 2017). In sustainability and environmental issues, many studies discussed how the issues and challenges are presented and framed by media. Van et others (2010) assured the importance of choosing the frame when addressing people to be more sustainable and environmentally friendly energy consumption. They also assured that the information source and medium are of vital importance for the effectiveness of the communication, in addition to the content and the framing of the message. Barr, Gilg & Shaw (2011) argued that the types of framing may lead to a change from the passive normalisation of conventional environmental practice to contested ambiguities of climate change. Atanasova (2019) discovered that the media constantly provided answers, presented them in an optimistic manner, cited a variety of sources, and created a framework that criticised society's obsession with development and questioned consumerism while assisting in the creation of an ideal sustainable future. DiRusso & Myrick (2021) explored how companies use social media messages to communicate about the dangers of plastic pollution by using emotional frames to increase the fears and introduce the hope to affect attitudes, behaviours and intentions. Ghosh & Boykoff (2018) discussed how Indian local media interpret global discourses on climate change in constructing and maintaining knowledge, norms, and conventions.

2.4 The Egyptian Media During COP27

Under the overarching theme of "Together for Implementation," the COP 27 climate change conference took place in Egypt from November 7–18. The United Nations Department of Economic and Social Affairs (UNDESA) served as host. It has laid the groundwork for all stakeholders to strengthen the links between climate change and the other goals of sustainable development (Sanobar et al., 2023). Sandholm (2022) has confirmed that effective global climate governance is desperately needed to combat the grave threat posed by climate change. Working to ensure appropriate participation and representation from all significant stakeholder groups at COP27 was crucial, especially from representatives of African nations that are increasingly suffering from the effects of climate change (Hussein et al., 2023). A paradigm shift in international climate diplomacy has occurred due to hosting COP27, which has given people a platform to voice their opinions and highlight the detrimental effects of climate change on their lives. Badr (2024) has concluded that to advance peace, stability, and sustainable development, Egyptian climate diplomacy toward Africa has placed a high priority on addressing the problems and vulnerabilities that African nations face concerning the effects of climate change, the relationship between climate change and security, and the factors that make their countries vulnerable to climate risks. Additionally, Egypt's approach to climate policy is well-balanced, taking into account the trade-offs between growth, social fairness, economic resilience, green transition, and climate action. Egypt is also trying to introduce other African nations to its climate policy framework.

Muigua (2023) recommends the quick implementation of nature-based strategies for biodiversity preservation and climate change mitigation to help communities realise their socio-economic rights and other relevant rights as outlined in the sustainable development objective. When implemented, the suggested COP27 finance methods should be effectively utilised to create resilient ecosystems and communities. This will significantly increase efforts to fulfil the Sustainable Development Goals.

Because of the media's significant impact on public opinion trends on the topic of climate change, Tawfik (2022) has confirmed that the role of the media through its many channels, such as newspapers and electronic news websites, is developing as an essential and influential tool in spreading awareness and environmental culture. Consistent with what

has been mentioned above, Ali (2023) has confirmed that the media shapes the knowledge and information of the vast majority of viewers and recipients across a variety of disciplines and can play a significant role in spreading awareness regarding the causes and effects of climate change. It is worth mentioning that various media outlets and social media platforms have expressed interest in Egypt hosting COP 2022 (Alsharif, 2022).

All sectors are affected by Egypt's hosting of COP27, and the education sector is no different. Mohamed (2022) has confirmed that there is a need for a radical shift in the way that climate issues are traditionally approached. It has become critical to restructure the educational system to increase awareness of the importance of modernising curricula to address climate change issues such as recycling waste, saving energy, lowering individual carbon footprints, or helping people build their capacities to address and overcome fast climate change.

Climate change has received more regular, if uneven, attention in the media worldwide in recent years. The main thrust of the "climate communication agenda" remains distinctly "global," driven primarily by the more developed media markets in the North and particularly by the narratives emanating from international climate institutions (e.g., the Intergovernmental Panel on Climate Change [IPCC], climate Conference of the Parties [COPs], international non-governmental organisations [NGOs], and think tanks). While there are significant regional variations in the amount of attention paid to climate coverage, the discussion of climate has been noticeably uniform (Ejaz & Najam, 2023).

Sandholm (2022) examines the evolution of global climate governance discourse between 2015 and 2022. Beginning with the Paris Agreement, the findings are primarily consistent with the language of ecological modernity. This is demonstrated by the participation of diverse players in the solution to climate change and the conviction in green growth and private-based solutions. This pattern has continued throughout the analysed years, although it appears to be reducing in relevance as we approach 2022. The language of civic environmentalism is particularly notable as a tendency that has persisted throughout the years in emphasising the engagement of non-state and subnational actors in climate policy. The word "loss and damage" appears in the Paris Agreement, indicating the beginning of the discourse on climate justice. This trend demonstrates a substantial departure from the era before the Paris Agreement when the rhetoric of climate justice was less prevalent.

Zanaty (2023) investigates the discourse and major ecological components of Egypt's President Abdel Fattah Al-Sisi's political speech during the COP27 opening session on November 7th, 2022. The critical discourse analysis approach serves as a theoretical foundation for analysing the speech.. The study's findings demonstrate that the language of the speech is employed skillfully to achieve the speaker's desired outcomes. Regulative rhetoric is often used in the Egyptian president's speeches to achieve various ecological goals. Al-Sisi employed five forms of ecological discourse narratives: reasons to practice sustainability, faith in government activities, climate justice, economic help, and depiction of the environment.

