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A critical discourse analysis of news on forest resources in Turkish newspapers

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This study investigates how Turkish newspapers frame forest-related issues through a critical discourse analysis of articles published in Cumhuriyet, Posta, and Sabah between 2010 and 2021. Utilizing Teun A. van Dijk's critical discourse analysis approach, the articles were categorized into four main themes: deforestation, forest fires, afforestation, and other forestry issues. Selected articles from each newspaper on these themes were analyzed. Findings reveal significant editorial differences; Cumhuriyet adopted a critical stance, highlighting governmental inadequacies, while Sabah employed supportive narratives portraying government efforts as effective. Posta aligned somewhat with the government by avoiding criticism and emphasizing neutral causes like global warming. The analysis underscores discrepancies in thematic structures, background context, and source selection, influenced by each newspaper's ideological alignment. Additionally, the crisis-oriented discourse prevalent across themes accentuated forest fires and their consequences. The study concludes that ideological orientations significantly shape media portrayals of forestry issues, influencing public perception and policy dialogue. Enhancing environmental journalism and fostering collaboration between media and forestry experts are recommended to improve public understanding of forest management challenges.

KEYWORDS
environmental communication, Turkish forests, media framing, journalism, crisis narrative

1 Introduction

Forests, as essential ecosystems and valuable resources are central to numerous environmental and socio-economic discussions. The media plays a crucial role in shaping public perception and influencing policy decisions regarding these complex issues. Mass media potently influences social change (Quigley, 2006). News shapes our daily decisions through headlines and themes (Cockerill, 2003). Rather than dictating thoughts, media guides which issues deserve attention (Cohen, 1963; Ader, 1995), allowing reporters and editors to shape perspectives and policy decisions. Forests, as vital ecosystems and valuable resources are at the heart of numerous environmental and socio-economic debates. The media plays a crucial role in shaping public perception and influencing policy decisions surrounding these complex issues. A significant body of research has explored the media's power to shape public opinion and influence policy debates. Palmer (1996), in the analysis of news coverage of the Amazon rainforest, demonstrated how media framing significantly influences public perception.

Within the specific context of forestry, several studies have examined how media representations impact public understanding and policy outcomes. Stoddart and Carroll (2004), found that Canadian media favored industry-related news, potentially skewing public

perception toward industry perspectives. Lidestav et al. (2007) revealed how hegemonic masculinity shapes the ideal image of a forester in Swedish forestry media, highlighting how media representations can reinforce existing power structures and marginalize certain perspectives.

Furthermore, much research has examined media coverage of specific forestry issues. Yücel (2007), analyzed newspaper coverage of a constitutional amendment proposal for forest land ownership transfer in Türkiye, highlighting differing perspectives from pro-government and critical newspapers. Similarly, Richardson (2009) examined media coverage of the Great Bear Rainforest in Canada, finding that while environmental concerns gained mainstream attention, the environmental movement itself remained marginalized. Lindkvist et al. (2011) studied changing attitudes toward forest fertilization, revealing persistent disagreements among interest groups as reflected in media coverage. Ludwig et al. (2012) investigated the influence of media discourses on local acceptance of wildlife management projects, finding that media often reflect dominant public opinions and favor powerful stakeholders. These studies provide insights into the broader context of media influence on forestry debates.

Moreover, research has examined the relationship between media discourse and policy outcomes in different contexts. Sadath and Krott (2013) analyzed media coverage of forestry issues in Bangladesh, finding that while media often highlighted deforestation and wildlife issues, there was no clear link to policy changes. In contrast, Fabra-Crespo and Rojas-Briales (2015) found that Spanish media's focus on forest fires shaped public perception and influenced policy responses. These studies highlight the complex and varied relationship between media discourse and policy outcomes.

Furthermore, a range of other studies have contributed to our understanding of the interplay between media, discourse, and forestry. Miranda Costa (2016) examined environmental news in Brazilian media, finding that soybean producers and loggers were commonly viewed as primary contributors to the destruction of the Amazon. Ross and Edgar (2016) analyzed the discourse surrounding environmental policies in the Republic of Congo, revealing discrepancies between stated policies and actual practices. Bastakoti and Davidsen (2017) investigated Nepal's forest management, highlighting the limited awareness among the general public regarding REDD+ initiatives. Takala et al. (2017) examined the discourses of private forest owners in Finland, finding that dominant economic discourses emphasized efficient wood production. Kangas et al. (2018) investigated debates on using tree stumps for bioenergy in Finland, revealing differences in perspectives between media and expert opinions. Takala et al. (2019) analyzed Finnish media articles across three decades, identifying four forest discourses and tracking their evolution. Silva et al. (2019) conducted a comparative study of wildfire discourses in Brazil and Spain, revealing sensationalized media coverage. Kerbleski and Krueger (2019) examined how Trump's use of Twitter during the 2018 California wildfires created a new type of presidential discourse. Takala et al. (2020) examined Finnish media articles over three decades, identifying hegemonies and dependencies in forestry discourses.

Koskinen (2021) explored public forest debates in Finland, identifying two coalitions with distinct narratives about forest use and policy. Song (2021) analyzed global media to identify four discourses on Payments for Ecosystem Services (PES). Mather-Gratton et al. (2021) examined narratives on forest biomass sustainability in European renewable energy debates. Karnatz et al. (2021) conducted a media analysis of forest certification in the United States, finding that coverage was predominantly positive. Edwards et al. (2022) examined post-World War II forestry discourse in Europe. Mangani (2021) analyzed deforestation coverage in three newspapers, showing that media attention varied according to countries' economic conditions. Halla and Laine (2022) highlighted how emotional expressions influence stakeholder motivations and conflicts in digital media comments on Finland's "Stop Clearcutting" initiative. Takala et al. (2023) highlighted how production-focused thinking among forest owners suppressed innovations promoting sustainable forestry practices in Finland. Rodríguez-Teijeiro and Román-Masedo (2023) analyzed news coverage on major wildfires in Spain, revealing the use of sensationalist language.

While a substantial body of research has explored the media's power to shape public opinion and influence policy debates, there remains a gap in understanding how media discourses on forestry issues are influenced by ideological orientations, particularly in the context of Türkiye. This study aims to address this gap by examining how Turkish newspapers frame forest-related issues, with a focus on the interplay between media discourse, ideological alignment, and public perception.

Previous studies have demonstrated that media representations of forestry issues can significantly influence public understanding and policy outcomes. However, few studies have systematically analyzed how media discourses on forestry issues evolve over time, particularly in contexts characterized by pronounced ideological divisions, such as Türkiye. This study addresses this gap by conducting a longitudinal analysis of forest-related news in Turkish newspapers from 2010 to 2021, a period marked by increased environmental concerns and political polarization.

The aim of this study is to critically analyze how Turkish newspapers with varying ideological orientations frame forest-related issues and to explore the implications of these discourses for public perception and policy dialogue. By applying Teun A. van Dijk's critical discourse analysis methodology, this research seeks to uncover the underlying ideological biases in media representations of forestry issues and to assess how these biases influence public understanding and policy discussions.

The novelty of this study lies in its focus on the Turkish media landscape, which has been underexplored in the context of environmental communication. Unlike previous studies that have primarily concentrated on Western contexts, this research provides a nuanced understanding of how media discourses are influenced by political and ideological factors in a non-Western setting. Furthermore, by examining a wide range of forest-related themes—including deforestation, forest fires, afforestation, and other forestry issues—this study offers a comprehensive analysis of how media discourses evolve over time and across various ideological frameworks.

Analyzing the discourse in newspaper reports on forests is crucial for understanding the impact of media messages on public perceptions of environmental issues. By examining how the media frames forest-related news, the themes it emphasizes, and the narrative strategies it employs, we can assess how public perceptions of environmental issues are shaped. This study can help identify misleading or incomplete information and contribute to the development of more informed media consumption.

This analysis can assist policymakers and environmental activists in developing more effective strategies by examining the relationship

between media representations of environmental policies and public attitudes toward environmental issues. Furthermore, evaluating the differences in discourse among various media outlets can promote impartial and science-based journalism. This, in turn, can enhance public support for sustainable environmental policies.

From an academic perspective, discourse analysis can significantly contribute to various disciplines, including media studies, sociology, environmental sciences, and psychology. Specifically, it can enhance the design of more effective educational and awareness campaigns, thereby fostering greater environmental consciousness within society. Consequently, analyzing media discourse can yield valuable insights for both scientific research and practical applications aimed at increasing environmental awareness. To achieve these objectives, this study addresses the following research questions:

How do Turkish newspapers with varying ideological orientations frame issues related to forests, and what discursive strategies do they utilize to shape public perception?

What are the key thematic differences in the coverage of forest-related issues among newspapers, and how do these differences reflect their ideological alignments?

