

Impact of Social Media in the Promotion of Climate Change Adaptation Actions: Case of the Use of LinkedIn by Climate Change Advocates in Kenya

Ndumi Kathini^{1*}, Idah Gatwiri Muchunku², Wilson Ugangu³

¹Post Graduate Student, Faculty of Media and Communication, Multimedia University of Kenya, Kenya

^{2,3}Associate Professor, Faculty of Media and Communication, Multimedia University of Kenya, Kenya

Abstract: As climate change increasingly threatens communities worldwide, effective communication and advocacy strategies are essential for fostering adaptation actions. Social media platforms offer unique opportunities for engaging diverse audiences and mobilizing collective efforts towards addressing climate-related challenges. The objectives of this study were (i) to assess utilization of diverse LinkedIn features by climate change advocates in their quest to promote adoption of climate change adaptation actions in Kenya and (ii) to analyze the extent of agenda setting through LinkedIn by climate change advocates in their quest to promote adoption of climate change adaptation actions in Kenya. Diffusion of innovations theory and agenda setting theory guided the study. The target audience was made up of Kenyan climate change advocates who were actively participating in LinkedIn campaigns to adapt to climate change. Purposive sampling was used to select 32 profiles, and data was collected from 6 advocacy accounts, 6 advocates, and 14 followers through interviews, focusing on those actively engaging with LinkedIn posts. An interview guide and content analysis code were used as data collection instruments. Data presentation and analysis was done using thematic narratives guided by the study objectives. The study discovered that climate change advocates in Kenya made considerable use of a variety of LinkedIn features in their efforts to encourage Kenyans to adopt climate change adaptation measures, including the use of content format (text posts, articles, photos, and videos), engagement metrics (likes, shares, and comments), and post frequency. Most of the climate change advocates were found to have posted with a moderate to high frequency. The large number of shares and likes and comments by users also suggested that there was a high level of interaction with the climate advocacy posts. Regarding LinkedIn features, the findings indicate that multi-image posts featured posts and single-image posts had the highest engagement by having the highest number of shares, likes and comments. The findings also indicate that a bigger percentage of the posts emphasized on the topical issue of policy advocacy on climate change, with emphasis on sustainable operations and activities. The findings also show that majority of the messages were positively framed. Based on the results, the study suggests that social media should be aggressively exploited to educate and inspire young people to adopt a more environmentally conscious stance.

Keywords: Global Warming, Climate Adaptation Actions, Social Media Impact, Climate Advocacy, Climate Change Communication, Climate Change Awareness.

1. Study Background

Social media platforms have become indispensable in the realms of networking, activism, and communication across various international fields, emerging as crucial tools for researchers (Stokes, Jacob, Gifford, Squires & Vandyk, 2019). With the proliferation of platforms such as Instagram, Twitter, LinkedIn, Facebook, Pinterest, chat forums, dating sites, and online blogs, determining the exact number of available social networking sites is increasingly complex (Méndez-Díaz, Akabr, & Parker-Barnes, 2021). These platforms have particularly gained prominence in environmental advocacy and climate adaptation efforts, addressing one of the most pressing issues of our time: climate change. This phenomenon affects nearly all natural processes, endangers species, and threatens biodiversity (Demirhan, 2020).

The Africa Climate Summit (ACS) held in Nairobi, Kenya, in 2023 highlighted climate change as the paramount challenge facing humanity and a significant threat to life on Earth. The summit called for urgent and coordinated action to lower emissions and mitigate greenhouse gas concentrations. In this context, social media platforms, notably LinkedIn, have become invaluable tools for climate change advocates. LinkedIn, in particular, has enabled these advocates to amplify their messages, raise awareness about climate challenges, showcase successful adaptation initiatives, and garner support from policymakers, donors, and the public.

Despite the growing influence of social media, the precise utilization and effectiveness of LinkedIn by climate change advocates, especially in the context of climate adaptation, remain relatively unexplored. This study aims to address two key objectives: (i) To assess the utilization of diverse LinkedIn features by climate change advocates in their efforts to promote climate change adaptation actions in Kenya. This involves

*Corresponding author: lukanduamr@gmail.com

examining how climate advocates leverage LinkedIn's various functionalities—such as posts, articles, groups, and messaging—to advance their climate adaptation initiatives and (ii) analyze the extent of agenda-setting through LinkedIn by climate change advocates in their quest to promote the adoption of climate change adaptation actions in Kenya. This objective focuses on understanding how LinkedIn is used to influence and shape the climate change agenda, mobilize stakeholders, and drive collective action.