Tawfik (2022) has shown that the Egyptian newspaper sites in the study sample are interested in reporting everything linked to climate awareness and the COP27 Conference of the Parties. Youm7 was eager to communicate Foreign Minister Sameh Shoukry's views on the negotiations in preparation for COP27 and how to increase community involvement. While the Al-Ahram website concentrates on the study's subject, offering awareness information about the conference, its parties, and concerns, it is characterised by its involvement in press debates and opinion materials. It is not restricted to news coverage alone. The Egyptian Ministry of Environment's announcement and Egypt's hosting of the COP27 United Nations Climate Conference are also highlighted on the Al-Masry Al-Youm website.

Egyptian television program coverage is critical to consider. Abdelaziz (2023) has discovered discrepancies in the "Al Hekaya" and "Yahdoth Fe Masr" programme coverage to COP 27. When compared to "Yahdoth Fe Masr," which was distinguished by a greater balance of both good and negative features, the coverage of "Al Hekaya" demonstrated greater emphasis on the positive parts of the Egyptian role. The programs highlighted how Egypt can arrange and host an international event that is well recognised, as well as how important it is to play a pioneering role in the area. Furthermore, they furnish details on Egyptian allocations towards climate change initiatives and the prospective advantages and financial resources Egypt may obtain via the conference's agreements. The main negative parts of Egyptian television programs covering world climate politics are related to international issues. The programs emphasise how prior conferences have failed to ensure that recommendations can be implemented globally and voice doubt about the United Nations' capacity to ensure effective implementation.

Radwan, Mousa & Gjylbegaj (2023) examine how Emirati and Egyptian newspapers tackle sustainability concerns and pinpoint the primary subjects discussed by the publications concerning the environment, climate, and standard of living. The study showed how holding the 2022 COP27 conference in Egypt affects the level of interest in sustainability problems in Egyptian publications following the summit. Egypt has problems with its economy and people, but the UAE, an oil-producing nation with a multicultural populace, has issues of its own that need to be handled according to its culture. The newspaper discussions of comparable ideas emphasise the critical role that media and the arts play in promoting ecological

consciousness. They also underlined how crucial it is to have rules and laws controlling how organisations and people operate to maintain the sustainability of the resources in the two nations. Abdelaziz et al. (2023) look at the quantity of coverage and spot sourcing trends and investigate the advantages and disadvantages of Egyptian media coverage of international climate politics. The shows reveal a dedication to covering global climate politics, increasing public knowledge, and highlighting Egypt's contributions. They are deficient in other areas, such as addressing human rights concerns and offering information based on evidence, which may reflect the fact that they have not entirely upheld their social obligation.

Egypt's unique blend of environmental possibilities and problems has made sustainability and environmentalism important subjects in the country's contemporary conversation. Egypt, one of the most populated nations in the Arab world, is dealing with a number of environmental problems. A large portion of its people reside in the lush but crowded Nile Delta. The shift to a green economy is a key component of Egypt's Vision 2030 growth plan, which includes investments in ecotourism, sustainable agriculture, and renewable energy. In accordance with Egypt's Vision 2030, COP27 encouraged the Egyptian media to focus more on sustainability concerns and talk about the conclusions, suggestions, and application of the conference. Governmental organisations were also eager to take part in global conferences and gatherings on climate change and sustainability.

3. Methodology

To answer the raised questions, the authors conducted a qualitative analysis to examine how the Egyptian media presented environmental issues during the Cope27 conference. Discourse analysis (DA) is used as a methodology to focus on words, concepts, and semantics (Ramanathan & Hoon, 2015).

The term "media discourse" describes the presentation and construction of meaning around certain subjects or situations by various forms of mass communication including newspapers, television, and the internet (Rita, António & Afonso, 2023). It includes the words, pictures, and other representations used in various mediums, along with their arrangement and presentation. (Barkemeyer, Givry & Figge, 2018). Media discourse can include news articles, television news broadcasts, talk shows, documentaries, and other forms of mediated communication (Ramanathan & Hoon, 2015). To determine the sources of dominance, power, and inequality with special reference to the social, political, and historical context in the media, it is compulsory to single out the type of language used and analyse it within the framework of discourse (Blommaert & Bulcaen, 2000).

The discourse approach recognises the importance of language in shaping our understanding of the world and our interactions within it. Each discourse is thus embedded within its language, whilst also resting on shared assumptions and contentions about the world (Dryzek, 2005). Both Critical Discourse Analysis and Foucauldian Discourse Analysis are broad categories of discourse analysis that Fairclough (2003) suggests. Discourse analysis according to Foucault focusses on theoretical social themes rather than textual linguistic details. The field of Critical Discourse Analysis is making strides in textual linguistic analysis. Textual material is examined using qualitative research methodologies within its social, historical, and geographical context in discourse analysis, which is rooted in social science (Manna, 2021).

To analyse how the Egyptian media presented sustainability and environmental issues, two prominent Egyptian newspapers were selected based on readership and accessibility of an online archive. The selection aimed to represent diverse perspectives by including both national and privately-owned publications.

- Al-Ahram: A leading national newspaper, first appeared in both Egypt and the Arab world in 1875. It is available in Arabic, with online versions in English and French. Al-Ahram also maintains a website, YouTube channels, and social media accounts.
- Youm7: A privately-owned daily newspaper, launched weekly in 2008 and daily in 2011. It is published in Arabic and has been recognised by Forbes Middle East for its effective online presence. Additionally, in 2013, Youm7 created The Cairo Post, an English news website.