To what extent do media discourses on forestry issues in Türkiye align with or challenge government policies, and what implications do these discourses have for public understanding and policy dialogue?

By addressing these questions, this study seeks to enhance our understanding of the role of media in shaping public discourse on forestry issues. It offers insights that are essential for improving environmental journalism, informing policy decisions, and fostering more balanced and informed public debates. The findings of this research carry significant implications for policymakers, media practitioners, and environmental advocates, as they underscore the necessity for more equitable and informed media coverage of forestry issues in Türkiye and beyond.
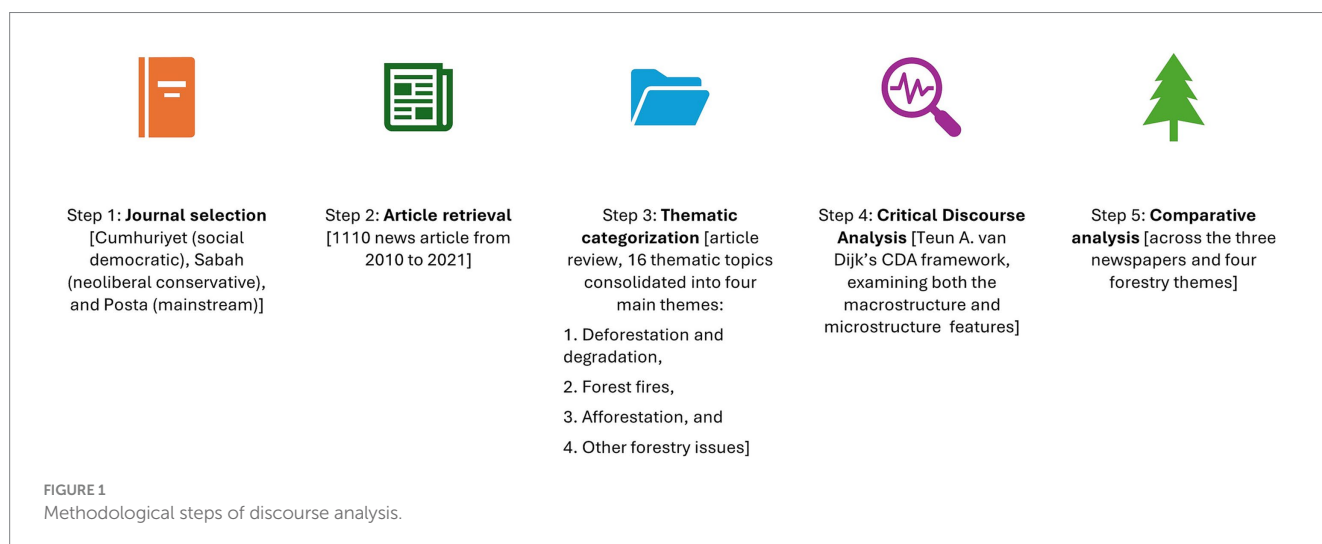
2 Materials and methods

This study employs critical discourse analysis, as proposed by Teun A. van Dijk, to examine how forest-related issues are framed in Turkish newspapers. The analysis focuses on articles published in three national newspapers—Cumhuriyet, Posta, and Sabah—between 2010 and 2021. To provide a clear overview of the research process, Figure 1 illustrates the research process followed in this study. The process begins with the selection of newspapers, followed by article retrieval, thematic categorization, critical discourse analysis, and comparative analysis across the three newspapers and four forestry themes. Each step is described in detail in the following subsections. All articles were analyzed in their original language (Turkish) to preserve the integrity of the discourse.

2.1 Newspaper selection and data collection

In this study, we aimed to identify the discourse surrounding forestry in print media by analyzing news articles and opinion columns related to forests and forestry published in three national newspapers (Cumhuriyet, Posta, and Sabah). Initially, the data range was set from 2010 to 2020; however, due to the significant number of forest fires occurring worldwide and in Türkiye in 2021, we also included forest fire news from that year, comprising 182 articles, in the dataset. The period of 2010–2021 was selected because it reflects a time when global climate change and biodiversity issues gained prominence, leading to increased pressures on forest resources and heightened controversies surrounding them.

For this study, three newspapers with high daily circulation and distinct editorial policies concerning forest resources and forestry were selected: Cumhuriyet (social democratic), Sabah (neoliberal conservative), and Posta (mainstream). According to the national circulation rankings for 2021, Sabah ranked either first or second, Posta ranked fifth or sixth, and Cumhuriyet ranked 20th or 21st (Ulusal gazete tirajları, 2024). The news articles that formed the dataset were retrieved from the archive department of the Sabah newspaper and provided in Portable Document Format (PDF), resulting in a total of 1,030 articles. The following keywords were utilized to retrieve forest related news articles: tree, forest, wood, mushroom, timber, forest fire, biodiversity, afforestation, greenhouse gasses, sapling, laurel, sweetgum, medicinal and aromatic plants, recreational area, urban forest, forest cadaster, watershed

FIGURE 1
Methodological steps of discourse analysis.

Step 1: **Journal selection** [Cumhuriyet (social democratic), Sabah (neoliberal conservative), and Posta (mainstream)]

Step 2: **Article retrieval** [1110 news article from 2010 to 2021]

Step 3: **Thematic categorization** [article review, 16 thematic topics consolidated into four main themes:
1. Deforestation and degradation,
2. Forest fires,
3. Afforestation, and
4. Other forestry issues]

Step 4: **Critical Discourse Analysis** [Teun A. van Dijk's CDA framework, examining both the macrostructure and microstructure features]

Step 5: **Comparative analysis** [across the three newspapers and four forestry themes]

rehabilitation, stream rehabilitation, soil, seed, forest pests, national park, nature park, forest villages, resin production, income-generating trees, honey forests, ecotourism, memorial forest, biological control in forests, turpentine tree, erosion, "Breath for the Future" afforestation project, insect, mining areas, greenery, desertification, pasture, and the General Directorate of Forestry (OGM).

During the review of the articles, it was discovered that digital versions of the Posta newspaper's content from 2010 to 2015 were unavailable. As the archive department of Posta lacked a comprehensive database, the missing data for this period was supplemented by conducting searches on the newspaper's website. Consequently, an additional 80 articles related to forestry and forest resources were obtained.

2.2 Data review and categorization

All forest related news articles were analyzed and classified according to their content, distributed across 16 topic headings (see Table 1). The methodological approach involves manual content analysis of articles related to forestry and forest resources, ensuring a comprehensive and rigorous examination of the data. These topics were subsequently refined and consolidated into six broader categories. After further analysis, which considered the thematic proximity of certain articles, these six categories were reduced to four main themes (Figure 2). The process of distinguishing these themes involved identifying the dominant discourses within the texts based on their frequency and emphasis.

Following a comprehensive content analysis of the news articles, those deemed to have low relevance to forest resources and forestry were excluded. This process resulted in a dataset comprising

TABLE 1 News topics on forestry and forest resources.

Topic	Frequency	Percentage (%)
Afforestation	124	11.2
Forest fires	616	55.5
Forest villages	4	0.4
Forest protection	52	4.7
Forest cadastral issues	11	1.0
Forest pests	10	0.9
Water pollution	15	1.4
Wildlife conservation	26	2.3
Erosion and desertification	37	3.3
Tourism–national parks	50	4.5
Mining areas	40	3.6
Permit–easements	9	0.8
Non-timber products	48	4.3
Deforestation	51	4.6
Beekeeping	12	1.1
Seeds	5	0.5
Total	1,110	100

942 articles for descriptive statistical analysis. The annual distribution of these articles is illustrated in Figure 3, which indicates that the highest number of articles were published in 2019 and 2020, while an average of 65 articles were published in the remaining years.

When the monthly distribution of 942 articles on forest resources was examined (Figure 4), a seasonal pattern emerged, with the majority of articles concentrated in the summer months. Given that Türkiye's forests are located within a temperate Mediterranean climate, summers are characterized by dry conditions, decreased air humidity, and an increased likelihood of ignition for flammable materials. Consequently, most fires occur between June and September, which is reflected in the number of articles that peak during this period. This finding suggests that a substantial portion of news coverage occurs during the forest fire season.

Figure 5 presents the top 10 newspaper sections in which all forest-related news was published, along with their corresponding frequencies and percentages. Most articles appeared in the agenda section, followed by the back page and economy sections.

