

บทความวิจัย (Research articles)

Unraveling Climate Change Narratives in Thai Media: Exploring Discourse, Misconceptions, and Marginalized Perspectives

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Abstract

Climate change is an undeniable global challenge with far-reaching impacts, including altered weather patterns that threaten food security and rising sea levels that increase the risk of catastrophic flooding. According to the Global Climate Risk Index 2025 published by Germanwatch, Thailand ranks 30th among countries most affected by extreme weather events in the long-term index (1993–2022) (Germanwatch, 2025). This ranking reflects the human and economic impacts of climate-related events such as storms, floods, and heatwaves over the assessed period. This study investigates how climate change is portrayed in Thai media and assesses the effectiveness of related communication strategies. Eighteen key informants representing six stakeholder groups-traditional media, digital media, vulnerable groups, NGOs (Non-governmental organizations), experts, and corporations-were interviewed in-depth between May and July 2025. The data were analyzed according to seven themes identified in the literature: (1) employing frames that resonate and engage, (2) communicating the existence of scientific consensus, (3) prioritizing accuracy goals over directional goals in climate change communication, (4) utilizing credible messengers, (5) incorporating authoritative scientific information, (6) presenting both problems and solutions, and (7) mobilizing action. The research identifies key discourse patterns, misconceptions, and marginalized perspectives within Thai media, aiming to enhance understanding of climate communication strategies and bridge the gap between local and global perspectives. By addressing these discrepancies, this study seeks to promote informed public discourse and contribute to more effective climate action in Thailand.

Keywords: Climate Change, Narratives, Thai Media, Communication Strategy

Introduction

Climate change is an undeniable global challenge with far-reaching impacts, including altered weather patterns that threaten food security and rising sea levels that increase the risk of catastrophic flooding. The Germanwatch Global Climate Risk Index 2026 ranks Thailand 30th globally for the period 1993–2022 (Adil, 2025). This revised position, down from ninth in earlier assessments, reflects updated evaluations of the frequency and severity of extreme weather events—such as storms, floods, and heatwaves—and their associated human and economic impacts worldwide (Germanwatch, 2025).

Despite this relative shift, Thailand’s underlying vulnerability to climate change remains severe due to its extensive coastline, its large agriculture-dependent economy reliant on stable climatic conditions, and its densely populated urban centers situated on flood-prone plains.

Effective climate change communication is increasingly recognized as a critical factor in fostering adaptive responses among policymakers, communities, and other stakeholders (Moser, 2010). News media play a central role in this process by shaping public discourse and influencing how climate risks and solutions are understood. Through framing and agenda-setting, media narratives affect public perceptions of climate change and the types of responses that gain political and societal support (Bolsen & Shapiro, 2018). Recognizing this, the United Nations (UN) has issued guidelines emphasizing the importance of authoritative scientific information, the presentation of problems alongside actionable solutions, and the mobilisation of public engagement.

Further discussions involving the international organizations have produced key recommendations, including avoiding “doom-and-gloom” narratives, broadening climate discourse beyond environmental impacts alone, localizing communication with attention to climate justice, countering misinformation through trust-building, and maintaining a science-based, solution-oriented approach (Hinkel et al., 2020).

Although climate change coverage in Thai media has increased in recent decades, opportunities remain to further strengthen how the issue is communicated. Thailand’s climate performance ranking and public awareness levels suggest room for enhancing climate literacy and engagement (Social Progress Imperative, 2022). The Climate Perceptions Index indicates that approximately 40–50% of the Thai population reports awareness of climate change, compared to higher levels in some Global North countries. These patterns highlight the importance of examining how media framing may shape public understanding and engagement in the Thai context.

Further complexity is revealed by a global survey reported by Lee et al. (2015), which found that although more than 75% of Thais were aware of climate change, only 50–69% perceived it as a serious threat. This gap between awareness and perceived risk suggests limitations in existing communication

approaches and highlights the need for strategies that emphasize the local relevance and lived impacts of climate change.

In Thailand, climate communication is shaped less by ideological denialism-common in Western contexts-than by cultural fatalism, which can perpetuate inaction (Suthirat & Takashi, 2013). Media narratives are often influenced by anthropocentric perspectives that priorities economic consequences, such as impacts on agriculture and economic stability.

These narratives may also be shaped by corporate public relations and CSR (Corporate Social Responsibility) initiatives, contributing to selective framing or greenwashing. As a result, national media discourse may diverge from broader, science-based global perspectives necessary for effective climate action. The objective of this study is to examine the effectiveness of Thai media coverage of climate change.