The authors collected the data from November 2022 to January 2023. This period follows COP27 which was held between 6 to 20 November 2022. Using keywords like "sustainability" and "environmentalism" in Arabic, 223 articles were identified from the online platforms of the newspapers.

The following technique, which is shown in the accompanying table, was used to code the 223 articles that were chosen using an investigator-centered approach to meaning building:

Table (1). Coding protocol

Topic	Definition
<i>Topics</i>	Climate change, renewable energy, water conservation, and waste management are just a few of the many potential subjects discussed in discussions about environmentalism and sustainability.
<i>Themes</i>	Topics related to sustainability and the environment may be presented in articles via the lenses of economics, national security, or ethical and moral duties.
<i>Representation of Stakeholders</i>	Many parties, including public and corporate entities, NGOs, and communities at large, may be shown in different ways and given different degrees of influence in the discussion.
<i>Solutions and Initiatives</i>	Topics covered may include green construction practices, sustainable city plans, solar energy project development, and other specialised sustainable endeavours.

4. Findings

The authors constructed a theoretical framework grounded on discourse theory and analysis after conducting an initial literature search to identify papers that addressed sustainability and environmentalism. Tracing the articles, examining the subjects, and interpretation are the three basic phases in data analysis that lead to a more complete knowledge. The newspapers covered various issues during the conference.

4.1 The Main Discussed Topics

- **Water-related issues** topped the list, including water scarcity, safeguarding water resources' significance, and groundwater. Additionally, the newspapers addressed concerns regarding water quality. Additionally, the effects on Egypt's water supply, the possible environmental repercussions, and the tragedy of the Ethiopian Renaissance Dam's collapse were discussed.
- **Sustainability concerns in education:** including the significance of training technical personnel in line with environmentally friendly procedures, the promotion of scientific research on climate change and sustainability, and the utilisation of technology in the learning process, were addressed. The subjects also encompassed climate change, increasing temperatures, and potential solutions.
- **Agriculture:** Egypt is an agricultural nation that depends on the Nile's waters. Consequently, Egyptian newspapers prioritised agriculture. Sustainable agriculture, water conservation, advanced irrigation systems, horizontal and vertical growth, improved farming methods, and food security were all topics of discussion.
- **Environmental preservation:** The newspapers also addressed environmental preservation by emphasising the protection of migratory animals, waste management, biodiversity, and illegal fisheries. Additionally, the topics of energy consumption reduction, the pursuit of green energy sources, and the support of green industries were addressed.
- **Quality of life:** Newspapers underscored the significance of enhancing quality of life as a sustainability objective in the societal realm. This was achieved through the empowerment of women and families, healthcare, social care, and justice among social groups. Furthermore, they underscored the significance of political parties, civil society organisations, and corporate social responsibility.
- **Agreements and regulations:** One of the topics highlighted in the media coverage was the conference's discussion on the extent of implementation of the agreements signed during previous conferences, in addition to the regulatory and technical rules governing the practices of countries and companies to ensure that no negative impacts on the environment occur. It also addressed the extent to which countries are fulfilling their commitments, such as determining how countries should practically measure their emissions to create a level playing field for all and how to move from negotiations and planning to implementation.

Findings indicated that the conference has reaffirmed the importance of collaboration across all sectors of society and the economy and the importance of fostering cooperation among governments and non-state entities such as cities, regions, businesses, and investors.

4.2 Framing Environmental Themes During Cope27

The newspapers presented multiple themes in addressing environmental issues.

- **Cooperation theme:** It encompasses international cooperation with other countries and international organisations, alongside regional collaboration in African and Arab settings. Particularly at the regional and continental levels in Africa, the need of cooperation in achieving peace and understanding via funding was emphasised.

Egypt leads Africa in Sharm El-Sheikh climate conference to confront climate change effects (youm7.com)

- **Quality of life and human interests theme:** They address sustainability and environmental issues in a variety of sectors, including women's empowerment, education, healthcare, energy, food, government performance improvement, and infrastructural development. This includes the establishment of green factories, water purification facilities, and clean power stations.

The National Initiative for Smart Green Projects reflects the state's seriousness in dealing with climate change issues (ahram.org.eg).

- **The national/ Activism theme:** Is pertinent to the sustainability concerns that are currently being addressed in the national dialogues of Egypt between the government, political parties, and civil society organisations. Youth engagement has also been emphasised in that context. Activism appeared to be a national demand to support people's engagement in environmental initiatives. This also includes the framework of social responsibility of Egyptian institutions, as the Egyptian media has addressed the role played by governmental and private institutions in the field of the environment.

Climate Change Conference President's Envoy Reveals Details of First "Youth Document" in Interview with "Al-Ahram Gate".

- **Integration and Empowerment support theme:** It stresses the need of working together across sectors of society, public and commercial organisations, and the need to attend to all areas and cities, not just the nation's capital or big cities..

After Egypt's success in putting the loss item on the climate conference agenda for the first time... What are the mechanisms for compensating developing countries? (ahram.org.eg)

- **Challenges theme:** This refers to addressing the challenges facing the world, especially the countries of the South, in the field of environmental protection and climate challenges. These challenges are determined by financial challenges and support, technical challenges, and the challenges of adhering to what was agreed upon in previous conferences, especially the Paris Conference and the implementation of the major countries' pledges. This was also presented in the context of illustrating the potential risks and adverse effects that could affect the Earth and its inhabitants if these agreements are not followed and their recommendations are not implemented.