2.3 Critical discourse analysis

The articles deemed most relevant in terms of topical significance, adherence to journalistic standards, and newsworthiness were selected for analysis using van Dijk's discourse analysis framework (see Figure 6). This model of critical discourse analysis consists of both macrostructures and microstructures. Macrostructures are further divided into two categories: thematic and schematic analyses. Thematic analysis organizes and conveys the meaning of a news article, necessitating a structured macro framework. This framework is supported by schematic components, which include elements such as summaries, analyses, and complexities. The absence of these elements within the schematic structure may lead readers to perceive the narrative as incomplete or lacking significance. News articles often incorporate various schematic structures, including main events, background information, chronology, and context, each of which can be further subcategorized. For example, the commentary category may include evaluations provided by reporters or editors (van Dijk, 1988a).
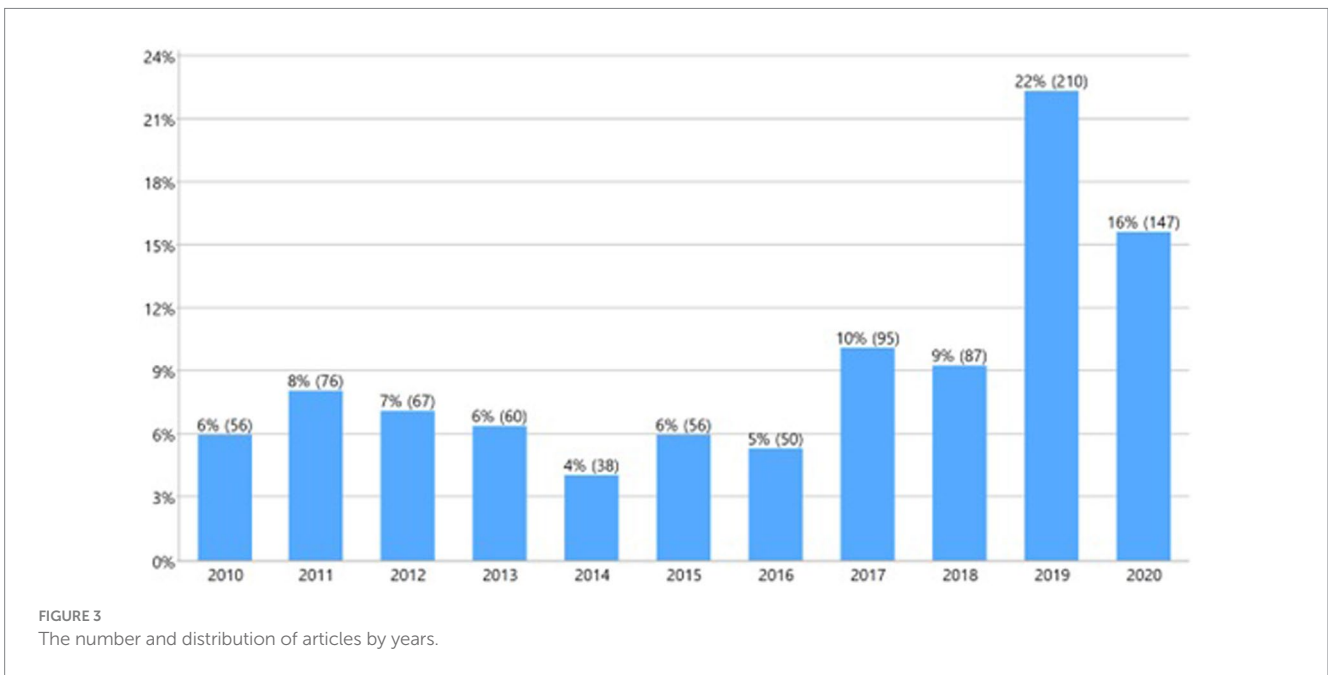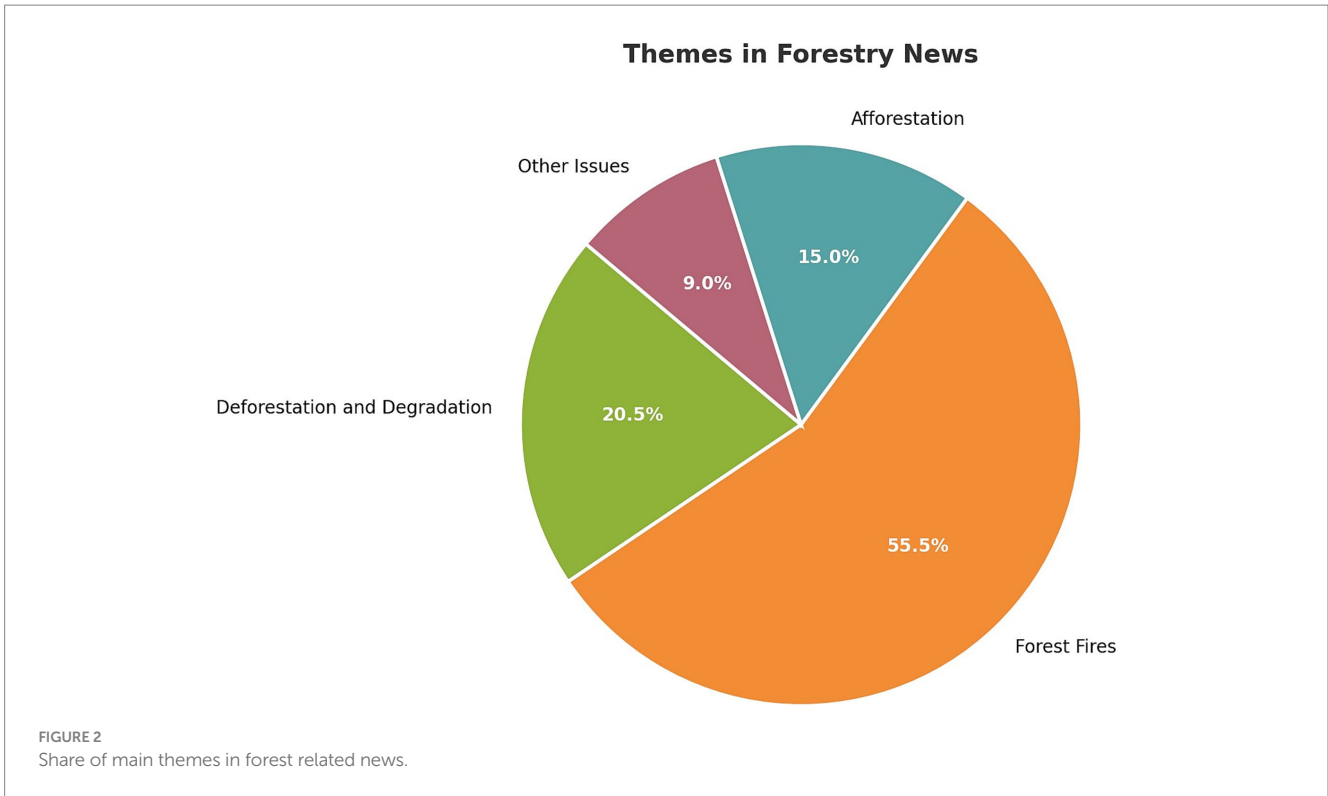
Without macrostructures, headlines that summarize news subjectively cannot be interpreted effectively. This explains why many readers focus solely on headlines to form opinions about news stories. However, presenting trivial information in headlines or placing critical information at the end of a news story within its thematic or schematic structure undermines the neutrality of the report (van Dijk, 1988a).

The microstructure of news text includes syntactic analysis, local coherence, word choice, and rhetorical analysis (Özer, 2011). Microanalysis represents abstract general structures through concrete, localized language. At this local level, words, idioms, sentences, and clauses undergo detailed categorization (van Dijk, 1988b).

In news discourse, sentences are typically complex and seldom presented in simple forms. They are often embedded or nominalized. Syntactic analysis investigates the length and structure of sentences, as well as their use of active or passive voice. Within the microstructure, propositions, assumptions, and local coherence are also examined. Local coherence emphasizes the relationships between successive sentences. Furthermore, to enhance the credibility of news, elements

FIGURE 2
Share of main themes in forest related news.