In Kenya, the rise of social media usage reflects a broader trend across Africa, where internet accessibility and smartphone penetration have surged. As of 2022, over 384 million Africans were active social media users, with internet penetration reaching 47%—a significant increase from 9% in 2010 (Galal, 2022). This digital growth facilitates the dissemination of critical information on climate change impacts, adaptation strategies, and mitigation techniques.

Kenya's expanding online community, with notable organizations like the Kenya Climate Innovation Centre and Youths for Green Action Kenya, has been pivotal in advocating for Sustainable Development Goal 13 (SDG 13), which focuses on climate action. The ACS underscored the importance of effective networking and communication for advancing climate action. By investigating how LinkedIn is utilized for these purposes, this study seeks to enhance our understanding of the platform's role in promoting climate adaptation and setting the climate change agenda in Kenya.

2. Statement of the Problem

Climate change is a major global issue, impacting natural processes and threatening biodiversity (Demirhan, 2020). As Kenya faces significant climate-related challenges, understanding how LinkedIn—a leading professional social network—can aid in promoting climate adaptation is essential. This study aims to fill the gap in knowledge regarding LinkedIn's role in climate change advocacy. LinkedIn is widely recognized for its professional networking capabilities and its potential to connect users across various industries (Appleby, 2015). However, its specific use in advocating for climate adaptation measures in Kenya remains underexplored. This is particularly important given Kenya's vulnerability to climate impacts and its socio-economic development goals under Kenya Vision 2030. This study was therefore carried out to assess the utilization of LinkedIn features in this matter by investigating how climate change advocates in Kenya use LinkedIn's tools to promote climate adaptation efforts and secondly by analyzing how climate advocates use LinkedIn to set agenda to shape climate change discourse, influence stakeholders, and mobilize support for adaptation actions. By examining these aspects, the study will provide insights into how LinkedIn can be effectively used for climate change advocacy, contributing to more strategic use of social media in addressing climate-related issues.

3. Study Objective

This study was guided by the following two specific

objectives:

- i. To assess utilization of diverse LinkedIn features by climate change advocates in their quest to promote adoption of climate change adaptation actions in Kenya.
- ii. To analyze the extent of agenda setting through LinkedIn by climate change advocates in their quest to promote adoption of climate change adaptation actions in Kenya.

4. Theoretical Framework

The Diffusion of Innovation Theory and Agenda-Setting Theory served as the study's pillars. The Agenda-Setting Theory offered a framework for analyzing how LinkedIn affects the discourse on climate change among Kenyan professionals and how important it is to take action to adapt to it. A framework for comprehending how these acts are adopted by the intended audience is provided by the diffusion of innovation theory. By merging these theories, the study aimed to elucidate how LinkedIn functions as a platform for disseminating climate change information and fostering behavioral change.

A. Agenda Setting Theory

Agenda Setting Theory, originating from Walter Lippmann's 1922 observations and formalized by Maxwell McCombs and Donald Shaw in 1972, posits that media can shape public priorities by highlighting specific issues over others, thus influencing societal agendas and public opinion (Lippmann, 1922; McCombs & Shaw, 1972). The theory is based on three main assumptions: the media's ability to select and frame issues, the influence of media emphasis on public perceptions of importance, and the interaction between media and public agendas in shaping attitudes and behaviors. This study's objectives align with these assumptions by examining how climate change advocates use LinkedIn features to set the platform's agenda (assessing feature utilization) and analyzing how these advocates influence public discourse on climate change (analyzing agenda setting).

B. Diffusion of Innovation Theory

Everett Rogers' Diffusion of Innovations Theory, introduced in 1962, explores how new ideas and practices spread within a community, emphasizing the role of communication channels in this process (Rogers, 2003). The theory outlines that innovations—defined as new ideas, practices, or objects—are adopted through a process involving five stages: awareness, interest, evaluation, trial, and adoption. Rogers highlights that mass media is effective for creating awareness, while interpersonal channels are crucial for shaping attitudes and influencing adoption decisions. The rate of adoption is influenced by both individual traits and the innovation's characteristics (O'Connor, 2007). This theory is pertinent to the study's objectives by evaluating how LinkedIn facilitates the diffusion of climate adaptation initiatives among professionals, tracking their progression through the stages of adoption, and assessing the accessibility and impact of climate-related content

on the platform.