The Road to COP27 "Together towards Implementation" The Road to COP27 "Together towards Implementation". A special issue of Al-Ahram IBdo on the Climate Summit - Al-Ahram Gate (ahram.org.eg)

Findings indicated that the main themes of COP27 focus on addressing global climate change and its challenges through evolving priorities. Key areas include mitigating climate change by reducing emissions, transitioning to renewable energy, and adapting to climate impacts by building resilience and promoting sustainable practices. Climate finance plays a vital role, with efforts to mobilise resources and encourage private-sector investment. Collaboration among nations, non-state actors, and civil society is essential for advancing technology, innovation, and equitable climate solutions. Additionally, the conferences emphasise implementing the Paris Agreement, addressing loss and damage, protecting biodiversity, and amplifying the voices of vulnerable communities and youth.

4.3 Stakeholders' Representation

Various stakeholders, such as government institutions, civil society, the private sector, and political parties, were addressed by the Egyptian newspapers in pursuit of sustainability. Groups that were affected included students, women, labourers, administrators, and regional and international organisations, including the African Development Bank, the African Union, the Arab League, and Presidents. In addition, the media, arts, and culture sectors were emphasised for their contributions to environmental awareness through drama, visual arts, museums, and heritage, as well as universities and environmental preservation agencies.

As it appears from the Egyptian media coverage of the conference, the presence of world leaders in Sharm El-Sheikh, Egypt, such as the US President and others, was taken advantage of, and their participation was covered in the context of their support for environmental efforts and Egypt's presidency of the 27th session, in addition to focusing on cooperation between governments. The crowds achieved at the conference were reflected in the media coverage and their interest in covering the news of the personalities who attended the conference, including presidents and international officials.

"Great anticipation for Biden's participation in the climate conference in Sharm El-Sheikh" (ahram.org.eg).

"Belarusian President stresses the importance of participating in climate conference to combat climate change" (*youn7.com*)

"Successful Egyptian participation in COP28. President Sisi calls on the world to unite to confront climate change. Calls ring the alarm bell to save the Earth. Summit Chairman: We appreciate Egypt's efforts.. and the Loss and Damage Fund is an extension of COP27 efforts" (youm7.com)

4.4 Solutions and Initiatives

Numerous solutions and initiatives were discussed in Egyptian newspapers in order to address environmental and sustainability concerns. The private sector's assistance to the government, as well as external financing and support, were emphasised as critical solutions. The newspapers also emphasised the importance of establishing policies and procedures to ensure the establishment of environmentally friendly factories, nature reserves, hygienic landfills, and the preservation of groundwater. The newspapers also prioritised the promotion of resource conservation and the transformation of citizens' attitudes towards the environment through the use of media, educational institutions, and civil society organisations. They also emphasised the importance of community activities and initiatives, including the promotion of health, the sowing of trees, the expansion of green spaces, and the organisation of environmental competitions. Additionally, solutions were discovered by utilising technology and supporting the function of universities and research centres, which benefited from the experiences of other countries.

"12 Achievements of the COP27 Climate Summit in Sharm El-Sheikh" (youm7.com)

"Sunak participates in COP27 and confirms: No prosperity without confronting climate change" (ahram.org.eg)

"Climate Change.. Suez Canal University organises seminars on waste recycling and smart green schools" (youm7.com)



Fig. A word cloud to show the most frequented words used in the selected media

The figure indicates the presence of several important words that were repeated in the published news reports, most notably the word climate, then the agenda, COP, then the president, the report, and finally, the parties. This indicates the media's interest in the various environmental issues that are the focus of the conference's topic, and its relationship to the conference's agenda, sessions, and activities, in addition to the reports and agreements associated with it and the role of the attending presidents, including the Egyptian president, whose activities during the conference were covered by Egyptian newspapers, as well as the activities of the parties participating in the conference. Then came other words that represented the topic's details, including financial support and funding, change, development, and others.

5. Discussion

The global community is confronted with critical environmental and climate change issues; however, Africa's distinctive geographic, political, and economic context presents unique challenges. Numerous African nations, particularly those in the North, are among the most water-scarce in the world. This issue is being exacerbated by climate change, overpopulation, and inefficient water management. In Egypt, many challenges threaten its sustainability and environmental welfare, such as developing sustainable water management practices. Many efforts are needed to raise environmental awareness and initiatives to mobilise public support for sustainability and to convince individuals to adopt

more environmentally friendly practices. Population growth and economic problems are putting enormous pressure on Egyptian efforts in the field of sustainability. The Egyptian press has addressed a variety of environmental and sustainability-related issues. Water scarcity, agriculture, environmental preservation, education, and quality of life have been the primary topics of Egyptian newspapers. These challenges are associated with Egypt's population of over 105 million individuals, which is currently experiencing water scarcity, environmental issues, socio-economic challenges, and a reduction in agricultural land.