FIGURE 3
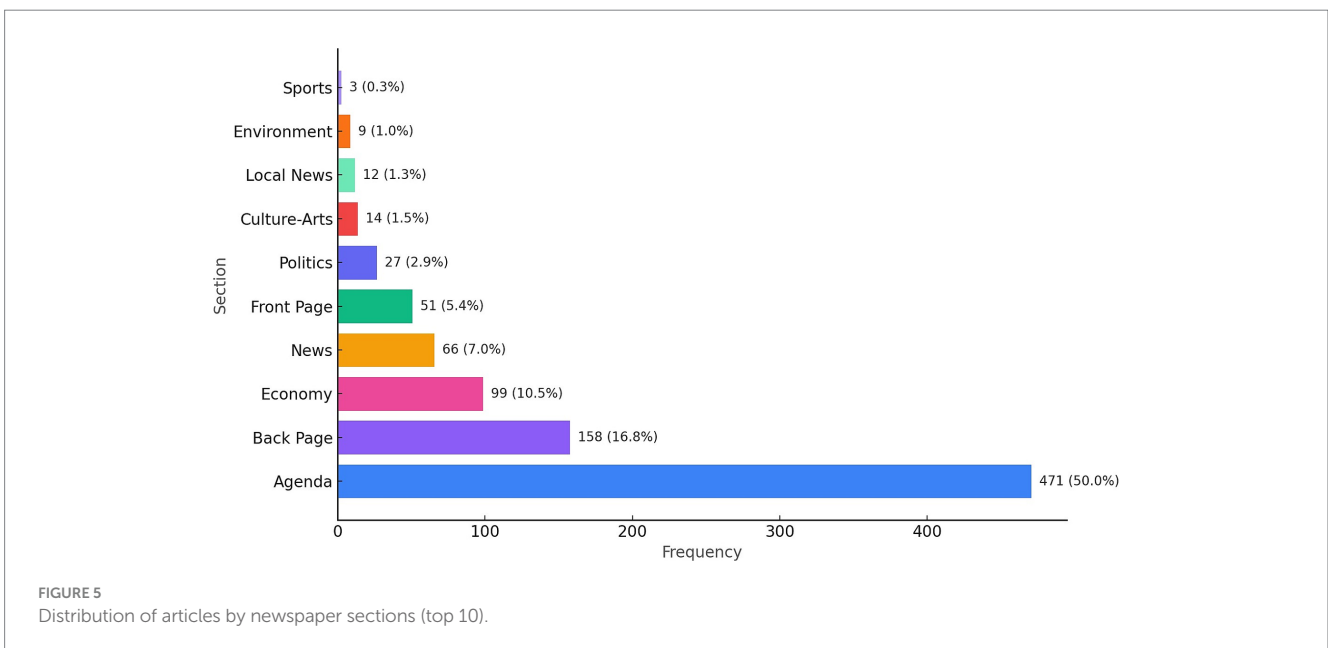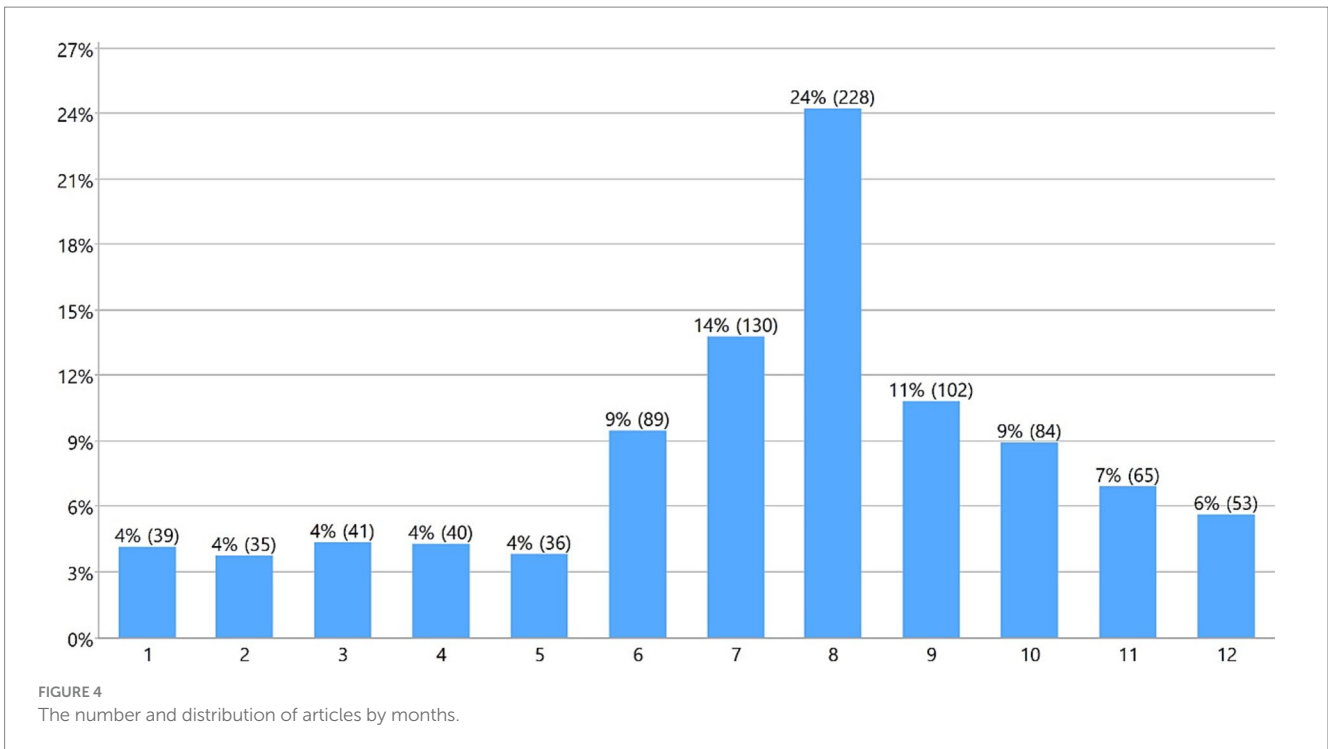The number and distribution of articles by years.

such as photographs, graphics, and statistical data are integrated into the microstructure (van Dijk, 1988b).

3 Results and discussion

The presentation of news in newspapers is determined by the ideological structure shaped by their supportive or oppositional stance toward dominant/powerful groups (Yaylagül, 2019). This study assumed that all three newspapers report on forestry and forest resources according to their ideological orientations and ownership structures. It is hypothesized that Sabah, as a publication aligned with the AKP government, will produce supportive news; Cumhuriyet, as an oppositional newspaper, will adopt a critical tone toward the AKP government; and Posta will avoid a critical approach to activities undertaken by the AKP government. While the findings and discussions regarding the discourse analysis of news related to forestry were presented in this study, the results and discussions of the specific

The number and distribution of articles by months.
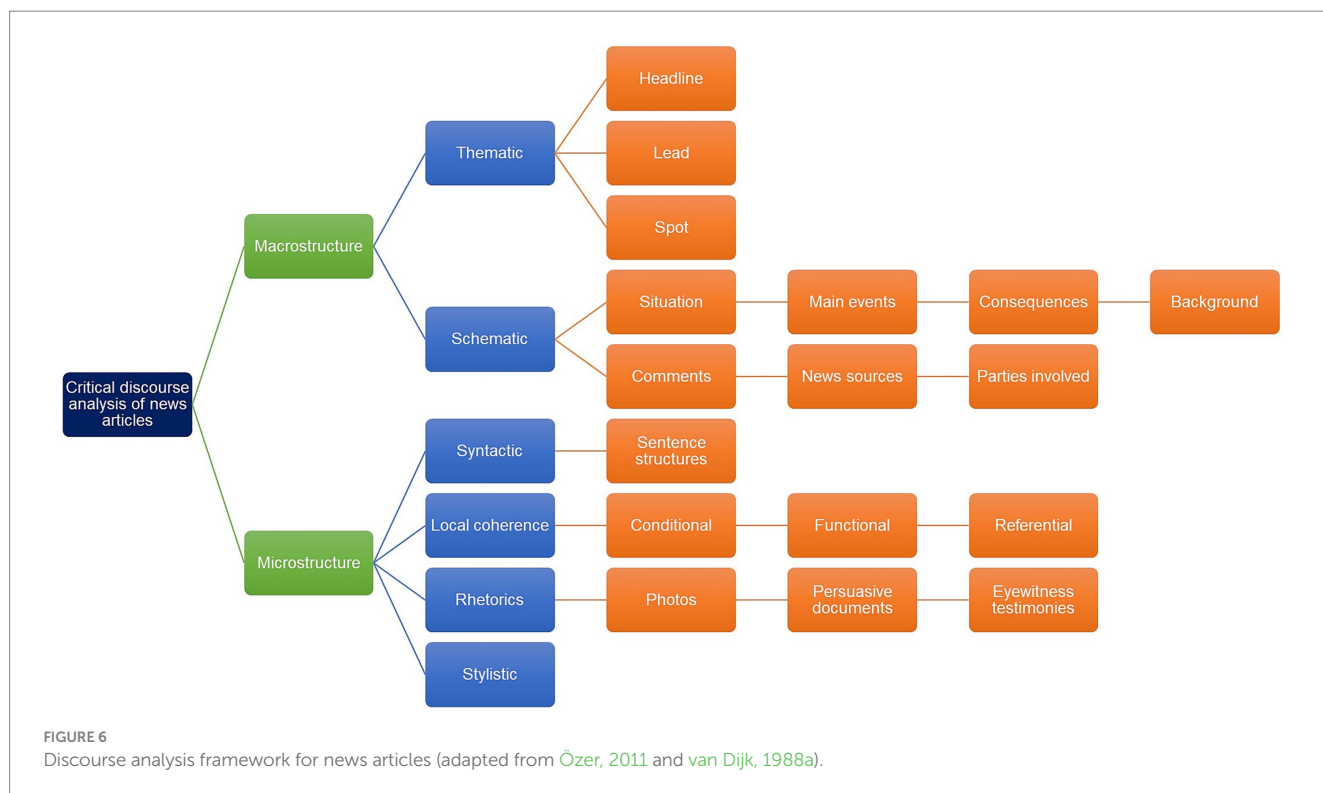
Distribution of articles by newspaper sections (top 10).

analyses pertaining to the four main themes were initially organized under separate headings. Subsequently, the common analytical findings and discussions related to all themes were consolidated in the final heading.