Despite growing scholarship on climate communication in Thailand, prior studies have primarily focused on media effects, public perception, or isolated environmental issues (e.g., Suttirat, 2014), with limited attention to narrative construction across different stakeholder groups. Little research has examined how media narratives intersect with vulnerable communities and corporate actors within a shared communication ecosystem. This study addresses this gap by analysing climate discourse across media professionals, experts, NGOs, vulnerable groups, and corporate representatives. By situating these perspectives within a unified analytical framework, the study contributes a multi-actor understanding of climate communication in Thailand.

Theoretical framework

This study draws on the strategic climate communication framework proposed by Bolsen and Shapiro (2018), complemented by the United Nations (UN) Guidelines on Communicating on Climate Change (United Nations, 2025), to examine the effectiveness of climate change communication in Thai media. Together, these frameworks provide a robust basis for analyzing how media narratives shape public understanding, engagement, and responses to climate change.

Bolsen and Shapiro (2018) identify four key strategies for effective climate communication. First, the use of frames that resonate emotionally and cognitively with diverse audiences is essential for engagement. Research demonstrates that visual imagery and narrative framing can significantly influence beliefs and behavioral intentions. Frames emphasizing immediate, locally relevant impacts-such as public health effects-or the effectiveness of individual and collective actions can enhance perceived efficacy and broaden support for climate action, particularly among skeptical audiences.

Second, communicating the existence of a scientific consensus can increase public recognition of agreement among scientists, especially when conveyed through clear and visual formats. However,

consensus messaging alone is often insufficient to generate concern or policy support, particularly in politicized contexts. Its effectiveness depends on integration with emotional, cultural, and contextual framing strategies.

Third, the framework highlights the importance of prioritizing accuracy goals over directional goals in climate communication. Directionally motivated reasoning, in which individuals interpret information to confirm prior beliefs, can undermine understanding. Accuracy-oriented processing is more likely when audiences are exposed to diverse sources, encouraged to evaluate evidence, or anticipate accountability (Druckman, 2015). Emphasizing local climate impacts can further support accuracy-driven engagement. Fourth, the use of credible messengers is critical. Scientists and scientific institutions play a central role in countering misinformation, enhancing trust, and depoliticizing climate narratives, particularly in contested media environments.

These principles align closely with the UN Guidelines (United Nations, 2025), which emphasize authoritative science, balanced problem–solution framing, avoidance of “doom-and-gloom” narratives, and attention to local context and climate justice. Together, these frameworks inform the analytical framework of this study, enabling an evaluation of how Thai media frame climate issues, convey scientific credibility, and mobilize public engagement within the national context.

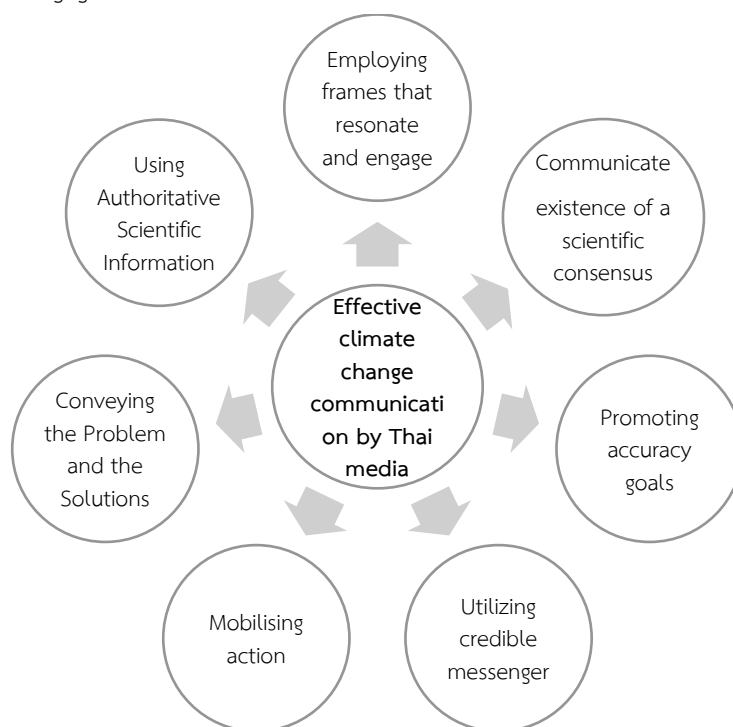


Figure 1 Analytical framework to evaluate the effectiveness of climate change communication by Thai media

References: adapted from Bolsen and Shapiro (2018) and United Nations (2025)

Although this study applies Western-based frameworks-particularly Bolsen and Shapiro (2018) and the UN Guidelines (United Nations, 2025)-their use is theoretically justified because they address structural communication mechanisms (e.g., framing, credibility, scientific consensus, and accuracy goals) that operate across media systems. However, the study does not assume direct equivalence. Instead, it examines how these principles function within Thailand’s distinct cultural and media context. While Western scholarship often emphasises political polarisation and climate denial, the Thai case reveals depoliticised framing, accountability diffusion, cultural fatalism (Suthirat & Takashi, 2013), and CSR-driven sustainability narratives. By analysing these dynamics, the study extends established communication models and contributes new empirical insight from a Southeast Asian context.