5. Literature Review

Understanding the role that social media, and especially LinkedIn, plays in encouraging climate change adaptation efforts is important, especially in Kenya, where the country's agriculture, water resources, and public health are among the many sectors facing serious difficulties from climate change. A complicated worldwide phenomenon, climate change has attracted more attention recently because of its profound effects on economies, society, and ecosystems. Understanding how individuals perceive climate change is crucial, as these perceptions can significantly influence responses to the climate crisis, both at the individual and societal levels (Howe, Marlon, Mildenerger, & Shield, 2019). Understanding the elements that influence the creation of public perceptions of climate change is crucial since these views have a significant impact on attitudes towards climate policies and efforts.

The complex process of perception creation is clarified by Ruiz, Faria, and Neumann (2020), who emphasized both direct and indirect inputs. Direct influences encompass a myriad of factors, including shared societal views and values, personal experiences, levels of education, awareness of scientific research, exposure to media, and corporate messaging. These factors collectively shape individuals' understanding and interpretation of climate change-related information, influencing their attitudes and behaviors towards climate adaptation actions. Indirect influences, as elucidated by Ruiz *et al.* (2020), are also significant contributors to perception formation. These effects are frequently linked to more general societal elements like the degree of social contact, community development, and the spread of knowledge about climate change in local communities.

These findings highlight the growing significance of social media sites like LinkedIn in supporting efforts to adapt to climate change. Social media platforms are effective instruments for promoting community involvement, influencing public opinion, and sharing information. By leveraging the features of LinkedIn such as frequency of posts, engagement metrics (shares, likes, comments), and content format (text posts, articles, images, videos), climate change advocates can strategically communicate climate-related messages, share best practices, and mobilize support for climate adaptation initiatives. The frequency of posts refers to the rate at which climate change advocates share content related to climate change adaptation on LinkedIn. Research has shown that what people say and how they say it also affect user engagement on social media (Li & Xie, 2019). In the context of this study, it is imperative to retain audience engagement and keep the topic of climate change adaptation at the forefront of their minds by adhering to a regular and constant publishing schedule. By posting frequently, climate change advocates can ensure that their messages reach a wider audience and remain top-of-mind among professionals on LinkedIn. Moreover, the capacity of LinkedIn to foster significant discourse and knowledge sharing among professionals is consistent with the focus placed by Ruiz *et al.* (2020) on the significance of social

interaction in the construction of perceptions. Professionals may interact, exchange ideas, and work together on climate resilience tactics on LinkedIn, creating a community that is conducive to taking action as a whole.

Studies have shown that the frequency of posting on LinkedIn can impact the visibility and reach of climate-related content. The frequency of usage of LinkedIn had significant positive correlations with both protean career orientation and networking ability (Davis, Wolff, Forret, & Sullivan 2018). Therefore, understanding the optimal frequency of posting is crucial for maximizing the effectiveness of climate advocacy efforts on LinkedIn. The degree of audience interest and interaction with climate-related information on LinkedIn is reflected in the number of likes, comments, and shares. Studies conducted in 2019 by Li and Xie showed that visual content in social media posts can have value beyond the text that goes along with it in terms of informational, artistic, or self-enhancement. Therefore, it might improve the post's overall attractiveness. As a result, examining engagement numbers can shed light on the efficacy of various engagement tactics used by climate change advocates on LinkedIn. The format of content shared on LinkedIn, including articles, posts, and videos, can influence audience perception and engagement with climate adaptation actions. Therefore, understanding the optimal content format can enhance the efficacy of climate advocacy campaigns on LinkedIn.

Research by Arnav, Anitha, and Chaitra (2021) suggests that LinkedIn can be used in various ways to make the content more discoverable. For instance, embed multimedia content such as videos, slideshows, documents and even other LinkedIn posts in the status updates can increase visibility. Agenda-setting theory posits that the media plays a crucial role in shaping public opinion and influencing societal priorities. By selecting and emphasizing specific issues, the media can influence the public's perception of what is important and, consequently, their attitudes and behaviors (McCombs & Shaw, 1972). This study explores the extent to which climate change advocates on LinkedIn can influence the public agenda and promote the adoption of climate change adaptation actions in Kenya. By analyzing the content and engagement metrics of these advocates, we can gain insights into their strategies and effectiveness in shaping public discourse.

Previous research on agenda-setting theory has demonstrated the media's ability to influence public opinion on various issues, including political campaigns, social movements, and public policy. In the context of climate change, social media platforms like LinkedIn offer a unique opportunity for advocates to reach a wide audience and shape public perceptions. Through the sharing and dissemination of content, climate change advocates can highlight specific issues and concerns, shaping the agenda of discussions within professional networks. The discourse surrounding climate action on LinkedIn is influenced by various stakeholders, including climate change advocates, professionals, and policymakers. Framing techniques play a crucial role in agenda setting by influencing how climate-related issues are perceived and understood by LinkedIn users. Studies by Olsson & Ihlen (2018) suggests that frames have

been proven to shape the way an issue is reported and significantly influence the audience's perception.

