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Digital media and citizen journalism in environmental reporting in Baringo County-Kenya, 2010–2015

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This article analyzes the history of digital media and citizen journalism in environmental reporting in Baringo County, Kenya from 2010 to 2015. The study suggests that mobile communication technologies and the advent of social media have revolutionized the way that environmental information is communicated in semi-arid communities that have been historically excluded from the dominant media system. The article argues that, through interpretative analysis, oral interviews and focus group discussions, together with archival research, local communities were able to document ecological crises like drought, deforestation, water scarcity, and geothermal expansion via digital communication. The results show that citizen journalism first became visible as a way of mobilizing a community around information about its environment, advocacy and shaping the local media agenda—essentially as a survivalist strategy. This transformation was, however, not as inclusive as it could be with infrastructural inequalities, weak internet access, digital illiteracy, and misinformation. It is concluded that digital media reconfigured communicative power relations in Baringo in the sense that it allowed marginalized populations to become active in the environmental discourse and politically engaged, thus providing a basis for post-2015 environmental activism in Kenya's semi-arid areas.

KEYWORDS

agenda-setting, digital activism, environmental communication, media history, rural communication

1 Introduction

Digital media technologies have greatly reshaped global environmental communication. Digital platforms in many developing countries have opened up public participation in public discourse, notifying environmental degradation, mobilizing communities and affecting public political debate (Tinga et al., 2020). The rise of mobile phones, internet connections and social networks in the early 2010s in Kenya changed the country's media landscape by bringing new decentralized modes of communication into the fold. These shifts were especially significant to the rural areas and their local environmental issues, which were historically ignored in these areas by the mainstream media (Castells, 2016).

Baringo County is part of the semi-arid Rift Valley region of Kenya with a history of droughts, land degradation, deforestation, water scarcity and resource-based conflicts.

In the face of these ecological problems, environmental issues in the National media in Baringo had remained limited, during both colonial and post-colonial era (Chelimo, 2016). As a result, local communication networks played a key role in communities, particularly through radio, oral communication and community gatherings, as means of distributing information about the environment.

From 2010 to 2015, digital communication technologies slowly changed how the county reports on the environment. With the increased use of mobile phones and smartphones and social network sites like Facebook and WhatsApp, citizens could share news about environmental catastrophes and local environmental injustice (Safari and Wambua, 2024). Citizen journalism is also becoming an important alternative to conventional journalism, in that the population who are directly involved in environmental events are able to report them directly from the place of the event (Mwaura, 2020b).

This article examines the impact of digital media and citizen journalism on environmental reporting in Baringo County in this transition. It also considers the opportunities and constraints of digitally engaged citizenship in a historically disenfranchised and highly unequal space.

2 Literature review

Digital communication has become a source of great debate with scholars now claiming that new media technologies have created an “information democracy” that allows citizens to actively engage in public discourse. In this digital era, Manuel Castells maintains, communication power has increasingly come to rely on decentralized networks, ones that can outflank traditional institutional gatekeepers (Castells, 2016). This shift has given marginalized groups increased access to the public sphere to question the status quo and contest dominant narratives.

Digital media is becoming a more vital part of communication for development and environmental promotion in Africa. According to Ngugi (2016), community-based communication systems strengthen community involvement by providing opportunities for community participation. Similarly, Mwaura (2020a), reports that digital activism in Kenya has helped communities rise up and engage in socio-political issues that were previously neglected by the mainstream institutions.

The importance of citizen journalism as a critical tool for covering climate-related crises is also pointed out by environmental communication scholars. According to Hlanze (2025), climate communication platforms are crucial for raising awareness and fostering adaptation actions among vulnerable groups. Emphasizing the role of community-based communication networks in enhancing resilience, Mehan (2024) also posits that the networks contribute to linking local experiences with larger policy discussions.