Methodology

A qualitative approach was employed in this study. Data were collected through in-depth interviews with 18 key informants (Table 1) conducted between May and July 2025. Informant selection was guided by the aim of capturing diverse perspectives involved in the communication of climate change and environmental issues. To achieve a comprehensive understanding of climate communication processes, participants were chosen to represent key stakeholder roles in message production, interpretation, and reception.

The snowball sampling technique was employed to select the key informants. As the interviews progressed, recurring information and consistent patterns emerged. Data saturation was therefore considered to have been achieved. However, the selection of key informants in this study has certain limitations, as only individuals involved in Thai media organizations based in Bangkok were included. Informants from media organizations outside Bangkok were not represented in this study.

The interview guide was used to explore key informants’ perspectives on the effectiveness of climate change communication by Thai media. The interview questions formed the basis of the analysis and addressed issues such as: how visual imagery and textual frames are selected to frame climate change in the media; how media communication of the scientific consensus on human-caused climate change can influence public perceptions; and how the media emphasize opportunities, local relevance, and youth engagement in their coverage.

Table 1 Characteristics and numbers of key-informants

Key-informants	Characteristics	Number
Journalist and media professional	Journalist and media professionals from traditional and digital platforms	6
Environmental expert	Environmental experts with extensive knowledge in climate communication	3
NGO	NGOs involved in climate advocacy	3
vulnerable communities	Members of vulnerable communities are directly impacted by climate change	3
Corporate	Corporate entities are involved in climate communication through CSR initiatives	3
TOTAL		18

Thematic analysis was employed by using pre-determined themes that evaluate the effectiveness of climate change communication from the conceptual framework: 1) employing frames that resonate and engage, 2) communicating the existence of a scientific consensus, 3) promoting accuracy goals over directional goals in climate change communication, 4) utilizing credible messengers, 5) using authoritative scientific information, 6) conveying the problem and the solutions and 7) mobilizing action. Codebook developed for thematic analysis is presented in Table 2. The first author (NW) collaborated with the primary advisor (KK) to code and organize the themes, ensuring the reliability of the analysis.

Table 2 The codebook developed for thematic analysis

Theme	Description	Examples on the characteristics of quotes to be categorized in theme
1) Employing frames that resonate and engage	Media employs frames that resonate and engage involves strategically selecting visual imagery and textual frames in media stories to shape public attitudes and behaviors towards climate change.	- Select visual imagery and textual frames reflecting Thai cultural values - Avoid stereotypes - Use accessible language and tone
2) Communicate the existence of a scientific consensus	Media communicates the scientific consensus on human-caused climate change can shift public perceptions although its effectiveness may diminish over time and in the presence of politicized rhetoric.	- Thai media consistently conveys the scientific consensus on human-caused climate change - Monitor and adapt strategies to maintain effectiveness over time
3) Promoting accuracy goals over directional goals in climate change communication	Media bolsters the effectiveness of climate communication, prioritize accuracy by encouraging audiences to form opinions based on factual information.	- Prioritize factual information in climate communication - Encourage audiences to form opinions based on accurate data - Emphasize the importance of factual accuracy in shaping perceptions

Theme	Description	Examples on the characteristics of quotes to be categorized in theme
4) Utilizing credible messengers	Media reports challenging politicization, promoting cleaner energy alternatives, and engaging diverse audiences through credible voices and communication initiatives to foster informed discourse and build consensus.	- Feature credible voices and communication initiatives. - Focus on promoting cleaner energy alternatives.
5) Using authoritative scientific information	Media relies on reliable, science-based, sources that are consistent with the latest scientific consensus. These sources should be free from financial or political bias and include peer-reviewed articles and assessments from reputable institutions.	- Ensure objectivity and alignment with scientific consensus - Avoid sources with financial or political bias
6) Conveying the problem and the solutions	Media tell compelling stories that make the climate crisis tangible, empowering individuals to take action, linking climate change to justice issues, and avoiding stereotypes by highlighting the positive actions and solutions from diverse communities.	- Present compelling stories to make climate crisis tangible - Avoid stereotypes and highlight positive actions from diverse communities
7) Mobilising action	Media focuses on opportunities, making it relevant to local communities, and engaging youth. Emphasizing the immediate need for action, showcasing the benefits of sustainability, using relatable language, and involving young voices are key strategies to galvanize support.	- Involve diverse stakeholders, including young voices

References: pre-determined themes were adapted from Bolsen and Shapiro (2018) and United Nations (2025)

Results and discussion

The result and discussion are guided by seven pre-set themes derived from the literature and used as the analytical framework for this study (Table 2). These themes include: (1) employing frames that resonate and engage audiences; (2) communicating the existence of a scientific consensus; (3) prioritizing accuracy goals over directional goals in climate change communication; (4) utilizing credible messengers; (5) using authoritative scientific information; (6) conveying both the problem and potential solutions; and (7) mobilizing public engagement and action.