Newspapers showed a strong interest in many different demographics as participants and goals in the funding process, highlighting the significance of cooperation among government agencies, the commercial sector, civil society organisations, youth, and women. The need of funding sustainability programs and using the knowledge of other nations, colleges, and environmental specialists was emphasised by Egyptian publications as a solution. Additionally, they underscored the importance of community awareness of sustainability issues through the arts, culture, and media. Their emphasis was on the necessity of implementing environmental laws and regulations and utilising contemporary technologies. Two of the most significant challenges that Egyptian newspapers addressed in the pursuit of environmental and societal sustainability were the economic and population challenges.

Through an analysis of how African environmental issues were presented in the Egyptian press during COP27, Egyptian newspapers provided important new insights into the discourses that have been developed around these important issues. According to the findings, the Egyptian media significantly influenced how the population recognised and discussed the environmental issues the continent is facing. The way these problems were framed frequently combined national interests with a sense of solidarity within the continent, emphasising the necessity of taking action on climate change and the distinctive circumstances of African countries. Coverage addressed the socio-economic effects of environmental deterioration while emphasising issues like climate justice, sustainability, and the need for cooperative solutions.

The results indicate that what the Egyptian media covered was consistent with what the international media presents on environmental issues and climate change, which also indicates government governance in the field of disclosing environmental problems facing the state and their risks to humans, society and the economy. This is consistent with Abouaiana (2022), who confirms that Egypt's interest in environmental issues has diversified to the point that it has become linked to many regional and international concerns following the conference. Hammad, Hossam, Mahmoud, & Fahim (2023) have confirmed that the strong relations between Egypt and its international, Mediterranean, African, and Arab surroundings make it interested in issues such as: Financing Climate Action; Net-zero Coalition; Climate Adaptation; Renewable Energy; and Technology transfer.

The results also indicate the interest of Egyptian institutions in their role in social responsibility and the organisation of activities and events that support the environment and are consistent with the state's interests and commitment to the conference's outcomes, especially since Egypt remained responsible for this file until it was handed over to the UAE, which organised the COP28 Climate Change Conference in 2023. In this context, the Egyptian media also focused on many humanitarian concerns to link environmental issues to citizens' daily concerns and push them to adopt sustainable behaviours. This goes in harmony with Radwan & Ayyad (2024), who reveal the interest of electronic media organisations in Egypt in addressing sustainability issues.

Egypt benefited from hosting the conference on its land, as it highlighted the environmental issues it faces, along with those confronting the African continent. The country also focused on topics of cooperation and financial and logistical support for efforts to preserve the environment in areas such as electricity, water, agriculture, technology, and others. El Baradei & Sabbah (2024) confirmed that Egypt has developed a national climate change strategy extending to 2050, which has been reflected in clear laws and guidelines for institutions and members of society. Researchers believe that this has been reflected in the media coverage of these topics, as they appeared in news, reports, and interviews in Egyptian newspapers.

6. Conclusion

Egypt is strategically crucial in Africa, the Mediterranean, and the Arab region, with strong connections to other countries. The chapter sheds light on how the Egyptian media presented environmental issues during and after the COP27 conference and the main frames presented in media outlets by examining the news reports in two newspapers. The results indicate that the Egyptian media worked on enriching knowledge about environmental, climate issues and the COP27 in Africa and emphasised the significance of responsible and nuanced reporting. The media's ability to frame these problems will be critical in supporting educated public participation and successful policy responses throughout the continent, given the serious concerns that climate change continues to pose. More investigation into the long-term impacts of this media framing on public opinion and environmental action in Africa may be conducted in future studies.

The knowledge highlighted in this study can be a foundation point for future research and literature. The study recommends that other investigations be conducted into how the media presents environmental issues within the context

of different frames and how these frames differ based on the region, interests, and media type.

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References

- Abd El-Salam, A. M., & Abo-EL-Fotouh, M. E. (2023). The Impact of Climate Changes on the Sustainability of Tourism Activity and Archeological Sites Applied to the City of Alexandria. *JAAUTH*, 24(2), 276-301. <https://doi.org/10.21608/jaauth.2023.203048.1441>
- Abdelaziz, F. M., Ali, A. M., Elsayed, M. Y., & Wadie, S. F. (2023). Egyptian Media Coverage of International Climate Politics: A Case: Study of COP27. *Journal of Media Research and Studies*, (24), 271-294. <https://doi.org/10.21608/mjrm.2023.305408>
- Abdelmelek, M., Ghandour, S. E., Ibrahim, S., Madi, T. H., & Nadeem, Z. (2022). *Mitigating the Impact of Climate Change on Egyptian Cities: Sustainable Building and Construction as a Strategy*. The Public Policy HUB, The American University in Cairo (AUC). <https://fount.aucegypt.edu/studenttxt/106>
- Abouaiana A. (2022). Rural Energy Communities as Pillar towards Low Carbon Future in Egypt: Beyond COP27. *Land*. 11(12), 2237. <https://doi.org/10.3390/land11122237>
- Al Sayed, O., Samir, S., & Anwar, H. H. (2021). Assessing fiscal sustainability in Egypt: a comparative study. *Review of Economics and Political Science*, 2021, 1-20. <https://doi.org/10.1108/REPS-02-2020-0020>
- Ali, W. E. A. (2023). Attitudes of the academic elite towards Egyptian private satellite channels' coverage of United Nations Climate Change "COP27" conference activities. *Egyptian Journal of Public Opinion Research*, 22(2), 197-234. <https://search.mandumah.com/Record/1416493>
- Alsharif, R. S. (2022). The Egyptian public is seeking information about climate change on social media sites and its attitudes toward the 2022 Climate Summit. *Egyptian Journal of Media Research*, (80), 563-610. <https://doi.org/10.21608/EJSC.2022.264336>