3.1 Deforestation and forest degradation

Since it is not feasible to examine all of these news reports through discourse analysis, we selected those that have garnered significant attention from the press and non-governmental organizations (NGOs)

regarding deforestation and forest degradation in Turkey, particularly those highlighting the dire consequences that may arise if measures are not implemented. The selected news content includes reports on deforestation, the exploitation of forests for energy and mining, and the apparent indifference of politicians toward the forests. A total of 21 news articles were chosen for critical discourse analysis, with 7 articles selected from each newspaper.

When analyzing the macrostructure of newspaper articles under the theme of deforestation and forest degradation, it was observed that all three newspapers preferred a general-to-specific news introduction and adhered to the journalistic "5W1H" rule.

FIGURE 6
Discourse analysis framework for news articles (adapted from Özer, 2011 and van Dijk, 1988a).

This suggests that the newspapers followed professional news-writing techniques. However, in their headlines, all three omitted key informational elements such as location, time, and period details. Cumhuriyet, in its headlines, used terms like "mining plunder" and "blind to green" to evoke curiosity among readers. Generally, Cumhuriyet adopted a critical discourse when covering government activities on deforestation and forest degradation. Posta, on the other hand, used terms like "natural revenge" and "national initiative" in its headlines, presenting the news without criticism and framing deforestation and degradation as natural phenomena. Sabah, through headlines like "miracle" and "turned lush green," portrayed the reported efforts as successful and appropriate. A critical discourse analysis of the headlines on deforestation and forest degradation revealed that news produced in Turkish national newspapers is shaped by their editorial policies.

In the microstructural analysis of deforestation and forest degradation-themed news, the reports from all three newspapers were evaluated in terms of main event presentation, background information, and context. It was observed that newspapers generally conveyed the main events by reading headlines and subheadings together. However, background and contextual information were largely absent from the news. This lack of information, crucial for revealing the social and political dimensions of events and establishing cause-effect relationships, limits the depth of the reporting. Background and context illuminate dominant power structures, but the news often presented events in a straightforward manner, primarily for immediate consumption. Palmer (Palmer, 1996) examined the social and historical development of environmental issues in the Amazon Rainforest and noted that news coverage on such topics often faded from public attention shortly after publication. Similarly, in this study, the sampled newspapers did not explore the social and political dimensions of the topics and showed that the news quickly disappeared from the agenda.

The analysis of the selected newspapers' coverage of deforestation and forest degradation, particularly in terms of their sources and perspectives on involved parties, indicates that the newspapers aligned their reporting with expectations. They predominantly included statements from scientists and eyewitnesses who shared ideological proximity to their editorial policies. For example, Cumhuriyet generally avoided featuring the statements or interviews of ministers and bureaucrats representing the AKP government. Conversely, Posta and Sabah excluded statements or interviews from left-leaning NGOs. Fabra-Crespo and Rojas-Briales (2015), in their study on forestry-related coverage in the Spanish media, found that the media gave more prominence to the voices of government representatives and officials from public institutions, which is consistent with the patterns observed in this analysis.

The sentences in the analyzed news articles on deforestation and forest degradation were written in a straightforward style for ease of reader comprehension. The writing techniques of all three newspapers adhered to regional coherence rules in a causal, referential, and functional manner. In terms of rhetoric, all newspapers sought to enhance credibility by incorporating news photos and statements from eyewitnesses.

When examined from a lexical perspective, each newspaper employed language that aligned with its political preferences and ownership structure. Significant differences were noted in their choice of words, particularly in their criticism of political authority, including the relevant ministry and forestry institutions. Cumhuriyet, for instance, frequently used terms such as "rent," "collusion," "plunder," "looting," and "concrete," often in association with the AKP government during the studied period. In contrast, Posta and Sabah

deliberately avoided using such terms. This finding aligns with Yaylagül's (2019) thesis that "newspapers, while setting their own political agenda, often succumb to the influence of political authority."

Journalistic practices serve as instruments for constructing the hegemony of dominant ideologies (Gürses, 2017). Thus, beyond political preferences, newspapers' ideological frameworks significantly influence their news discourses. These frameworks are often shaped by dominant ideological references, typically rooted in capitalist ideology (Yaylagül, 2019). In this context, a notable difference was found in the ideological framing of news between Cumhuriyet and the other newspapers. The neo-liberal approach—aligned with reducing state involvement in economic activities—has become the dominant ideology and was reflected in the forestry and forest resource-related articles of Posta and Sabah.

Before the establishment of the Republic, forests in Türkiye were primarily exploited as sources of income, often by foreign individuals and institutions in collaboration with local intermediaries. Exclusive contracts granted railway companies the right to exploit forests near railway lines (Çağlar, 2012). Turkish forestry, shaped by the foundations laid during the early Republican era, gained its legal framework with the Forest Law No. 3116, enacted in 1937. This law stipulated that "state forests shall be managed by the state," a principle that was later enshrined in the constitutions of 1961 and 1982, providing constitutional guarantees for state forestry.

However, from the 1980s onwards, neo-liberal governance approaches rapidly gained prominence both globally and within Türkiye. In this context, the provision of many goods and services traditionally delivered by the state was handed over to the private sector, and extensive privatization initiatives were implemented. Pressures to exploit natural resources such as minerals and water located within state-owned forests intensified, particularly after 1980. The fact that nearly all forests in Türkiye are state-owned has always provided political authorities with various opportunities for exploitation. Consequently, from the second half of the 1980s, there was a growing trend among dominant classes and various political groups in power to maximize the use of these opportunities, particularly in sectors such as tourism and mining (Çağlar, 2012; Türker, 2020).

The Tourism Encouragement Law No. 2634, enacted in 1982, allowed state-owned forests to be leased, allocated, and subjected to easement rights for use by Turkish or foreign individuals and legal entities. These areas could not be returned to their original forest state. Such practices violated the rule prohibiting the reduction of forest boundaries, effectively leading to the contraction of forested areas (Ayanoğlu, 1994). Additionally, the 1982 Constitution, the Mining Law, the Cadastre Law, the National Parks Law, the Law on Supporting the Development of Forest Villagers, and laws concerning Forest Engineering, Forest Industrial Engineering, and Wood Products Industrial Engineering contain provisions facilitating the reduction of state forests and their use for non-forestry purposes. Amendments to several articles of the Forest Law No. 6831 further reduced the scope of state forests, enabled private sector utilization, and allowed forestry activities previously conducted by state institutions to be outsourced to private individuals and entities.

In the 1980s, efforts to increase the private sector's share in forestry were also evident. The General Directorate of Forest Products Industry, comprising 45 facilities including sawmills, chipboard, cement-bonded chipboard, fiberboard, plywood, veneer, parquet, packaging, and impregnation plants, was converted into a state economic enterprise in 1983 and included in the privatization program in 1986 (TMMOB, 1994). Laws enacted in 1986 and 1987 further facilitated private sector involvement and introduced contract-based forestry operations.

As summarized above, the dominant ideological framework has significantly influenced the forestry sector and forest resource management, shaping the discourse of news on these topics. Within this context, Cumhuriyet maintained objectivity and criticized practices such as the reduction of forested areas, opening forests to non-forestry uses, and privatizing forestry operations through contracting. However, Posta and Sabah remained under the influence of neo-liberal discourse. For instance, regarding the 2-B lands issue, both newspapers avoided framing the reduction of state forest areas as a privatization initiative. Instead, they focused on other aspects, such as the economic benefits derived from the sale of 2-B lands and resolving ownership ambiguities for lands located within urban centers.

3.2 Forest fires

In this study, forest fires emerged as the theme with the highest number of news items, frequently occupying the agenda in 2021. The number of forest fires that year accounted for approximately one-third of the total number of fires on studied period. Analyzing the causes of these forest fires reveals that they are primarily attributed to sabotage, stubble burning, discarded cigarette butts, picnic fires, and natural causes. For the discourse analysis, 10 news articles were selected from each newspaper that generated significant public debate.

In the macrostructural analysis of news articles focused on forest fires, the headlines, introductions, and subheadings of reports from all three newspapers were examined to discern the intended message. Each newspaper employed clear and concise language in their headlines. Cumhuriyet, in its introductions, frequently referenced the 2-B regulation, highlighting the possibility of burned forest areas being sold under this framework. In contrast, Posta and Sabah did not establish any connection between forest fires and the 2-B regulation, omitting any mention of this policy in their reports on forest fires.