1. Thai specificity in regional context

While this study focuses on Thailand, the findings suggest several characteristics that distinguish the Thai case within broader ASEAN climate communication scholarship. Unlike contexts where climate discourse is shaped by overt political polarization or climate denial (e.g., Boykoff, 2011; Bolsen & Shapiro,

2018), climate communication in Thailand appears largely depoliticized. Scientific consensus is rarely openly contested; instead, environmental problems are often simplistically attributed to “global warming,” which may diffuse accountability rather than generate ideological conflict.

In addition, prior research highlights culturally mediated fatalistic tendencies in Thai climate perception (Suthirat & Takashi, 2013), which, when combined with event-driven media logics, may constrain sustained mobilization. The highly centralized Bangkok-based media structure further shapes representation patterns, limiting localized perspectives. Finally, corporate sustainability narratives—often communicated through CSR initiatives—play a visible role in framing climate solutions, reflecting broader political economy dynamics of media systems in developing contexts (Couldry, 2010).

Together, these features position Thailand as a case of structurally constrained and depoliticized climate communication, contributing a distinct Southeast Asian perspective to climate media scholarship.

2. Employing frames that resonate and engage

According to Bolsen and Shapiro (2018), a key strategy for effective climate communication is to employ frames that resonate emotionally and cognitively with diverse audiences, often using visual storytelling to influence belief and action. The findings from this research align with this principle, revealing that both traditional and digital Thai media outlets consistently use a human-centric approach to make complex environmental issues more relatable.

This human-centric strategy is a conscious editorial choice designed to bridge the gap between a large-scale crisis and individual experience. *“The starting point is that the public is affected first. We’ll take that point and connect the dots, one by one, until it forms a bigger picture of what the driving forces are in Thailand, moving from a small point to a wider scope, which then leads to change”* (Traditional media #1). The informant’s approach of “connect the dots” demonstrates a conscious effort to make a complex issue both emotionally and cognitively accessible.

To avoid presenting climate change as an abstract issue, informants from both traditional and digital media described anchoring coverage in compelling human-interest narratives. This approach was particularly evident in digital media, where journalists deliberately identify relatable “pain points” to engage audiences. One digital media editor explained how their team introduces climate change through the disappearance of Thai mackerel—a familiar and culturally significant food—rather than abstract appeals to reduce emissions. This narrative strategy links everyday experience to a causal chain involving coral reef degradation, rising sea temperatures, and human activity (Digital media #1). While such framing enhances relevance and audience engagement, it also risks oversimplification. Attributing the decline of mackerel solely to global warming may obscure other contributing factors, including historical overfishing and bycatch, resulting in incomplete or potentially misleading interpretations.

This strategic choice can be understood through the lens of cultural cognition, as described by Kahan et al. (2011) that the effectiveness of climate communication in Thailand is often less about conveying scientific facts and more about navigating the landscape of cultural values and worldviews. By framing the issue around a familiar food staple, the media attempts to address the "underlying cultural frameworks that shape public opinion" rather than focusing solely on scientific literacy.

This approach becomes problematic when it intersects with the structural challenges within the field. As Suttirat (2014) research underscores, there is a "notable deficiency in the understanding of scientific principles among Thai journalists reporting on climate change". This knowledge gap makes it more likely for a journalist to adopt a culturally resonant but scientifically incomplete narrative. Without a deep understanding of the complex ecology, the simple analogy is prioritized, leading to the exact kind of oversimplification that risks misleading the public.

This critique of oversimplification is strongly supported by expert informants, who argue that the media's tendency to label complex environmental problems as "global warming" is a significant barrier to accountability. One expert noted that this framing provides a convenient way for authorities to evade responsibility; *"It becomes an easy excuse for those in charge, right? 'It's global warming, we can't do anything about it'"* (Expert#1).

This concern is also reflected by members of vulnerable communities, who experience the direct consequences of this narrative. An informant from a coastal community explained that when the local issue of seagrass loss is solely attributed to "global warming," it prevents the problem from being fixed at its source: *"When the problem is labelled 'global warming,' you can't solve it... You can't find anyone to take responsibility. The agency that should be held responsible can just float away"* (Vulnerable group #2).

While human-centric "connect-the-dots" framing effectively links climate change to everyday life, it must be applied cautiously to avoid oversimplification and misinformation. Such narratives require strong scientific literacy and careful fact-checking. In comparative perspective, Thai media practices reflect broader global trends in climate communication, where personalized, event-driven, and crisis-oriented frames are widely used to enhance relevance and engagement, often at the expense of sustained attention to long-term climate processes.