- Ashour, A., & Ibrahim, D. A. A. (2018). *Financing the SDGs in Egypt: Evaluating the Current Practices and Challenges*. Institute of National Planning - Cairo, Egypt. <https://doi.org/10.21608/INP.2024.350416>
- Atanasova, D. (2019). Moving society to a sustainable future: The framing of sustainability in a constructive media outlet. *Environmental Communication*, 13(5), 700-711. <https://doi.org/10.1080/17524032.2019.1583262>
- Atwoli, L., Erhabor, G. E., Gbakima, A. A., Haileamlak, A., Ntumba, J. M. K., Kigera, & Zakhama, L. (2022). COP27 Climate Change Conference: urgent action needed for Africa and the world. *Rev Panam Salud Publica*, 46, 1-3. <https://doi.org/10.1136/bmjmed-2022-000404>
- Badr, A. (2024). Tackling Climate Change Repercussions on Africa: The Egyptian Perspective. *The International Journal of Public Policies In Egypt*, 3(1), 181-202. <https://doi.org/10.21608/IJPPE.2024.339139>
- Barkemeyer, R., Givry, P., & Figge, F. (2018). Trends and patterns in sustainability-related media coverage: A classification of issue-level attention. *Environment and Planning C: Politics and Space*, 36(5), 937-962. <https://doi.org/10.1177/2399654417732337>
- Barr, S., Gilg, A., & Shaw, G. (2011). Citizens, consumers and sustainability:(Re) Framing environmental practice in an age of climate change. *Global Environmental Change*, 21(4), 1224-1233. <https://doi.org/10.1016/j.gloenvcha.2011.07.009>
- Blommaert, J., & Bulcaen, C. (2000). Critical discourse analysis. *Annual Review of Anthropology*, 29(1), 447-466. <https://doi.org/10.1146/annurev.anthro.29.1.447>
- Borah, P. (2011). Conceptual issues in framing theory: A systematic examination of a decade's literature. *Journal of communication*, 61(2), 246-263. <https://doi.org/10.1111/j.1460-2466.1999.tb02784.x>
- Chand, S. (2017). Newspaper coverage of climate change in Fiji. *Pacific Journalism Review*, 23(1), 169-185. <https://doi.org/10.24135/pjr.v23i1.310>
- Cramer, C. M. (2008). The framing of climate change in three daily newspapers in the Western Cape Province of South Africa (Unpublished Master Dissertation), Stellenbosch University, South Africa. <http://hdl.handle.net/10019.1/2204>
- De Vreese, C. H. (2005). News framing: Theory and typology. *Information Design journal+ document design*, 13(1), 51-62. <https://dlwqtxts1x7le7.cloudfront.net/32324999/Framing-libre.pdf?>
- DiRusso, C., & Myrick, J. G. (2021). Sustainability in CSR messages on social media: How emotional framing and efficacy affect emotional response, memory and persuasion. *Environmental Communication*, 15(8), 1045-1060. <https://doi.org/10.1080/17524032.2021.1933120>
- Dryzek, J. S. (2005). Deliberative democracy in divided societies: Alternatives to agonism and analgesia. *Political theory*, 33(2), 218-242. <https://doi.org/10.1177/009059170426837>
- Ead, H. Fahmy, S., Fadallah, S., Elhalwany, F., Fahmy, H., & Kapiel, T. (2022). How can climate change education contribute to awareness and action in Egypt? Cairo University as a case study. *Journal of the International Academy for Case Studies*, 28(4), 1-19. <https://www.abacademies.org>
- Eissa, N. A. M. (2020). Egypt Within the Sustainable Development Goals One and Two of the United Nations: Overview and Recommendations Thereof. *Research in World Economy*, 11(5), 420-432. <https://doi.org/10.5430/rwe.v11n5p420>
- Ejaz, W., & Najam, A. (2023). The Global South and Climate Coverage: From News Taker to News Maker. *Social Media + Society*, 2023, 1-5. <https://doi.org/10.1177/20563051231177904>
- El Baradei, L., & Sabbah, S. (2024). Climate Change Governance and Institutional Structures in Egypt Pre-and Post-COP27. *Climate Governance in International and Comparative Perspective: Issues and Experiences in Africa, Latin America, and the Caribbean*, 277.
- El Madbouly, D. M. K. (2022). Factors affecting the Sustainable Growth Rate and its impact on Firm Value: Empirical Evidence from the Egyptian Stock Exchange. *Accounting and Auditing Journal of the Union of Arab Universities*, (1), 1-40. <https://doi.org/10.21608/NAUS.2022.229413>
- EL-Maksoud, H. H., & Ahmed, E. B. (2023). Sustainability in Egyptian Universities between Reality and the Target According to Egypt Vision 2030 and COP 27. *MSA Engineering Journal*, 2(2), 746-770. <https://doi.org/10.21608/MSAENG.2023.291911>