The literature on the democratizing potential of digital media, however, tends to focus upon the presence of inequality in access and participation to the detriment of it. Research activities in digital communication in Kenya tend to be concentrated in urban areas like Nairobi and Mombasa, while the rural semi-arid areas like

Baringo get little attention (Bullock et al., 2024). As such, there is minimal historical research into the role that infrastructure, marginalization and differential technological access played in environmental reporting in rural Kenya in the early digital era. The current study builds on the existing literature on digital media and citizen journalism by exploring the evolution of these tools in Baringo County from 2010 to 2015 in a particular historical and socio-environmental setting.

2.1 Theoretical framework

The study is based on the theory of the agenda-setting by McCombs and Shaw which states that media institutions shape the priorities of the public by focusing their visibility on and maintaining specific issues. Agenda setting directs attention to public issues and consequently policy priorities, as stated by Birkland and Warnement (2017). Citizen access to environment-related information has become a growing force in influencing the agenda of local media in Baringo County as it has forced journalists, and stakeholders, to consider concerns like deforestation, pollution, geothermal expansion, and drought. This theoretical approach not only allows us to understand the subjective meanings attributed to digital communication by the communities but also the overall impact of digital reporting on environmental governance and prioritization of media.

3 Methodology

The study was qualitative with historical research design approach and interpretivist philosophy. The qualitative method was suitable since it allowed the researcher to delve into the views, experiences and interpretations of the participants on digital media and environmental reporting in Baringo County from 2010 to 2015 (Buchanan and Bryman, 2018). Oral interviews, focus group discussions, archival research, and key informant interviews were used to collect data. Oral interviews were conducted with community elders, local residents, journalists, environmental activists as well as civil society leaders from various parts of the community such as Kositei, Bartabwa, Barwesa, Kinyach, Maji Moto, Solian, Mogotio and Kabartonjo. The media practitioners, irrigation farmers and the digital content creators participated in the focus group discussions.

The historic trends of state-controlled communication and environmental reporting were analyzed using archival documents from the Kenya National Archives. Historical context on media marginalization in semi-arid rural areas during colonial and early post-colonial era were provided by these archival records.¹ Thematic analysis using interpretative analysis was used for data analysis. The researcher found commonalities in the following areas of digital participation, environmental advocacy, infrastructural inequality, media visibility and citizen reporting practices. The ethical issues considered were informed consent, confidentiality and voluntary participation of the respondents.

¹ KNA/AHC/10/14.

4 Findings and discussion

The last 5 years from 2010 to 2015 were a turning point in Kenya's media ecology, characterized by the rise of citizen and a complementary media role alongside the mainstream media, and the consolidation of digital media platforms. The shift in Baringo County was not uniform but rather affected by the infrastructural challenges, social-economic inequalities, and historical marginalization from the national media. However, through the oral testimonies, focus group discussions and key informant interviews that were conducted across Baringo, this period marked a significant transformation in the reporting, discussion and politicization of environmental issues at the local level, with a particular focus on land degradation, deforestation, water scarcity, geothermal expansion, and climate variability.

Historically speaking, digital media did not supplant older modes of communication in Baringo during this time but rather added to the radio based communication networks. Radio was consistently the most trusted source of environmental information and younger community members increasingly used mobile phones and social media platforms. This discovery goes against the grain of the interpretivist approach, which argues that technology is adopted in distinct ways by people in different social settings, as opposed to the view that all regions adopt technology in a similar fashion.

By 2010, many of those responding in Kositei, Bartabwa, Barwesa and Tenges reported that mobile phones were playing a key role in disseminating information regarding environmental disruption, especially floods, droughts, and conflicts for access to pasture and water. Internet access was still not widespread, particularly in remote areas like Kimngorom and Kinyach, and whilst some activities were restricted to SMS, basic phone-based communication enabled some forms of citizen reporting. One of the respondents from Kinyach said that:

We were exchanging messages long before the introduction of mobile phones here, such as when trees were felled close to the rivers or when farms were ruined in the floods.²

This was a local method of information sharing, a type of citizen journalism, but not one based on a formal media institution, rather one based on communal responsibility and a need to survive in the environment. Historical trends reveal that the State-led media structures in Kenya have traditionally not been able to pay adequate attention to issues affecting the environment in rural areas, especially in semi-arid areas like Baringo, as evidenced in the archival records from the Kenya National Archives.³ Partly, this is because communities were traditionally left out in the margins, making informal reporting systems appealing when digital alternatives were introduced.