6. Research Design

This study employed a qualitative content analysis research design to explore LinkedIn's role in climate change adaptation efforts in Kenya. Qualitative methods were chosen for their ability to provide deep insights into behaviors, perceptions, and the interpretation of LinkedIn content (Rahman, 2020). The study identified participants through LinkedIn Pages related to environmental and climate change adaptation in Kenya. A purposive sampling technique selected 32 profiles, including 8 advocacy organizations, 8 advocates, and 16 followers. Data was collected from 6 advocacy accounts, 6 advocates, and 14 followers through interviews, focusing on those actively engaging with LinkedIn posts. Data collection tools included an interview guide and a content analysis code to examine the type, frequency, and engagement of LinkedIn posts. Findings presented thematic narratives guided by the attributes under each of the two variables that were studied.

7. Data Analysis and Presentation

The study used content analysis to analyze LinkedIn posts by climate change advocates. It examined the type of content, engagement metrics, and reach. Statistical techniques were used to identify trends. Thematic analysis was used to understand the perceived role of LinkedIn in supporting climate change adaptation actions.

A. Utilization of Diverse LinkedIn Features by Climate Change Advocates

The analysis found that the six LinkedIn profiles under consideration have sizable followings that may have an impact on the climate change agenda. Account 1 had 455 followers, account 2, 21,000 followers, account 3, 6,000 followers, account 4, 48 followers, account 5, 250 followers, and account 6, 6,000 followers. The climate change advocates considered in the study equally had sizeable number of followers. They included informants 1, with 1,237 followers, informant 2, 742 followers, informant 3, 364 followers, informant 4, 1,259 followers, informant 5, 28,038 followers, and informant 6, 1,009 followers. Most of the pages posted 2-5 times per week, with diverse content keeping the audience engaged in different aspect of climate change. The posts were done by eight (8) LinkedIn accounts for climate change advocacy institutions and eight (8) climate change advocates. Regarding the Linked accounts, the findings indicate that 12.5% of the accounts had low frequency, 37.5% had moderate posts while 50% had high frequency of posts. Generally, they had above moderate frequent posts. The study also found out that most of the individual climate change advocates had over 75% practicing moderate to high frequency of posting, with 3 and above posts per week.

Based on shares of posts, the study explored the posts in the LinkedIn accounts. The study considered four (4) posts in each account, making up thirty-two (32) posts. Majority of the posts, making up 72% had moderate shares of between 11-50 shares.

23% of the posts had more than 50 shares, which was considered high, with only 5% of the posts having between 0-10 shares. Therefore, the results show that a higher degree of involvement with the posts was implied by the somewhat high number of shares that the majority of the posts in the accounts had. The study found out that 63% of the posts had more than 100 likes, with 25% having moderate likes of between 21 and 100. Only 12% of the posts had 0-20 likes that was considered low. It follows that the posts advocating for climate change had more participation, as evidenced by the moderate to high number of likes. The large number of likes indicates that consumers like the content and that it met their needs, indicating that the postings advocating for climate change had a lot of engagement.

The study also established that the number of comments was high for most of the posts at 83% having more than 20 comments, 12% having a moderate number of 6-20 comments and only 5% having low comments of below 5 for the climate change advocate posts. The results suggest that there was a higher level of participation, as individuals shared their thoughts, paid more attention, and intentionally contributed to the conversations by leaving comments. The findings indicate that Multi-image posts, featured posts and single-image posts had the highest engagement by having the highest number of shares, likes and comments. Text-only posts had the fewest level of engagement, followed by articles on climate change advocacy.

The study found out that *Text-only posts* were used, where the text does all the talking. It was discovered through interviews that they are helpful in increasing engagement. This required either using a list to highlight key points, successes, or ways that people can contribute, or it involved asking a question to grab the audience's interest and entice them to comment. The majority of the pages and supporters advised avoiding large text blocks, which can be difficult to read. This is due to the fact that a large number of readers will be accessing the post via a mobile device, thus it must be as brief as feasible. Some of the text only posts sampled from the LinkedIn pages of the organizations and advocates as given below:

Account 1:

"A quarter of all journeys are made by bike"

"Restoration of forest cover urgent"

"Kenya needs strategy to harness blue economy"

Additionally, "Single-image posts" are used. An infographic, picture, screenshot, or other static visual that could be enhanced with further text is referred to as a single-image post. They are visually striking elements that can instantly captivate the audience's attention and provide a more comprehensive narrative than relying solely on words. Posts that contain at least one image generally receive twice as many comments as those that do not. The majority of LinkedIn users utilize clear, high-quality photos to establish a professional demeanor. The majority of these articles incorporate textual content alongside images to offer background information and encourage engagement. LinkedIn enhances post accessibility by including

descriptive alt text.