- El-Zouka, M. M. K. (2024). Appraisal Patterns in Selected Speeches in COP27: A Cross-Linguistic Eco-Critical Discourse Analysis Study. *Journal of the Faculty of Arts, Alexandria University*, 74(116), 1-26. <https://doi.org/10.21608/BFALEX.2024.354389>
- Entman, R. M. (1993), Framing: Toward Clarification of a Fractured Paradigm, *Journal of Communication*, 43(4)4, 51-58. <https://doi.org/10.1111/j.1460-2466.1993.tb01304.x>
- Evans, H. C. (2017). News media coverage of climate change: Perspectives from South Africa and Zimbabwe. South Africa: Sustainability, Climate Change and the Green Economy. <https://www.researchgate.net/publication/316604629>
- Fairclough, N. (2003). Analysing discourse: Textual analysis for social research. Psychology Press. <https://www.routledge.com>
- Furrer, M., Mostofi, H., & Spinler, S. (2022). A study on the impact of extreme weather events on ceramic manufacturing in Egypt. *Resources, Environment and Sustainability*, 7(2022), 1-11. <https://doi.org/10.1016/j.resenv.2022.100049>
- Ghosh, A., & Boykoff, M. (2018). Framing sustainability and climate change: Interrogating discourses in vernacular and English-language media in Sundarbans, India. *Geoforum*. <https://doi.org/10.1016/j.geoforum.2018.1016/j.geoforum.2018.1016>
- Grazzini, L., Rodrigo, P., Aiello, G., & Viglia, G. (2018). Loss or gain? The role of message framing in hotel guests' recycling behaviour. *Journal of Sustainable Tourism*, 26(11), 1944-1966. <https://doi.org/10.1080/09669582.2018.1526294>
- Güran, M. S., & Özarslan, H. (2022). Framing theory in the age of social media. *Selçuk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (48), 446-457. <https://dergipark.org.tr/en/pub/susbed/issue/72364/1142562>
- Hammad, H., Hossam, Y., Mahmoud, M., & Fahim, I. S. (2023). Egypt's Approach and Initiatives Towards Greener Future: Policy Paper. *IRASD Journal of Energy & Environment*, 4(2), 101-111. <https://doi.org/10.52131/jee.2023.0402.0039>
- Hussein, A. A. A., & Pollock, E. (2019). Sustainable Development Approaches in Egypt. *IOP Conf. Series: Earth and Environmental Science*, 297(2019), 1-12. <https://doi.org/10.1088/1755-1315/297/1/012027>
- Hussein, A., Saleh, R., Eltonbary, H., Tarek, I., Nasr, H., & Nasr, H. (2023). From COP27 to COP28: Global Climate Concerns Fair Transition to a Green Economy. *The International Journal of Public Policies In Egypt*, 2(3), 169-199. <http://doi.org/10.21608/ijppe.2023.310117>
- Jungudo, M. M. (2022). The Impact Of Climate Change In Egypt. *International Journal of Research (IJR)*, 9(3), 274-290. <https://ijrjournal.com/index.php/ijr/article/view/419>
- Kassem, H. S., Bello, A. R. S., Alotaibi, B. M., Aldosri, F.O., & Straquadine, G. S. (2019). Climate Change Adaptation in the Delta Nile Region of Egypt: Implications for Agricultural Extension. *Sustainability*, 11, 685. <https://doi.org/10.3390/su11030685>
- Mahgoob, Y. (2023). Impact of Climate and Environment Changes on the Sustainability of the Coastal Areas: The Case of Ain Sukhna, Red Sea, Egypt. *International Journal Of Multidisciplinary Studies In Architecture And Cultural Heritage*, 6(1), 98-116. <https://doi.org/10.21608/IJMSAC.2023.193634.1020>
- Manna, D. (2021). Analysis of the Critical Discourse and Adversaries. *International Journal of Trend in Scientific Research and Development*, 5(6), 1810-1833 <https://www.ijtsrd.com/papers/ijtsrd47701.pdf>
- Mohamed, A. R. K. (2022). A proposed model to activate the role of Egyptian universities to confront climate change in light of Climate Summit COP27. The Second Environmental Conference "Climate Change and the Education System-A Future Vision", Faculty of Education, Fayoum University. https://www.fayoum.edu.eg/english/Education/newsdetail.aspx?news_id=95931
- Moreno, A. L., & Cueto, L. A. C. (2022). Situation and Challenges of Sustainability in Africa: A Classification of Countries According to the SDGs Based on Cluster Analysis. Paper presented at the 4th AMENET International Conference of the Jean Monnet Network "The European Union, Mediterranean, and Africa in the Global Age", held online on 28-29 October 2021. <https://doi.org/10.25115/eea.v40i1.7231>
- Mostafa, A. (2023). An update on Egypt climate change policies post-coronavirus. A Research Presented To The Twenty-Second Annual International Conference *Legal and Economic Aspects of Climate Change*, March 19-20, 2023 AD. https://journals.ekb.eg/article_3