In 2011–2013, respondents observed a gradual penetration of urban areas like Kabarnet, Eldama Ravine, Marigat and Mogotio by the use of the cell phones and social media like Facebook and WhatsApp. The results of the Focus Group Discussions with media practitioners in Kabarnet also confirms that the frequency of local journalists using citizen generated content to identify environmental stories that mainstream media outlets have been missing in the news, has increased over time.

A lot of stories we've been following regarding pollution, charcoal burning, or drying rivers were from regular folks sending in pictures and photos or texts.⁴

This is in line with the agenda-setting theory, that the media not only affects what people think, but also what they consider important. In Baringo, citizens played a role in shaping the content of the papers and got them to address environmental degradation a significant portion of their editorial space. This local dynamic echoes the literature that sees digital media as a democratizing force and differs from previous research which has been based on urban areas and overestimates the speed of digital transformation (Doreen, 1982).

During this time, environmental reporting became more and more about real-life ecological crises. The droughts in 2011–2014 brought about a greater need for community members to use digital communication to report water scarcity and livestock losses, as noted by respondents from Maji Moto.

Rivers become shallower, animals began dying and people started taking pictures and sharing them with the leaders and NGOs, so that they can see.⁵

These accounts illustrate the way citizen journalism was expressed as a practice of survival, not just expression. Naturally, similar environmental vulnerabilities were earlier recorded in Rift Valley districts in various archival development reports from the Ministry of Home Affairs in the 1960s, but with no systems for community-driven reporting.⁶ The digital era is thus a break in information circulation, but in the face of structural inequalities.

Further, it is observed that digital platforms have been turned into crucial instruments for environmental advocacy through Focus Group Discussions with civil society leaders in Kabartonjo. They observed that a lot of times, environmental complaints are shared online before they're even made to the county board or in a formal petition.

⁴ Focus Group Discussion with media personalities in Kabarnet on 08/09/2025.

⁵ Victor Kipkemei Sang, (55 years), Oral Interview in Nosuguro, on 30/06/2025.

⁶ KNA/AHC/18/17: Broadcasting New Service Digest, KBS News Commentaries, 1960.

² Emily Chebet Kipkoeh, (47 years), Oral Interview in Kinyach, on 18/08/2025.

³ KNA/AHC/18/3: Nakuru calling 1953–1954.

Until we got to the offices, we would make noise online first to ensure that our questions wouldn't be ignored.⁷

This finding is in line with interpretivist philosophy in that it illustrates how communities interpret digital visibility as a form of political leverage. Furthermore, it supports the theory of agenda setting showing that the constant online attention forced the authorities to address environmental concerns.

But the researcher also highlights important limitations. Respondents in remote places like Koroto repeatedly highlighted that they were left out of digital conversations because of poor network coverage.

"People talk on the internet but here we hear things late or not at all."⁸

This digital divide complicates celebratory narratives in some secondary literature that frames digital media as universally empowering (Masullo Chen, 2016). In Baringo, digital citizen journalism expanded participation but did not eliminate spatial inequalities in information access.

By 2014–2015, environmental reporting increasingly intersected with broader political processes, particularly debates surrounding geothermal development in areas such as Solian and Mogotio. A respondent from Solian noted that citizen-generated content circulated widely during disputes over land compensation and environmental impacts.