Yücel (2007) analyzed press coverage regarding legislative proposals related to the transfer of ownership of forest lands. The study revealed that newspapers supportive of the government (e.g., Akşam, Anadolu'da Vakit, Sabah, Star, Türkiye, Yeni Şafak, and Zaman) tended to endorse the sale of 2-B lands. Meanwhile, critical newspapers like Cumhuriyet and Radikal portrayed the sale of 2-B lands as a "struggle over profit."

In forest fire-related news, the main event is typically communicated through the headlines or introductions. However, none of the three newspapers provided significant background or contextual information in their reports. Across all outlets, the credibility of the news was enhanced by incorporating eyewitness accounts and moments observed firsthand by reporters. Silva et al. (2019), in their study on local media coverage of forest fires in Brazil and Atlantic Spain, found that such reports often sensationalized forest fires, ignored or superficially addressed the underlying causes,

and primarily focused on the damages to capture public attention. These findings align with the discourse surrounding forest fires in Türkiye, suggesting similar media practices in both contexts.

This study identified significant differences in how the causes of forest fires are represented across newspapers. Each newspaper shaped its news discourse in line with its editorial policy, often opting for a sensationalized reporting style. For instance, Cumhuriyet used headlines like "profit-driven fire" and "burned for 2-B regulation," while Posta opted for "record heat ignites forest fire," and Sabah featured phrases like "life sentence for arsonist" and "firefighting efforts continue." Similarly, Rodríguez-Teijeiro and Román-Masedo (2023) found that reports on forest fires in Galicia frequently employed dramatic expressions such as "black nightmare," "tsunami of fire," "volcano of fire," "tongue of flame," and "the monster."

A microstructural analysis of the forest fire-related news articles revealed that all three newspapers employed simple, clear language to communicate with readers. Their news texts maintained causal, functional, and referential coherence, ensuring that readers could easily access the information they sought without confusion.

Comparative studies on forest fire reporting in Spain and Indonesia highlighted differences in journalistic practices. Fabra-Crespo and Rojas-Briales (2015) analyzed news coverage in Spain, finding that 50% of sources cited in forest fire reports were official institutional statements, suggesting that journalists relied heavily on press releases. In contrast, Ekayani et al. (2016) observed that in Indonesia, scientific experts accounted for only 2.49% of sources in forest fire-related news, reflecting their minimal influence on media narratives.

In the Turkish context, the three sampled newspapers incorporated photographs and eyewitness accounts in their reporting but selectively included statements from scientists aligned with their editorial stance. Consequently, the same fire could be framed differently based on expert opinions. For example, a scientist quoted in Cumhuriyet described the cause as a "profit-driven fire," while experts cited in Posta and Sabah attributed the same incident to "global warming." Similar trends were observed in Indonesia (Ekayani et al., 2016), where mainstream media frequently attributed forest fires to "accidents," whereas local media emphasized "intentional acts" as the primary cause.

3.3 Afforestation

In this section, news articles regarding afforestation were analyzed using critical discourse analysis methods. The selection of articles focused on those that report on afforestation efforts in areas previously affected by wildfires, where the cause of the fires was attributed to land speculation. Additionally, articles covering "National Afforestation Day" activities, which involved widespread community participation in afforestation efforts, as well as reports on afforestation initiatives conducted by non-governmental organizations, were included. A selection of frequently discussed news articles was chosen for analysis using this technique. Ultimately, 21 news items were analyzed, with 7 articles selected from three different newspapers.

When examining the macro structure of news articles on afforestation, the headlines, subheadings, and leads were analyzed. The articles were generally structured to create information attenuation,

with the headlines designed to capture the reader's curiosity. However, when the headlines and leads were considered together, readers were able to gather information about the main event of the story. It was observed that the words used in the headlines by all three newspapers aligned with their editorial policies. Cumhuriyet, for instance, used headlines such as "No Progress in the Battle Against Erosion" and "11 Million Seedlings are a Hoax," which, as evident from the chosen words, reflected a critical stance toward the afforestation efforts. In contrast, Posta employed headlines like "Seedlings Ready" and "For Life," avoiding words that might incite critical interpretations. Sabah Newspaper, on the other hand, featured headlines such as "4 Billion Seedlings Planted in 15 Years" and "The King of Forests," presenting the efforts positively and portraying the government and relevant institutions as successful.

When analyzing the presentation of the main event, results, and context in afforestation-themed news, the main event was usually introduced in the lead, following a general-to-specific narrative structure. It was also found that all three newspapers adhered to the 5W1H rule when presenting their news stories. However, the articles did not provide context or background information, though the underlying ideologies conveyed through the content were discernible. Each of the three newspapers conveyed the message that afforestation is essential for preventing climate change and reducing the effects of global warming. Khuong and Quyen (2019) highlighted that environmental sustainability topics such as climate regulation, air pollution reduction, biodiversity conservation, water scarcity management, renewable energy sources, forest protection, and the conservation of soil, water, and the ozone layer were emphasized in news articles, stressing the need to safeguard these areas. The discourse analysis of afforestation-related news articles in Türkiye revealed that such efforts are expected to mitigate climate change impacts, prevent air pollution, support biodiversity, and offer benefits related to soil and water conservation.

Regarding the evaluation of news sources and the perspectives of those involved in afforestation, all three newspapers included photos and statements from participants in the afforestation projects. Cumhuriyet, consistent with its stance in other themes, underscored the failure or potential failure of afforestation efforts, emphasizing that the number of seedlings planted was misleading. In contrast, Posta and Sabah Newspapers reported that the afforestation work was completed on time, that the survival rate of the planted seedlings was high, and that the areas planted with seedlings would eventually turn into lush green spaces. Gürses (2017) pointed out that news discourses are texts through which the dominant ideology is produced. Dominant journalistic strategies regulate what and whose news will be covered, and which professional and societal ideologies will be emphasized. In the context of afforestation, Cumhuriyet, Posta, and Sabah Newspapers were found to have produced articles consistent with their ideological orientations, highlighting the discursive differences between them.

Policy-makers and technocrats in forestry can also sometimes resort to sensational or tabloid-like discourse. A recent and notable example of this is the National Afforestation Day activities that began on November 11. During these events, tree planting was initiated across all regions of the country, with goals set for achieving the "largest number of trees planted" within a specific period and being included in the Book of Records. Afforestation, being one of the main themes in forestry-related news, is vital for the forestry profession.

Therefore, it is a fundamental reality well known by every forest engineer that afforestation activities should be carried out within a structured plan and program, involving multifaceted steps such as defining afforestation objectives, examining ecological, economic, and even social conditions, preparing the land, selecting suitable tree species, determining appropriate afforestation techniques, and organizing the timing, workforce, and necessary financial resources. However, despite this knowledge, a serious action like afforestation is reduced to the "planting of millions" of seedlings in a sensationalized manner, disregarding forestry techniques and at times when it is known to be inappropriate for most regions of the country, thereby damaging the profession's reputation and gravity.

In the micro-structural analysis of afforestation-themed news, all three newspapers used simple and clear language in their reports. Causal, functional, and referential relationships were maintained between the news texts. Each of the newspapers framed their articles using photos of afforestation activities, credible documents (statistical data), and statements from eyewitnesses. Cumhuriyet published photos of the areas where afforestation events took place but announced that the number of seedlings planted did not reflect the reality and that the public was being misled. In contrast, Posta and Sabah showcased photos of the afforestation activities and presented their stories with phrases such as "it will flourish, an oasis will emerge" and "so many trees have been planted, and more will continue to be planted." Similarly, İrvan (2019) examined how environmental issues were represented in the media and pointed out differences between newspapers in how these issues were covered, stating that the way environmental news was processed was problematic in terms of the basic principles of environmental journalism.

3.4 Other forestry issues

The themed news items in this cluster encompass activities aimed at supporting forest villagers, combating forest pests, and protecting wildlife. To prevent deforestation in our country, it is essential to raise awareness among individuals living near and adjacent to forests and to enhance their economic conditions. To achieve this, forest villagers receive support in various areas that boost their income. These initiatives include beekeeping, afforestation with income-generating species, solar energy systems, and efforts to reduce reliance on firewood. Additionally, the cluster includes news items on strategies to combat insect species that threaten forests, as well as efforts to ensure the sustainability of wild animal populations. In selecting the news items for analysis, careful consideration was given to those that focus on the most lucrative afforestation species for forest villagers, honey production, the promotion of high-income mushroom species, loan support provided to villagers, activities aimed at protecting wildlife, and practices employed in the natural management of insect species that damage forests.