3. Communicating the existence of a scientific consensus

The theoretical framework from Bolsen and Shapiro (2018) states that while communicating, a scientific consensus can effectively increase the public's perception of agreement among scientists, but this approach has notable limitations. The research suggests that these consensus messages often fail to translate into broader belief changes, increased concern, or support for policy action on their own. The impact of this strategy is highly dependent on the political context and can be significantly diminished

by frames that politicize the issue. This underscores the need for a more strategic approach that doesn't just convey scientific facts, but also addresses the broader political and emotional factors influencing public attitudes.

According to the findings, informants from vulnerable groups and a non-governmental organization identified how political dynamics can override scientific facts, creating scapegoating and marginalized perspectives. For example, informants from vulnerable communities raised concerns about how media narratives disproportionately focus on the actions of local people—such as burning trash or practising rotational farming—while often relying solely on official government sources for context (Vulnerable group#1#3).

This politicized context, where vulnerable groups are often scapegoated, is also noticeably shaped by corporate influence. Informants from the NGO sector argued that the media's financial dependence on advertising revenue creates a power imbalance, allowing corporate actors to control the public narrative and distract from the scientific consensus on their environmental impact (NGO#1), while a digital media journalist highlighted how critical, fact-based reporting is often silenced by corporate influence, using a recent oil spill incident to illustrate this dynamic: (Digital media#2).

While Thai journalists aspire to communicate a scientific consensus by involving experts, as shown in the findings, it shows this ideal is often compromised in practice. A key reason is the structural tendency to rely on a single source, a practice that reflects earlier research by Suttirat (2014) and risks inaccurate reporting, as seen in the scapegoating incidents discussed previously. When this is combined with a politicized media environment where vulnerable groups are marginalized and corporate influence can silence critical reporting, it creates a landscape where the scientific consensus is fragile. This dynamic ultimately hinders the goal of creating a well-informed public, as objective science is often overshadowed by narratives shaped by political and economic interests.

In comparison with media practices in other countries, the challenges observed in Thai media in communicating scientific consensus are not unique. International climate communication research similarly highlights difficulties in consistently conveying the strength of scientific agreement on climate change, particularly when media narratives prioritize immediacy, balance, or event-based reporting. As in the Thai context, scientific consensus is often implied through expert presence rather than explicitly explained (Boossabong, 2017), which can limit public understanding of climate change as a well-established scientific issue rather than a matter of ongoing debate.

4. Promoting accuracy goals over directional goals

As Bolsen and Shapiro (2018) explain, a "directional goal" seeks to persuade an audience, often by creating a simple and compelling narrative that appeals to their pre-existing beliefs. An "accuracy goal," in contrast, focuses on providing objective, comprehensive facts so that audiences can form their own well-informed opinions.

The findings from this research suggest that in the competitive Thai media landscape, the directional goal of creating an engaging, sensational, or emotionally resonant story frequently overrides the journalistic duty of achieving the accuracy goal. This tension was articulated by an expert in marine science, who criticized the media's use of sensationalism at the expense of scientific precision. He argued that journalists often prioritize making stories "sexy and sellable" over factual accuracy (Expert#2).

This conflict is further compounded by the pressures of the contemporary media business model, which prioritizes speed and audience engagement—both directional goals—often at the expense of traditional journalistic standards of depth and accuracy (Expert#2). This pressure forces newsrooms to react to trending topics rather than setting the agenda on important but less "viral" issues (Traditional media#1).

A direct result of this engagement-driven environment is the loss of nuance in climate reporting. An informant from an NGO explained that the pressure to be concise for an audience with a short attention span often leads to the omission of crucial details, resulting in a superficial public understanding of the issue (NGO#2).

This reveals two central paradoxes: 1) In striving for a clear directional goal (capturing audience attention), the aim for accuracy (providing a complete picture) is compromised, hindering the media's ability to foster a truly well-informed public. 2) In striving for a clear directional goal of capturing audience attention, the accuracy goal of providing a complete picture is consistently compromised. Ultimately, the findings demonstrate that this prioritization is a systemic feature of the fast-paced, engagement-driven Thai media environment. The need for 'fast, high engagement' and 'marketing-led' news forces a direct trade-off with the journalistic standards of depth and verification. While this approach may succeed in generating clicks, it hinders the media's ability to foster a genuinely well-informed public on the complexities of climate change.

When considered in relation to climate communication practices in other countries, the tension between accuracy goals and directional goals observed in Thai media reflects a wider international challenge. Studies of climate change communication across different national contexts have similarly identified difficulties in maintaining scientific accuracy while simplifying information for public consumption (Ascher, 2004; Hansen, 2016; Jensen et al., 2013). As in the Thai case, efforts to make climate issues

accessible can lead to selective emphasis or partial explanations, which prioritize clarity and engagement but risk weakening the accuracy and completeness of climate information presented to audiences.