Climate change supporters and LinkedIn accounts also employed multi-image posts. It enables the display of several still photos in an eye-catching collage that viewers can click to enlarge and get additional information about. They employ a number of striking images to encourage further interaction with the postings and to share additional background. They share lucid, well-reproduced photos with accompanying text to set the scene and detailed alt text to further enhance accessibility. The sampled “Single-image posts” and “Multi-image posts” are as follows:



Fig. 1. Single-image posts” and “multi-image posts”
 Source: Center for Climate Change Awareness; Kenya Climate Innovation Centre (2024)

The use of Native Videos was also introduced by the researcher. Video footage shared with LinkedIn followers is called a native video post. They are better since they can make the message more emotionally charged and establish a closer bond between you and the listener. Native videos on members' LinkedIn feeds autoplay, in contrast to embedded videos like YouTube links, which encourage viewers to pause and watch. The climate change supporters added post text with the video to give context and entice viewers to stop scrolling and watch. Most of the videos were between 30 and 60 seconds hence performing better than longer videos. The informants indicated that the native videos were uploaded directly to a post they created on the platform.

The link below is a native video posted by Account 1:

Link: Global Food Security

<https://wef.ch/2D0VpIwhashtag#sustainabilityhashtag#environment>

The post's primary focus was on how climate change affects food production and, in turn, food supply. The informants claim that in addition to having an influence on the earnings and standard of living of small-scale food producers, climate change also has an effect on the lives of low-income net food consumers by driving up food prices and producing unpredictability, which in turn restricts their availability.

Account 2:

The climate change advocate posted a video showing how natives are working hand in hand with indigenous stewards to protect the world's most precious biodiverse areas.

[hashtag#earthday](#) [hashtag#climate](#) [hashtag#film](#)
[hashtag#nature](#) [hashtag#earth](#) [hashtag#climatechange](#)
[hashtag#sustainable](#)

Articles were equally utilised to raise public awareness, advocate for changes to policies, and promote the usage of sustainable practices. These are straight-up editorial posts that have been posted on LinkedIn. The rationale for posting an article on LinkedIn is that it enables supporters and followers to comment on it right away and share it with their networks with

ease. Furthermore, a note about the mention is sent to the other member or organization when you @mention them in the article. This makes it more likely that they will view the content and engage with it. As a result, they employ articles to tell and educate the public about climate change, as well as to spread news, present details about upcoming campaigns, and exhibit thought leadership. Less than 1,000 words should be the goal, and bulleted lists should be taken into consideration to make the articles easier to read.

An article titled "The Fourth Big Force: Climate Change" was published by one of the informants. According to the article on the advocacy element, climate change is happening on a massive scale and will unavoidably cause major economic hardship for the world's population, with costs potentially amounting to 5% of GDP. He further indicated that the estimated costs will be allocated towards mitigating climate change by reducing temperature increases to less than 1.5°C through initiatives such as transitioning from brown energy to green energy, adapting to the anticipated changes resulting from climate change by constructing safeguards against rising sea levels and temperatures, and covering the expenses incurred from damages that cannot be prevented. He opined that increasing investment in mitigation during the initial years would result in reduced expenditure on adaptation and future damage compensation.

Regarding the reality that climate change is a powerful force, one interviewee, a supporter of the Centre for Climate Change Awareness, said,

"Currently, approximately \$1 trillion per year is being allocated towards efforts to mitigate climate change. However, this amount is only about one-sixth of the estimated funding needed to limit the temperature rise to the targeted 1.5°C. Therefore, the actual temperature increases and their associated impacts will be greater than initially anticipated". He further stated that *"In the coming decades, the globe will need to undertake significant and expensive adjustments, resulting in much higher harms than what is currently being experienced and acknowledged".*

The second informant with 724 followers published an article titled, *"The Effects of Climate Change"* It underlined that there is no denying the existence of climate change and that people, ecosystems, multinational firms, and our way of life are already feeling its effects. It further indicated that rising temperatures will result in emerging economies losing up to 10 percent of their daytime working hours. Further, despite the implementation of stricter restrictions, it is projected that by 2030, significant areas will experience nearly a full month of additional intense heat annually, that would decrease job efficiency, heighten the necessity for breaks, and raise the likelihood of health issues and work-related injuries along with their respective outcomes.