The total number of news items categorized under this theme is 100. Due to the impracticality of analyzing all these items through discourse analysis, we selected news items that are prominent on the public agenda, possess high news value, and adhere to established news writing techniques for analysis. Ultimately, 15 news items were chosen for discourse analysis, with five items selected from each of the newspapers studied.

When examining the macro structure of news articles related to other forestry issues, it was found that three newspapers analyzed did not provide sufficient information regarding the content of the articles through their headlines alone, as the journalists employed information reduction techniques. Single-event introductions were preferred in news stories, and the articles were structured according to the 5W1H rule. Through the opening sentences used by all three newspapers, readers could gather information about the main event in terms of its presentation, results, background, and context. However, no context or background information was provided. In terms of news sources and comments from stakeholders involved in the event, statements from NGO managers and participants were cited to increase the reliability of the stories.

When analyzed in terms of microstructure, the articles on other forestry issues employed simple sentence structures. Causal, functional, and referential relationships were maintained within the news content. The articles were framed with photos, scientific data, and statements from eyewitnesses, aligning with the editorial policies of the newspapers in terms of language choice.

3.5 Discussion of cross-themes discourses

A significant finding from the discursive analysis of news articles related to forest resources is that these discourses were crisis-oriented. They typically encompassed broad societal concerns such as environmental disasters, the depletion of forest resources, and the destruction of forest ecosystems. The newspapers in the sample developed a discourse focusing on topics such as deforestation, water resource protection, and the conservation of wildlife and biodiversity. Among these, forest fires emerged as the most prominent issue under the theme of deforestation.

Sadath and Rahman (2016) similarly found that discourses in Bangladeshi media on forestry-related news were crisis-oriented. The study noted that deforestation and wildlife were the most highlighted topics in national media concerning societal concerns about forestry. Issues like illegal logging, forest degradation, poaching, and human-wildlife conflict were among the most discussed topics.

According to the findings, forest fires were clearly at the center of crisis-oriented discourse in Türkiye. The damage caused by these fires, explored in environmental, economic, and social dimensions, was frequently emphasized by the newspapers to capture public attention.

Forest fires are typically defined as rapidly spreading natural events that result in significant loss of trees, vegetation, and wildlife. These fires also lead to climate change by releasing large amounts of carbon dioxide into the atmosphere. Additionally, they negatively impact local communities and economies. For this reason, forest fires have been given considerable attention in national media and have been central to crisis discourses.

Fabra-Crespo and Rojas-Briales (2015) noted that, in Mediterranean countries like Spain, the most reported forestry issue in the media was forest fires. The authors criticized the media for giving minimal attention to important forestry issues such as biodiversity, climate change, the use of wood as a substitute for fossil fuels, and rural employment.

As observed in the articles, in news stories related to forestry and forest resources, there was limited reference to statements or interviews with officials from public institutions. In contrast, there was a higher frequency of citations from NGO representatives. The same pattern was found for the statements or interviews of faculty members and academics in forestry departments. This highlights the need for stronger media relations for both public forest institutions and forestry scientists, particularly those in forest faculties. Sadath and Krott (2013) noted that in Bangladesh, interviews with forest institution administrators were rarely used as news sources.

Garlitos (2020) examined national and local news articles in the Philippines using critical discourse analysis and found that the discourse was shaped by the ideological perspective of the reporters. In this study, it was observed that the content of the discourse was generated based on the editorial policies of the newspapers. Cumhuriyet included interviews with individuals and organizations aligned with its editorial stance, while Posta and Sabah featured interviews with government officials and representatives of state institutions that aligned with their supportive editorial policies.

4 Conclusion

This study examines how news on forest resources and forestry published between 2010 and 2021 was addressed in the national newspapers Cumhuriyet, Posta, and Sabah. The selected news articles were analyzed using Teun A. van Dijk's critical discourse analysis model.

The news articles were categorized by themes and analyzed. The discourse analysis revealed that the themes did not significantly differ among the newspapers. While Cumhuriyet adopted a critical perspective across all themes in its reporting, Posta and Sabah did not exhibit such a critical stance.

In the analysis of forestry and forest resource news, Cumhuriyet frequently criticized the implementations and practices compared to Posta and Sabah. Specifically, Posta refrained from criticizing the practices, while Sabah avoided criticism and employed language supportive of the government and state forestry agencies.

The discourse analysis examined the macro and micro structures of the language in the news. The thematic and schematic structures of the news were analyzed, and it was found that journalists from all three newspapers lacked substantial knowledge about the history of forestry issues.

This study aimed to identify the differences in how forestry and forest resources were presented in Cumhuriyet, Posta, and Sabah. The analysis showed that Sabah used language consistently supportive of government efforts, portraying them as sufficient and promising more improvements. Conversely, Cumhuriyet criticized government actions, highlighting their shortcomings. Meanwhile, Posta overlooked deficiencies or mistakes in government actions, presenting them as routine aspects of daily life.

According to the findings, mainstream media supported the government in their writing, while opposition media criticized government efforts.

In Sabah, news about government efforts to combat deforestation was portrayed positively, while Cumhuriyet emphasized that the primary cause of deforestation was the government's flawed policies.

Posta presented the government's efforts less critically than the other two newspapers.

All three newspapers utilized visual elements and statistical data to increase the impact of their reporting. However, it was observed that news on forestry and forest resources did not remain on their agenda for long, suggesting these issues were treated as daily news.

Sabah described government efforts to combat deforestation as "miraculous," whereas Cumhuriyet used terms like "rent" and "betrayal" to highlight that forests were being destroyed for profit. Posta attributed deforestation to global warming and human indifference, rather than critiquing the government directly.

Despite differences in tone, all three newspapers highlighted that deforestation caused by wildfires would accelerate global warming and lead to drought. Notably, Cumhuriyet was the only newspaper to report on neglected firefighting planes, leading to their refurbishment and use, reflecting the newspaper's critical stance on government practices.

The study indicates that Sabah aimed to create a perception that government efforts were adequate, while Cumhuriyet framed them as insufficient. Posta refrained from assessing the government's actions as either deficient or adequate.

Each newspaper's choice of sources also reflected their editorial policies. For example, Sabah preferred official narratives by using government-friendly sources like Anadolu Agency, whereas Cumhuriyet relied on its own correspondents and experts critical of the government.

The study suggests that reporters covering forestry and forest resources should have expertise in these areas. Greater emphasis on thematic sections such as "environmental news" or "climate change impacts" within newspapers could enhance public awareness and understanding.

Additionally, effective communication and public relations units within organizations like the OGM could help disseminate accurate information. Establishing specialized teams in journalism and environmental reporting could support better, more comprehensive public communication.

In conclusion, addressing environmental issues such as deforestation, global warming, and climate change requires collaboration between media and forestry experts to educate the public and foster awareness effectively.

Data availability statement

Publicly available datasets were analyzed in this study. The news articles analyzed for the conclusions of this article are publicly available in the PhD thesis of TN.

Author contributions

TN: Conceptualization, Formal analysis, Investigation, Methodology, Resources, Writing – review & editing. İD: Conceptualization, Data curation, Methodology, Writing – original draft. FG: Conceptualization, Formal analysis, Methodology, Writing – review & editing.

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Conflict of interest

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Generative AI statement

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Supplementary material

The Supplementary material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/ffgc.2025.1575393/full#supplementary-material

References

Ader, C. R. (1995). A longitudinal study of agenda setting for the issue of environmental pollution. *J. Mass Commun. Q.* 72, 300–311. doi: 10.1177/107769909507200204

Ayanoğlu, S. (1994). Orman arazilerinin azalmasına yol açan düzenlemeler. *J. Facult. Forestry Istanbul Univ.* 44, 103–112. doi: 10.17099/JFFIU.31561

Bastakoti, R. R., and Davidsen, C. (2017, 2017). Framing REDD+ at National Level: actors and discourse around Nepal's policy debate. *Forests* 8:57. doi: 10.3390/F8030057

Çağlar, Y. (2012). Türkiye Ormancılık Tarihi. Ankara: ODTÜ Yayıncılık.

Cockerill, K. (2003). Testing language: media language influence on public attitudes about river management. *Appl. Environ. Educ. Commun.* 2, 23–37.

Cohen, B. C. (1963). The press and foreign policy. Princeton, NJ: Princeton University Press.