5. Utilizing credible messengers

As identified by Bolsen and Shapiro (2018), A crucial key to effective climate communication is the use of credible messengers. In a politically charged environment, ensuring that information originates from trusted sources like scientists and scientific organizations is paramount for fostering public trust and countering misinformation. The findings from this research reveal that Thai journalists adhere closely to this principle, defining credibility through a clear hierarchy of official and expert sources.

Across both traditional and digital newsrooms, informants consistently described a process of building credibility by grounding their reports in the voices of government officials, academics, and researchers. As one journalist explained, their process involves not just consulting experts, but verifying information by finding "multiple reference persons to confirm the same point" to ensure the report is authoritative (Traditional media#2).

However, despite the media's stated commitment to fact-checking and using expert sources, the findings reveal a significant gap between this ideal and its application. As confirmed by informants from expert, NGO, and vulnerable groups, the media's narrow definition of credibility often results in the marginalization of essential firsthand knowledge from affected communities.

This marginalization is a recurring experience for those on the front lines of the climate and ecological crisis. For instance, a key informant from Libong Island described an incident where media attention was focused entirely on a visiting government minister, while the community's perspective and firsthand experience were completely ignored (Vulnerable group#2). This suggests that when the principle of using credible messengers is applied too rigidly by prioritizing official status over firsthand experience, it undermines the ultimate goal of accurate communication. By ignoring the perspectives needed to tell the complete story, such reporting ultimately lacks nuance.

Additionally, this narrow definition of credibility creates a gap that corporate actors are increasingly filling, positioning themselves as key messengers on climate and sustainability. Through well-funded CSR campaigns and media partnerships, corporations actively shape the public narrative (NGO#2). However, experts and civil society interviewed for this research are highly critical of this dynamic, arguing that it frequently leads to greenwashing. They point out that corporate-led initiatives, such as tree-planting campaigns, are often promoted by the media as genuine solutions, even though they can be superficial and distract from the company's core environmental impact (Expert#1).

This dynamic, where corporate credibility is contested and local knowledge is marginalized, directly conflicts with the principles of accountability and fairness essential for effective climate action. As outlined

in the framework of the United Nations (UNFCCC, 1992), an inclusive climate narrative is crucial for holding "governments, businesses, and other stakeholders accountable" for their commitments to environmental justice.

However, when the media landscape prioritizes official and corporate messengers over the firsthand experiences of affected communities, it fails to create this inclusive narrative. This not only distorts public understanding but also weakens the very mechanisms for accountability, making it more difficult to achieve the fair and equitable solutions that are central to the global climate agenda.

When compared with climate communication practices in other countries, the reliance on journalists and expert sources as credible messengers in Thai media reflects a broader international pattern. Climate communication research across different national contexts similarly shows a tendency to prioritize institutional and expert voices to enhance credibility and authority (Carlton & Jacobson, 2016; Goodwin & Dahlstrom, 2014; Pearce et al., 2015). However, as observed in the Thai context, this emphasis can also result in the limited inclusion of perspectives from affected communities, suggesting that credibility is often constructed through professional expertise rather than lived experience in media narratives.

6. Using authoritative scientific information

The United Nations guidelines for climate communication (United Nations, 2025) emphasizes the critical importance of using authoritative scientific information, which requires that media reports are grounded in reliable, science-based, and objective sources consistent with the latest scientific consensus when communicating about the topic related to climate issues.

While Thai journalists expressed a commitment to this standard by consulting with experts, using scientific data from open sources like GISTDA, and checking facts with official agencies, the research findings reveal a persistent gap between this principle and its execution. For instance, key informants revealed that a commonly cited "fact," such as Thailand's top-ten ranking as a climate-vulnerable country, is often outdated and presented without crucial context (Digital media#1).

The tendency to use outdated or decontextualized data can be understood as a direct reflection of the structural challenges within Thai journalism identified by Suttirat (2014). The research underscores a "notable deficiency in the understanding of scientific principles among Thai journalists reporting on climate change". This knowledge gap is further explained by former scholars, who notes that journalists in developing countries often lack specialized training, which can lead to errors in stories concerning the technical aspects of the issue (Menezes, 2018; Smith & Morgoch, 2022). This fact is also noted by an expert informant *"A journalist with specialized training would likely investigate the timeline and context of the data. However, a non-specialist reporter is more likely to report the compelling headline figure or misrepresent complex processes, such as describing coral bleaching as an event of total death"* (Expert#2).

This suggests that such factual errors are possibly not isolated mistakes, but rather a systemic consequence of the lack of specialized climate change literacy within many Thai newsrooms.