The interviewee added that:

"International community is ill-equipped to handle a sudden surge in natural disasters caused by climate change, and that the lives of over 1.3 billion individuals would be affected by natural disasters by the year 2050". She further stated that *"The globe and its inhabitants are currently enduring the*

repercussions of Climate Change". The respondent further hinted on a solution by stating that *"Recycling can mitigate the adverse effects of global warming, and will ensure a consistent provision of essential commodities goods necessary for the attainment of sustainability. Join us in taking action".*

It was also found out that *Featured Posts*, were considered to achieve the need for higher frequency of posting and enhanced engagement metrics. Using "Featured Posts", LinkedIn Page Super administrators have the ability to choose up to three posts to prominently showcase on their Page. These posts will be displayed in the Featured area of the Home tab on the Page, as an additional option to the current capability of pinning a post at the top of the Page's feed. One of the featured posts in an informant's page, stated, *"What can you do to fight climate change?"* As a climate change advocate, the informant, through the featured posts highlighted effective ways to limit climate change, including the need to change lifestyles, support political change, and the use of personal leverage points.

The content format adopted by the LinkedIn pages and the climate change advocates included text posts, articles, images, videos. Images, encompassing photographs, graphics, and videos, play a crucial role in climate change communication by effectively increasing knowledge of this phenomena and promoting citizen participation in mitigation and adaptation efforts (O'Neill & Smith, 2014). The main point of emphasis is that climate change poses a serious and complex threat to human health and well-being. The efficacy of efforts to convey these concerns to the public may not meet expectations. Implementing evidence-based methods could enhance a diverse range of health-related outcomes for individuals and society, but also potentially mitigate climate-related health inequalities. Specifically, competent communication could facilitate individuals in comprehending the vital correlation between climate change and health hazards, so enabling them to take action based on this newly acquired knowledge and understanding. These methods cover a broad spectrum of techniques, such as using social networks and choosing carefully whatever words, stories, feelings, images, and information to utilize. Thorough message testing with suitable groups is also crucial. When effectively executed, these strategies are expected to enhance the acquisition of knowledge and promote improved decision-making and healthier habits.

The study further established the extent to which the content format improved engagements by the audience. The basis is that diverse LinkedIn features by climate change advocates were intended to promote adoption of climate change adaptation actions in Kenya. The findings assert that climate change advocates utilize diverse LinkedIn features in their quest to promote adoption of climate change in Kenya are consistent with the study by Arnot and Pitt et al (2024). They discovered that social media channels were a potent and all-encompassing means of communicating about climate action. They claimed that social media platforms provide a variety of characteristics that allow companies to connect young people around the world and reach a variety of audiences. They consequently came to the conclusion that, thanks to its many qualities, social media offers a potent chance to involve young people in conversations

and decision-making regarding the climate catastrophe.

In another study, Mohamed (2018) indicated that social media is the new medium for communication among people to sensitize the issue. This is due to the fact that the majority of people use smartphones and tablets to access information, which has raised public awareness. He came to the conclusion that social media use and attitudes towards climate change, environmental awareness, and public behavior are correlated. Examples of this type of content include discussions about the topic on Facebook, WhatsApp, LinkedIn, Twitter, blogs, and news comments. The study supports the current findings by showing that social media offers a platform for framing climate change skeptically and for energizing people who share that perspective through a variety of characteristics. This contains the various tools that proponents of climate change utilize on LinkedIn to encourage Kenyans to adopt climate change adaptation measures.

B. Extent of Agenda Setting through LinkedIn by Climate Change Advocates

The goal was to examine how much agenda-setting occurs on LinkedIn as a result of climate change advocates' efforts to encourage Kenyans to adopt climate change adaptation measures. The researcher was able to investigate how LinkedIn has specifically chosen and highlighted topics relating to climate change because of this goal. The specific concerns included topic prioritization, shaping of climate action discourse and framing of messages.

The findings indicate that a bigger percentage of the posts, making up 70% emphasized on the topical issue of policy advocacy on climate change, with emphasis on sustainable operations and activities. The policy advocacy issues included alternative transport to reduce emissions; innovative idea to harnesses the power of nature to address climate change, biodiversity loss, and ecosystem degradation; green bridges initiative, and green jobs in climate smart agriculture and green transportation sectors.