When the drilling started, people recorded what was happening and shared it so that outsiders could understand our situation.⁹

This grassroots documentation echoes earlier archival records on state-controlled broadcasting, which reveal limited tolerance for dissenting environmental narratives during the colonial and early post-independence periods.¹⁰ The digital era thus marks a significant historical shift in communicative power relations, even though institutional responses remained uneven.

Concerns about misinformation also emerged during this period. Media practitioners and community leaders alike warned that exaggerated claims sometimes circulated online, undermining trust. One respondent noted that, some stories spread fear because they were not verified.¹¹

This concern resonates with archival discussions on information control and propaganda dating back to the 1950s, when colonial administrators similarly worried about uncontrolled information flows.¹² The difference in the digital era, however, lies in the decentralized nature of content production, which limits state capacity to regulate narratives.

In synthesis, the period between 2010 and 2015 represents a transformative yet uneven chapter in the history of environmental reporting in Baringo County. Digital media and citizen journalism expanded the communicative space available to marginalized communities, enabling them to document ecological change, mobilize advocacy, and influence local media agendas (Julie and Coleman, 2015). At the same time, infrastructural constraints, digital illiteracy, and misinformation tempered these gains.

From a historical standpoint, these findings both confirm and qualify existing literature on digital media democratization. While scholars emphasize the empowering potential of citizen journalism, the Baringo case demonstrates that empowerment is contingent upon geography, infrastructure, and historical marginalization. The interpretivist framework allows these nuances to emerge by privileging community meanings, while agenda-setting theory explains how digital visibility translated into political and media attention.

Ultimately, digital media during this period did not merely transmit environmental information; it reshaped the historical relationship between Baringo communities, the environment, and structures of authority. This transformation, while incomplete, laid the groundwork for more assertive forms of digital environmental activism in the post-2015 period.

5 Conclusion

The period between 2010 and 2015 represents a critical historical transition in environmental communication within Baringo County. Digital media and citizen journalism expanded the A communicative space for marginalized communities to document ecological crises, drive media attention and provide environmental advocacy. The changes would impact on entrenched power dynamics that historically constrained the ability for rural communities to engage in the mainstream media. However, the mutation was not very complete because of infrastructural constraints, difficulties in accessing communication technologies and the fact that access to such technologies was still not equal. Digital platforms raised awareness of environmental issues, but brought new complexities with respect to misinformation and inequality of participation. The study finds that digital media did not just function as a medium of environmental information but rather, it transformed the nature of community relations, environmental governance and authority structures in Baringo.

7 Focus Group Discussion with civil society leaders in Kabartonjo on 15/10/2025.

8 Stephen Kipngetch Sang, (57 years), Oral Interview in Koroto, on 20/06/2025.

9 Monica Chebet Kipngetch, (43 years), Oral Interview in Solian, on 05/07/2025.

10 KNA/AHC/18/21: Broadcasting C.S. and W. Schemes I Policy and Application to Secretary of State, 1960–1963.

11 Anthony Kiptoo Koech, (62 years), Oral Interview in Sirwa, on 04/07/2025.

12 KNA/AHC/18/21: Broadcasting C.S. and W. Schemes I Policy and Application to Secretary of State, 1960–1963.

Citizen journalism became an important tool for giving voice to local people in the process of negotiating for visibility, survival, and political engagement in a rapidly evolving media landscape.

6 Recommendations

The study calls for the strengthening of digital infrastructure in Baringo County to lower digital participation and access to environmental information gaps in the County's marginalized rural communities by both county and national governments of Kenya. Better network coverage and low-cost Internet access would expand access to environmental information and advocacy by local communities. The research also proposes the creation of community-based digital literacy initiatives designed to provide the skills of digital responsible communication, fact-checking, and citizen journalism to the population, and particularly to youth and environmental activists. Finally, media institutions and civil society can do more to work together with the local community, building platforms that will connect citizen-created environmental information with mainstream media, with sufficient verification and ethics requirements. Furthermore, digital media platforms should be better leveraged by environmental agencies and county authorities to provide timely information relating to drought preparedness, water conservation and climate adaptation measures. Last but not least, future studies should be comparative historical analysis of the involvement of digital media in environmental communication in other semi-arid counties in Kenya, which will help in expanding the understanding of digital participation and ecological governance in marginalized counties.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by National Commission for Science, Technology and Innovation Institute of Science, Research and Ethics Committee. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed

consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

Author contributions

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References

- Birkland, T. A., and Warnement, M. K. (2017). Focusing events, risk, and regulation. *Policy Shock: Recalibrating Risk and Regulation after Oil Spills, Nuclear Accidents and Financial Crises* (Cambridge: Cambridge University Press), 82–106. doi: 10.1017/9781316492635.005
- Buchanan, D., and Bryman, A. (2018). *Not Another Survey*. Oxford, UK: Oxford University Press. doi: 10.1093/oso/9780198796978.003.0001
- Bullock, R., Majiwa, H., Saalu, F., Mundia, J., and Mugi, R. (2024). *Scaling Resilience through Use of Co-Designed Radio Programs in Baringo County, Kenya*. AICCRA Brief. AICCRA Presentation. Accelerating Impacts of CGIAR Climate Research for Africa (AICCRA).
- Castells, M. (2016). A sociology of power: my intellectual journey. *Ann. Rev. Sociol.* 42, 1–19. doi: 10.1146/annurev-soc-081715-074158
- Chelimo, C. K. (2016). *Natural resource conflicts and its impacts on household socio-economic activities of the arbor community in baringo North Sub-County, Baringo County, Kenya* (PhD dissertation), Kisii University.

- Doreen, F. (ed.). (1982). *Faulkner and the Southern Renaissance*. Jackson, MI: University Press of Mississippi.
- Hlanze, D. K. (2025). *Assessing the utilization and effectiveness of climate information services for disaster risk reduction: case study of smallholder agriculture sector in Eswatini* (PhD dissertation), Stellenbosch University.
- Julie, F., and Coleman, S. (2015). "Rethinking local communicative spaces: reflecting on the implications of digital media and citizen journalism for the role of local journalism in engaging citizens," in *Local Journalism: The Decline of Newspapers and the Rise of Digital Media*, ed. R. K. Nielsen (Oxford: Reuters Institute), 117–140.
- Masullo Chen, G. (2016). "Social media: from digital divide to empowerment," in *The Routledge Companion to Media and Race*, ed. C. P. Campbell (London: Taylor and Francis). doi: 10.4324/9781315778228-11
- Mehan, A. (2024). *The Affective Agency of Public Space: Social Inclusion and Community Cohesion*, Vol. 22. Berlin: Walter de Gruyter GmbH and Co KG. doi: 10.1515/9783111035642
- Mwaura, J. (2020a). # *Digitalactivism: a study of socio-political movements in Kenya* (PhD dissertation), University of the Witwatersrand, Johannesburg (South Africa).
- Mwaura, J. W. (2020b). *Financial risk management and financial performance of savings and credit cooperative societies in Nairobi City County, Kenya* (PhD dissertation), Masters Thesis, Kenyatta University, Kenya. p. 57 doi: 10.24940/theijbm/2020/v8/i8/BM2008-020
- Ngugi, M. (2016). Challenges facing mobile schools among nomadic pastoralists: a case study of Turkana County, Kenya. *Am. J. Educ. Res.* 4, 22–32.
- Safari, S. N., and Wambua, P. P. (2024). Water scarcity role on violent conflicts amongst pastoralist communities in Tiaty Sub-County, Baringo County Kenya. *Rev. J. Soc. Sci. Humanit.* 5, 137–163.
- Tinga, T. M., Murphy, P. D., and Sessou, E. S. (2020). "ICTs, environmental activism and community mobilization in Senegal, Kenya and South Africa," in *The Local and the Digital in Environmental Communication* (Cham: Springer International Publishing), pp. 129–149. doi: 10.1007/978-3-030-37330-6_7