Edwards, P., Brukas, V., Brukas, A., Hoogstra-Klein, M., Secco, L., and Kleinschmit, D. (2022). Development of forest discourses across Europe: a longitudinal perspective. *Forest Policy Econ.* 135:102641. doi: 10.1016/J.FORPOL.2021.102641

Ekayani, M., Nurrochmat, D. R., and Darusman, D. (2016). The role of scientists in forest fire media discourse and its potential influence for policy-agenda setting in Indonesia. *Forest Policy Econ.* 68, 22–29. doi: 10.1016/J.FORPOL.2015.01.001

Fabra-Crespo, M., and Rojas-Briales, E. (2015). Analysis of mass media news on forest issues: a case study of Spain. *For. Syst.* 24:e029. doi: 10.5424/FS/2015242-06381

Garlitos, A. P. L. (2020). Shades of green reporting: a critical discourse analysis of eco-news reports in the Philippines. *J. Lang. Lit.* 20, 25–39. doi: 10.24071/JOLL.V20I1.2381

Gürses, F. (2017). Kadın Cinayetlerinin Haber Söylemi: Münevver Karabulut ve Özgecan Aslan Haberleri Üzerine Eleştirel Bir Değerlendirme. *Ankara Üniversitesi SBF Dergisi* 72, 541–568. doi: 10.1501/SBFDER_0000002459

Halla, T., and Laine, J. (2022). To cut or not to cut – emotions and forest conflicts in digital media. *J. Rural. Stud.* 94, 439–453. doi: 10.1016/J.JRURSTUD.2022.07.019

İrvan, A. A. (2019). Environment and media: A critical discourse analysis of environmental news in Turkish newspapers. İstanbul: İstanbul Bilgi Üniversitesi.

Kangas, H. L., Lyytimäki, J., Saarela, S. R., and Primmer, E. (2018). Burning roots: stakeholder arguments and media representations on the sustainability of tree stump extraction in Finland. *Biomass Bioenergy* 118, 65–73. doi: 10.1016/J.BIOMBIOE.2018.08.006

Karnatz, C., Kadam, P., Pfeuffer, A., and Dwivedi, P. (2021). The portrayal of forest certification in national and state newspapers of the United States. *Forest Policy Econ.* 130:102531. doi: 10.1016/J.FORPOL.2021.102531

Kerbleski, E., and Krueger, B. C. (2019). Trump, twitter, and the trees: a critical discourse analysis of Donald Trump's tweets surrounding the November 2018 California wildfires. Available online at: https://www.proquest.com/dissertations-theses/trump-twitter-trees-critical-discourse-analysis/docview/2279841199/se-2?accountid=35366 (Accessed May 10, 2024).

Khuong, L. Q., and Quyen, N. T. H. (2019). A critical discourse analysis of English electronic news reports on environmental sustainability. *Univ. Danang J. Sci. Technol.* 17, 43–48.

Koskinen, J. (2021). Public forest discussion in Finland – Do we see beyond the pine tree? Jyväskylä: Jyväskylä University.

Lidestav, G., Sjölander, A. E., Egan Sjolander, A., and Sjolander, S. (2007). Gender and forestry: a critical discourse analysis of forestry professions in Sweden. *Scand. J. For. Res.* 22, 351–362. doi: 10.1080/02827580701504928

Lindkvist, A., Kardell, Ö., and Nordlund, C. (2011, 2011). Intensive forestry as Progress or decay? An analysis of the debate about Forest fertilization in Sweden, 1960–2010. *Forests* 2, 112–146. doi: 10.3390/F2010112

Ludwig, M., Grüninger, F., Rothfuss, E., and Heurich, M. (2012). Discourse analysis as an instrument to reveal the pivotal role of the media in local acceptance or rejection of a wildlife management project: a case study from the Bavarian Forest National Park. *Erdkunde* 66, 143–156. doi: 10.3112/erdkunde.2012.02.04

Mangani, A. (2021). When does print media address deforestation? A quantitative analysis of major newspapers from US, UK, and Australia. *Forest Policy Econ.* 130:102537. doi: 10.1016/J.FORPOL.2021.102537

Mather-Gratton, Z. J., Larsen, S., and Bentsen, N. S. (2021). Understanding the sustainability debate on forest biomass for energy in Europe: a discourse analysis. *PLoS One* 16:e0246873. doi: 10.1371/JOURNAL.PONE.0246873

Miranda Costa, L. (2016). The Brazilian press and the environmental issues at the beginning of the XXI century: the amazon deforestation in journalistic discourse. *Rev. General Inf. Doc.* 26:54721. doi: 10.5209/RGID.54721

Özer, Ö. (2011). Haber Söylem İdeoloji: Eleştirel Haber Çözümlemeleri. İstanbul: Literatürk Yayınları.

Palmer, W. A. (1996). News from the Amazon rain Forest: The social construction of an environmental problem. Utah: The University of Utah.

Quigley, P. (2006). Print media coverage of climate change: Why environmental organizations should care, and what they can do to achieve greater coverage. Burlington, VT: University of Vermont.

Richardson, G. (2009). The great bear media battle: How the forest was finally won. Available online at: https://www.proquest.com/dissertations-theses/great-bear-media-battle-how-forest-was-finally/docview/1027136500/se-2?accountid=35366 (Accessed May 10, 2024).

Rodríguez-Teijeiro, A., and Román-Masedo, L. (2023). The role of media in risk management processes—analysis of the news coverage of the forest fires in Spain. *Soc. Sci.* 12:688. doi: 10.3390/SOCSCI12120688

Ross, F. C., and Edgar, R. R. (2016). The environmental discourse of Denis Sassou-Nguesso 2002-2012 rhetoric and reality. Available online at: https://www.proquest.com/dissertations-theses/environmental-discourse-denis-sassou-nguesso-2002/docview/1892029586/se-2?accountid=35366 (Accessed April 1, 2024).

Sadath, M. N., and Krott, M. (2013). Can print media discourse drive Forest policy change in Bangladesh? *J. Sustain Dev.* 6:p1. doi: 10.5539/JSD.V6N5P1

Sadath, M. N., and Rahman, S. (2016). Forest in crisis: 2 decades of media discourse analysis of Bangladesh print media. *Forest Policy Econ.* 68, 16–21. doi: 10.1016/J.FORPOL.2016.03.003

Silva, N. T. C., Fra Paleo, U., and Ferreira Neto, J. A. (2019). Conflicting discourses on wildfire risk and the role of local Media in the Amazonian and Temperate Forests. *Int. J. Disaster Risk Sci.* 10, 529–543. doi: 10.1007/S13753-019-00243-Z/TABLES/8

Song, H. (2021). Global media discourse analysis of the payment for ecosystem Services of Forest. Wageningen: Wageningen University and Research.

Stoddart, M. C. J., and Carroll, W. K. (2004). Wilderness or working forest? British Columbia forest policy debate in the "Vancouver sun", 1991–2003. Available online at: https://www.proquest.com/dissertations-theses/wilderness-working-forest-british-columbia-policy/docview/305105571/se-2?accountid=35366 (Accessed May 6, 2024).

Takala, T., Hujala, T., Tanskanen, M., and Tikkanen, J. (2017). The order of forest owners' discourses: hegemonic and marginalised truths about the forest and forest ownership. *J. Rural. Stud.* 55, 33–44. doi: 10.1016/J.JRURSTUD.2017.07.009

Takala, T., Lehtinen, A., Tanskanen, M., Hujala, T., and Tikkanen, J. (2019). The rise of multi-objective forestry paradigm in the Finnish print media. *Forest Policy Econ.* 106:101973. doi: 10.1016/J.FORPOL.2019.101973

Takala, T., Lehtinen, A., Tanskanen, M., Hujala, T., and Tikkanen, J. (2020). Discoursal power and multi-objective forestry in the Finnish print media. *Forest Policy Econ.* 111:102031. doi: 10.1016/J.FORPOL.2019.102031

Takala, T., Tanskanen, M., Brockhaus, M., Kanniainen, T., Tikkanen, J., Lehtinen, A., et al. (2023). Is a sustainability transition possible within the decision-support services provided to Finnish forest owners? *Forest Policy Econ.* 150:102940. doi: 10.1016/J.FORPOL.2023.102940

TMMOB (1994). Orüs ve Özelleştirme, Türk Mühendis ve Mimar Odaları Birliği, Sektörel Rapor Dizisi, No: 5.

Türker, M. F. (2020). Orman İşletme Ekonomisi Üçüncü Baskı. Trabzon: Ormancılık ve Tabiatı Koruma Vakfı.

Ulusal gazete tirajları (2024). Available online at: https://medyajans.com/gazete-tirajları.html (Accessed April 10, 2023).

van Dijk, T. A. (1988a). News analysis: Case studies of international and national news in the press. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

van Dijk, T. A. (1988b). News as discourse. Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Yaylagül, L. (2019). 31 Mart 2019 Mahallî İdareler Seçiminin Sabah Ve Sözcü Gazetelerindeki Sunumunun Karşılaştırmalı Olarak İncelenmesi. *Akdeniz Üniv. İletişim Fakültesi Dergisi* 32, 323–339. doi: 10.31123/AKIL.620344

Yücel, Z. (2007). Politika Oluşum Sürecinde Basın; Orman Arazilerinin Mülkiyet Devrine İlişkin Tartışmalar. Ankara: Ankara Üniversitesi.