The research also validated that a crucial initial measure is frequently to enhance public consciousness about the climate change concerns. Respondents indicated that this objective would be accomplished by means of public gatherings, lectures, seminars, and newsletters aimed at disseminating information regarding climate change. Collaboration with the media can serve as a highly beneficial means to effectively engage with both influential individuals and the general public. The consequences of climate change are interconnected with issues such as environmental deterioration, food insecurity, calamities, and water resources. The results show that using human narratives and storytelling to emotionally connect with the audience was important in altering the climate discourse. This was mostly practiced by the individual climate change advocates and posts done on the LinkedIn pages.

The advocates contribute to shaping climate action discourse through a number of activities including awareness-raising, advocacy, and policy influence and community engagement. The most commonly used discourse posts were community engagement followed by policy influence, and then advocacy

and lastly awareness-raising. In order to incorporate the goals, worries, needs, and values of citizens and communities into policy development, planning, decision-making, service delivery, and assessment, governments, other businesses, and civil society organizations engage citizens, clients, communities, and other stakeholders in a two-way process known as community engagement. Advocates for climate change want to mobilize communities through community engagement projects to embrace sustainable and creative practices that support climate change initiatives. An overview of the climate action discourse adopted by the proponents of climate change is presented below. They include community engagement, policy influence, advocacy, and awareness raising.

Under community engagement, the researcher found out that advocates enhanced the agenda of competitions and initiatives where for instance they posted about organized and thereafter showed how they participated in various competitions and initiatives aimed at promoting climate change solutions. An example is the "Cleantech Innovation Competition and the Climate Launchpad competition" that was posted on the LinkedIn of Informant/account. Secondly, advocates posted about financing and investment agenda. This means that efforts were made to attract financing for climate-related projects, as exemplified by the "Financing an Ecosystem of Agrisolar Entrepreneurs in East Africa" conference. Thirdly, under community engagement, was the agenda of policy Influence where the researcher found out that advocates actively engaged in policy-related discussions and initiatives, advocating for urgent action on climate change and promoting sustainable practices. Examples include calls for restoration of forest cover, a shift towards a blue economy, and the adoption of sustainable tourism practices.

On advocacy, Climate change advocates on LinkedIn were found to be actively making direct calls for action to address pressing issues, such as improved solid waste management and sustainable tourism practices. Various green initiatives and programs were promoted, including the GreenBiz Programme and the NCN's Carbon Summit. Under awareness raising, the researcher found out that advocates shared informative content to raise awareness about climate change issues, such as the impact of glacial melt in the Himalayas and the prevalence of cycling as a mode of transportation. Efforts were also made to enhance awareness and understanding through training and capacity building programs, such as the ESG staff training workshop.

Further, the findings indicated that climate change advocates primarily used positive framing, emphasizing on the benefits of climate action and the potential for a sustainable future. This incorporated problem, solution, value and risk framing. The objective of the researcher was to identify the specific framing techniques used by the climate change advocates to convey climate change adaptation messages on LinkedIn. The field of climate change communication has made substantial use of the framing idea, which is centered on drawing attention to particular aspects of a problem in mediated communication. The main point is that message framing has an impact on how

climate change is communicated and how pro-climate initiatives are promoted. The summary of the below frames indicates that most of the posts and messages are positively framed.

On positive framing, climate change advocates on LinkedIn highlighted the potential for increased adoption of climate-smart agriculture practices. They emphasized that modernization, productivity improvements, and cost reductions were driving factors behind this trend. Additionally, the growing challenge of waste management in urban centers was addressed, with a focus on creating job opportunities through waste remediation and recycling initiatives. The potential for job growth in aquaculture and poultry industries was also discussed, driven by rising consumption due to population growth and increased incomes. Furthermore, the importance of sustainable use of wild species for the livelihoods and well-being of Indigenous Peoples and Local Communities (IPLCs) was emphasized.

Under Negative Framing, the researcher found out that posts also addressed the negative impacts of climate change, such as the concerning trend of glacial melt in the Himalayas. The urgent need for forest cover restoration was highlighted, emphasizing its importance for environmental sustainability.

8. Summary and Conclusion

As climate change increasingly threatens communities worldwide, effective communication and advocacy strategies are essential for fostering adaptation actions. Social media platforms offer unique opportunities for engaging diverse audiences and mobilizing collective efforts towards addressing climate-related challenges. The study discovered that climate change activists made considerable use of a variety of LinkedIn features in their efforts to encourage Kenyans to adopt climate change adaptation measures, including the use of content format (text posts, articles, photos, and videos), engagement metrics (likes, shares, and comments), and post frequency. The majority of the individual climate change activists were found to have posted with a moderate to high frequency.