In comparison with climate communication in other countries, the selective use of authoritative scientific information observed in Thai media reflects a broader international trend. Research across different media contexts similarly notes that scientific evidence is often referenced to support news narratives rather than explained in depth (McClune & Jarman, 2010; Ophir & Jamieson, 2021). As in the Thai case, authoritative sources are frequently used to legitimize reporting, while the underlying scientific processes and uncertainties remain less visible to audiences, shaping a partial understanding of climate change.

7. Conveying the problem and the solutions

The United Nations guidelines state that effective communication must strike a balance between "articulating the magnitude of the crisis and providing hopeful pathways forward". While the media's use of human-centric and disaster-focused frames is often effective at conveying the problem, the findings reveal a limitation when it comes to presenting meaningful and effective solutions.

As the findings show, another media's editorial strategy for conveying the problem of climate change is through event-driven frames that focus on immediate crises, particularly disasters and environmental crime. This approach is a conscious strategy to make abstract issues tangible and newsworthy. Nonetheless, in spite of the fact that these frames are effective at "articulating the magnitude of the crisis," the NGO informants argued that this intense focus on the problem, without a corresponding focus on solutions, leads to public disengagement due to the sense of hopelessness (NGO#3).

This critique directly aligns with a key UN recommendation for climate communication: the need to avoid 'doom and gloom' narratives to sustain public engagement. By prioritizing the scale of the problem over potential solutions, the media's narrative fosters inaction rather than empowerment, directly conflicting with the guidelines for effective communication. This limitation is further compounded when the media does present solutions, as they are often oversimplified or misleading. Expert and NGO informants were highly critical of the media's tendency to promote individual actions, like tree planting, as a sufficient answer to a systemic crisis. Beyond oversimplification, NGO informants argued that the media also amplify corporate-driven "false solutions," which amount to greenwashing. They pointed to the media's focus on technological fixes that originate from the fossil fuel industry, rather than solutions based on social justice and systemic change. This dynamic limit the media's ability to provide the public with a realistic understanding of the scale and complexity of the climate crisis. By focusing on these simplified and often corporate-friendly solutions, the public discourse is distracted from the need for meaningful policy reform and the pursuit of more equitable, justice-based solutions.

The media's approach to the human-centric principle is paradoxical. While its focus on disaster and human-centric frames is effective at articulating the magnitude of the problem, this often results in "doom and gloom" narratives that foster hopelessness rather than a call to action (Geiger et al., 2021). This approach is also directly conflicts with the UN guidelines' core principle of balancing the problem with "hopeful pathways forward". It leaves the public aware of the crisis but ultimately disempowered, lacking the clear and credible solutions needed to inspire meaningful engagement. Moreover, when solutions are presented, they are frequently oversimplified individual actions or corporate-friendly "false solutions" that distract from the need for systemic policy reform.

When viewed alongside climate communication practices in other countries, the tendency in Thai media to emphasize immediate problems over comprehensive solutions reflects a widely observed pattern. International research on climate communication similarly notes that media coverage often highlights the impacts and urgency of climate change, while providing more limited discussion of long-term, structural, or policy-based solutions (Feldman & Hart, 2021; Hase et al., 2021). As in the Thai context, this imbalance can shape public understanding by framing climate change primarily as a problem requiring short-term responses rather than sustained collective action.

8. Mobilizing action

The final principle of effective communication outlined by the United Nations concerns the mobilization of public action, a goal achieved by conveying both the urgency of the crisis and the opportunities for positive change. Central to this is the need to tailor messages to local communities and engage diverse stakeholders to foster a sense of collective responsibility. The media's limitations in presenting meaningful solutions, as previously discussed, directly impede its capacity to fulfil this mobilizing role.

This failure to mobilize action is rooted in a critical structural problem identified by informants: a lack of localized narratives as reporting remains heavily centralized in Bangkok, and the high cost of sending teams to the provinces is a major barrier to covering the lived realities of affected communities (Traditional media#3, 9 June 2025). This centralization of the media landscape was also mentioned by an informant from a digital media outlet, who explained that their primary challenge is framing distant environmental issues in a way that is relatable to their core audience (Digital media#3).

The insufficiency of on-the-ground reporting has tangible consequences for vulnerable communities. For instance, an informant from a fishing community explained that because mainstream media coverage is minimal and not localized enough, his community does not receive the warnings needed to protect safety and livelihoods, forcing them to rely on informal information available on social media platforms instead. This failure to provide localized reporting directly misaligns with the UN guidelines for

mobilizing action: the need to "tailor the message to resonate with local communities". The Germanwatch (2025) reports that the agriculture sectors employ nearly a third of Thailand's workforce and are key to both the rural economy and the country's GDP. Agricultural sector is also a sector that is highly vulnerable to the impacts of climate change, with climate-related extreme events projected to cause billions of dollars in losses and negatively affect almost all provinces (Germanwatch, 2025). The absence of media reporting that covers necessary, geographically localized information imposes a direct barrier for communities to mobilize actions to prevent these losses. Without context-specific insights into how climate change affects their communities, locals are unable to prepare for, mitigate, or respond effectively to its impacts (Laukkonen et al., 2009; Wolf & Moser, 2011), as their lived realities remain excluded from public discourse.