- Muhammad, H. H. (2022). Impact of the Green Economy on Sustainable Development in Egypt Challenges and Opportunities. *International Journal Of Humanities And Language Research*, 5(1), 13-25. https://journals.ekb.eg/article_303612.html
- Muigua, K. (2023). *COP 27 and Biodiversity: Towards an Integrated Approach to Climate Change Mitigation and Biodiversity Conservation*. Kariuki Muigua & Co Advocates. <http://kmco.co.ke/wp-content/uploads>
- Nambiar, P. (2014). Framing sustainability: A case study analysis of the environment and sustainability discourse in the Indian English language press. *Global Media and Communication*. <https://doi.org/10.1177/1742766513513194>
- Radwan, A. F., & Ayyad, K. (2024). Digital media's portrayal of climate change challenges during COP27 climate summit. *Online Journal of Communication and Media Technologies*, 14(3), e202437. <https://doi.org/10.30935/ojcm/14647>
- Radwan, A. F., Mousa, S., & Gjylbegaj, V. (2023). Discourse on Sustainability and Environmentalism in the Arab News Media: Challenges for Uncontested Agenda. *Kurdish Studies*, 11(3), 518-529. <https://kurdishstudies.net/menu-script/index.php/KS/article/view/1289>
- Ramanathan, R., & Hoon, T. B. (2015). Application of Critical Discourse Analysis in Media Discourse Studies. *3L: Southeast Asian Journal of English Language Studies*, 21(3). <http://journalarticle.ukm.my/9068/1/9183-27891-1-PB.pdf>
- Rita, P., António, N., & Afonso, A. P. (2023). Social media discourse and voting decisions influence: sentiment analysis in tweets during an electoral period. *Social Network Analysis and Mining*, 13(1), 46. <https://doi.org/10.1007/s13278-023-01048-1>
- Salman, D., & Ismael, D. (2023). The effect of digital financial inclusion on the green economy: the case of Egypt. *Journal of Economics and Development*, 25(2), 120-133. <https://doi.org/10.1108/JED-05-2022-0087>
- Sandholm, V. (2022). *The Road To Climate Justice: A discursive analysis of global climate governance between 2015 and 2022* (Unpublished Master Dissertation), The University of Gothenburg, Sweden. <https://hdl.handle.net/2077/78432>
- Sanober, R. S., Hussain, S. A., Solangi, M. A., Qazi, S. Q. A., & Mahar, S. S. (2023). Educating Readers About Climate Justice: Discourse Analysis Of Conferences Of Party. *Journal of Positive School Psychology*, 7(4), 1854-1866. <https://journalppw.com/index.php/jpsp/article/view/16915>
- Serdeczny, O., Adams, S., Baarsch, F., Coumou, D., Robinson, A., Hare, W., Schaeffer, M., Perrette, M., & Reinhardt, J. (2016). Climate change impacts in Sub-Saharan Africa: from physical changes to their social repercussions. *Reg Environ Change*, 1-19. <https://link.springer.com/article/10.1007/s10113-015-0910-2>
- Sithole, E. (2023). Climate change journalism in South Africa: noticeable improvements, less than adequate. Fojo Media Institute at Linnaeus University. <https://www.diva-portal.org/smash/record.jsf?pid=diva2%3A1743184&dswid=-3266>
- Tawfik, K. K. A. (2022). Frameworks for Egyptian press websites' coverage of the climate summit – Egypt COP 2/ An analytic study. *Scientific Journal of Media and Communication Technology Research*, (12), 258-303. <https://doi.org/10.21608/JSB.2022.238152>
- United Nations Development Programme. (2018). Climate Change Adaptation in Africa UNDP Synthesis of Experiences and Recommendations. UNDP Publications. <https://www.undp.org/publications/climate-change-adaptation-africa>
- Van de Velde, L., Verbeke, W., Popp, M., & Van Huylenbroeck, G. (2010). The importance of message framing for providing information about sustainability and environmental aspects of energy. *Energy Policy*, 38(10), 5541-5549.
- Vincenti, D. (2015). Sustainability Transitions in Arab-Islamic Countries: Egypt as a Case Study. *Agriculture and Agricultural Science Procedia*, 8, 135-140. <https://doi.org/10.1016/j.aaspro.2016.02.018>
- Vitale, G., Cupertino, S., Rinaldi, L., & Riccaboni, A. (2018). Integrated Management Approach Towards Sustainability: An Egyptian Business Case Study. *Sustainability*, 11(5), 1244. <https://doi.org/10.3390/su11051244>
- Williams, J., Chin-Yee, S., Maslin, M., Barnsley, J., Costello, A., Lang, J., ... & Parikh, P. (2023). Africa and climate justice at COP27 and beyond: impacts and solutions through an interdisciplinary lens. *UCL Open Environment*, 5(9), 1-18. <https://ucl.scienceopen.com/hosted-document?doi=10.14324/111.444/000180.v1>
- Williams, N., & Adetuyi, A. (2022). Environmental Challenges In Africa. Brooks & Knights Legal Consultants. <https://brooksandknights.com/2022/03/02/environmental-challenges-in-africa/>

- Yassen, A. N., Nam, W., & Hong, E. (2020). Impact of climate change on reference evapotranspiration in Egypt. *CATENA*, 194, 104711. <https://doi.org/10.1016/j.catena.2020.104711>
- Youssef, A. M. A. R., EL Adel, R., & Adam, H. (2021). Efforts to Achieve Environmental Sustainability in Egypt. *International Journal of Advanced Research on Planning and Sustainable Development*, 4(2), 68-82. <https://doi.org/10.21608/IJARPSD.2021.236794>
- Zanaty, D. G. (2023). Ecological discourse analysis of Al-Sisi's climate change speech at the COP-27 Conference. *Journal of Languages and Translation (JLT)*, 10(3), 49-76. <https://doi.org/10.21608/JLTMIN.2023.307730>
- Zielinski, C. (2022). COP27 Climate Change Conference: Urgent Action Needed for Africa and the World. *Afro-Egypt J Infect Endem Dis.*, 12(4), 300-302. [https://doi.org/10.1016/ S1473-3099\(22\)00696-X](https://doi.org/10.1016/ S1473-3099(22)00696-X)