The researcher found out that agenda setting was extensively done through LinkedIn by climate change advocates in their quest to promote adoption of climate change adaptation actions in Kenya. It was established that the LinkedIn accounts of the informants consistently set agenda on the news related climate-change solutions. An examination of the cognitive agenda setting of climate change advocacy through LinkedIn was done to assess how these stories provided the audience with access to climate change issues and hence created awareness. The main cognitive agenda setting through LinkedIn was that of information dissemination. These stories, statements and advertisements featured statements that created awareness regarding climate change.

The study concluded that LinkedIn use by proponents of climate change has a major impact on the promotion of climate change adaptation initiatives in Kenya. Based on the results, the study suggests that social media should be used to educate and inspire young people to adopt a more environmentally conscious stance. The study also suggests that climate change

advocates should demonstrate perseverance and steadfastness, as effective communication plays a crucial role in a prolonged endeavor. Finally, in order for future research to serve as a foundation for climate change adaptation policy, the study recommended the need to create databases that accurately represent the exposure status and socioeconomic features of individuals and populations.

9. Study Recommendations

Based on the examination of the impact of LinkedIn usage by climate change advocates in their quest to promote adoption of climate change adaptation actions in Kenya, the study recommended that Kenyan climate change advocates should endeavor to employ a variety of LinkedIn features in their online interactions. To improve access and interaction, climate change advocates should publish insightful articles and captivating images, use visuals and relevant hashtags, and encourage comments and shares. Additionally, they should post frequently, use various engagement metrics, and experiment with different content formats.

Secondly, the study recommended that there is need for Kenyan climate change advocates to leverage LinkedIn for agenda setting i.e. climate change advocates should use LinkedIn to influence public discourse and shape policy agendas by strategically sharing content, engaging with stakeholders, and participating in relevant discussions. This will help to raise awareness of climate change issues and promote greater adoption of adaptation measures.

Thirdly, the study recommends that Kenyan climate change advocates should actively seek partnerships and collaborations with other organizations, experts, and influencers in the field. By working together, they can amplify their message and reach a wider audience. Additionally, collaboration can lead to the development of more comprehensive and effective climate change adaptation strategies.

References

- [1] Arnav, A., Anitha, D. N., & Chaitra N. (2021). Analyzing the linkedin content and its effect on organizational success of start-ups. *International Journal of Advanced Science and Technology*, 28.
- [2] Davis, J., Wolff, H. G., Forret, M. L., & Sullivan, S. E. (2018). Networking via LinkedIn: An examination of usage and career benefits. *Journal of Vocational Behavior*, 118.
- [3] Demirhan, H. (2020). Impact of increasing temperature anomalies and carbon dioxide emissions on wheat production. *Science of The Total Environment*.
- [4] Howe, P. D., Marlon, J. R., Mildenerger, M., & Shield, B. S. (2019). How will climate change shape climate opinion? *Environmental Research Letters*, 14(11), 113001.
- [5] Lippmann, W. (1922). *Public opinion*. Transaction Publishers.
- [6] Li, Y., & Xie, Y. (2019). Is a Picture Worth a Thousand Words? An Empirical Study of Image Content and Social Media Engagement. *Journal of Marketing Research*, 57(1).
- [7] McCombs, M.E., & Shaw, D.L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, 36, 176-187.
- [8] Méndez-Díaz, N., Akabr, G., & Parker-Barnes, L. (2021). The Evolution of social media and the Impact on Modern Therapeutic Relationships. *The Family Journal*, 30(1).
- [9] O'Connor, B. (2007). Perceived attributes of diffusion of innovation theory as predictors of Internet adoption among the faculty members of Imam Mohammed Bin Saud University (Doctoral dissertation, University of North Texas).

- [10] Olsson, E. K., & Ihlen, O. (2018). Strategic communication and framing. 28.
- [11] Rahman M. (2020). The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language “Testing and Assessment” Research: A Literature Review. *Journal of Education and Learning*, 6(1), 102.
- [12] Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.
- [13] Ruiz, I., Faria, S. H., & Neumann, M. B. (2020). Climate change perception: Driving forces and their interactions. *Environmental Science & Policy*, 108, 112–120.
- [14] Stokes, Y., Vandyk, A., Squires, J., Jacob, J., and Gifford, W. (2019). Using Facebook and LinkedIn to recruit nurses for an online survey. *Western Journal of Nursing Research*, 41, 96–110.