Taken together, these findings suggest that climate communication in Thailand is shaped less by ideological polarization and more by depoliticized framing, scapegoating of vulnerable groups, corporate-driven sustainability narratives, and a highly centralized media structure. While similar tensions between engagement and accuracy are observed globally, the Thai case highlights how accountability diffusion operates within a context of cultural fatalism and CSR-mediated discourse. This combination distinguishes the Thai media environment from more polarized or decentralized contexts documented elsewhere and underscores the study's regional contribution.

Conclusion and recommendations

This study explored climate change and environmental communication in Thai mainstream media by examining how media professionals perceive, construct, and evaluate climate narratives, and how these narratives shape public understanding and social marginalization. Using a qualitative approach guided by a climate communication framework with seven established themes, the analysis was situated within global climate discourse to assess both intentions and impacts of media practices.

The findings indicate that climate change coverage in Thai mainstream media is predominantly framed through human-centric, event-driven, and immediacy-focused narratives. Traditional and digital media alike prioritize personal relevance and visible impacts to engage audiences who may otherwise perceive climate change as distant or abstract. While these practices align with the framework's emphasis on engaging frames, they frequently limit the communication of scientific consensus, long-term climate processes, and structural drivers of environmental change. As a result, climate change is often portrayed as a series of isolated events rather than an interconnected and ongoing systemic crisis. Climate communication practices are further shaped by professional norms, institutional constraints, and power relations. Media professionals demonstrate a strong commitment to credibility through the use of authoritative sources and expert voices. However, time pressures, limited resources, centralized production

structures, and an engagement-driven media environment lead to uneven application of these standards. These constraints contribute to simplified narratives, selective use of scientific information, and the marginalization of local and vulnerable communities, while allowing powerful actors to evade accountability.

When assessed against the criteria for effective climate communication, a clear gap emerges between journalists' intentions and the broader social consequences of media narratives. Although engaging frames enhance visibility, they often undermine accuracy, reinforce scapegoating, and promote individualized or corporate-driven "false solutions." The dominance of reactive, short-term reporting and "doom-and-gloom" storytelling further limits sustained engagement, weakens pathways for collective action, and contributes to public disengagement. Overall, while Thai mainstream media play an important role in making climate change visible and relatable, current practices face structural limitations in conveying complexity, equity, and solutions.

Beyond analyzing media practices, this study generates broader societal insight. It demonstrates that climate communication in Thailand is shaped less by ideological denial and more by depoliticized framing, oversimplification, and accountability diffusion. By showing how environmental problems are frequently reduced to "global warming" without structural context, the study explains why public awareness does not consistently translate into sustained engagement or collective action. These findings clarify how engagement-driven media logics and centralized reporting structures shape public understanding. The study therefore contributes by identifying communication gaps that affect climate literacy, democratic accountability, and inclusive climate discourse in Thailand.

Based on these findings, several recommendations are proposed. First, specialized capacity building is essential. Media institutions should support structured training in climate science literacy, data interpretation, investigative environmental reporting, and political economy analysis of sustainability claims. Strengthening journalists' ability to interpret scientific reports (e.g., IPCC findings), contextualize statistics, and critically assess CSR narratives can reduce oversimplification and misinformation. Second, solutions-oriented framing should complement crisis-driven reporting. Beyond disaster coverage, media should highlight structural policy reforms, adaptation strategies, and locally grounded climate responses to avoid "doom-and-gloom" narratives and foster sustained engagement. Third, decentralizing narratives is crucial. Expanding reporting beyond Bangkok through regional correspondents and community-based storytelling can improve representation of vulnerable groups and localised climate impacts. Finally, reinforcing accountability is necessary. Media should move beyond attributing impacts solely to "global warming" and instead examine governance structures, regulatory failures, and corporate responsibilities to prevent accountability diffusion.

Ethical consideration process

This study has been approved by the committee for research ethics (Social Sciences), Faculty of Social Sciences and Humanities, Mahidol University, Thailand (certificate of approval No. 2024/106.0612). Consent forms in written format were requested. The interview data were transcribed and encoded to ensure the confidentiality of the key informants.

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Conflicts of Interest

No potential conflict of interest was reported by the authors.

Abbreviations

CSR: Corporate Social Responsibility

IPCC: Intergovernmental Panel on Climate Change

NGO: Non-governmental organization

UNFCCC: United Nations Framework Convention on Climate Change

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