

An Ecolinguistic Analysis of Ideological Framing of Forest City in Indonesian Digital Media: Media Discourse Dynamics and Public Perception

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Abstract—Sustainable development is the central paradigm in modern urban planning, exemplified by the Nusantara Capital City in Indonesia, which incorporates the forest city concept that combines green technology and ecological sustainability. However, the ideological representation of this concept in digital media remains a relatively understudied area. This study examines how Indonesia's digital media portrays forest cities in the context of IKN's development. It employs an ecolinguistic approach that combines mixed-methods analysis, including critical discourse analysis of news from five national media outlets and public surveys using the Likert scale. The results of this study show that media supporting government policies use positive word choices, such as "sustainable forest cities," "conservation," "smart forest cities," and "green energy." In contrast, media opposing government policies use specific terms to describe ecological impacts, including "deforestation," "climate change," and "social conflicts." The choice of the lexicon in news writing reflects the ideology of each media outlet. The results of the public survey indicated that the development of the IKN will positively impact economic development and social welfare; however, environmental concerns remain. This research contributes to the expansion of ecolinguistic studies and the development of government communication strategies.

Index Terms—forest city, Ibu Kota Nusantara (IKN), ecolinguistics, discourse analysis, media ideology

I. INTRODUCTION

Sustainable development is one of the primary missions of all cities worldwide. It is a crucial concept in modern urban development planning for addressing climate change, environmental degradation, and rapid urbanization. Several countries, including Malaysia and China, have adopted development models that integrate green technology and sustainability, such as the concept of sustainable forest cities. The development of cities, aimed at creating a Forest City or smart city, seeks to balance human needs with the protection of natural ecosystems (Almalki et al., 2023; Appio et al., 2019; Caragliu & Del Bo, 2019). Forest cities are innovative solutions to mitigate adverse environmental impacts and promote sustainable urbanization by managing natural ecosystems and developing sustainable infrastructure.

The development of the Nusantara Capital City (IKN) in Indonesia incorporates the concept of forest cities to create a sustainable, green city. The government claims that the construction of the IKN will make a positive contribution to the preservation of natural ecosystems and economic growth (Walsh et al., 2022). The IKN project is claimed to maintain 75% of green space, reduce carbon emissions, and create environmentally friendly urban management in the forest areas of

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However, the development of the IKN remains a topic of debate among academics, experts, and digital media. Media that support government policies tend to use positive framing in developing the IKN. In contrast, independent media and environmental activists highlight environmental impacts, damage to forest exospecies, and the condition of local communities. This controversy demonstrates that the construction of media narratives is not neutral, but rather influenced by group, political, and ideological interests.

In the digital era, digital media plays a significant role in shaping the public perception of national development policies. Through the intervention of arguments in filtering and disseminating information, word choice and media framing are essential instruments in influencing public opinion (Fletcher & Park, 2017; Pan & Kosicki, 1993). In the context of IKN development, the media plays a dual role: it serves as a disseminator and an agent of ideological construction, using language that directs attention to sustainability issues.

Ecolinguistics is a critical approach to analyzing how the media use language to shape environmental discourse. Stibbe (2015) divides three media discourses, namely: (1) destructive discourse, which presents forest city development as a threat to the environment and ecosystem by using terms such as deforestation, biodiversity loss, and social problems of local communities; (2) favorable discourse, which presents a forest city using positive framing, such as nature conservation, ecosystem restoration, economic growth, green energy; and (3) ambivalent discourse, which presents news that is balanced between benefits and risks to the development of the IKN.

Several researchers have previously applied an ecolinguistic approach in examining various discourses, including discourses on environmental and economic impacts on the development of the capital city (Ichwan et al., 2022; Mutaqin et al., 2021), Media Discourse on Conservation (Jabeen, 2024; Yuniawan et al., 2018, 2019, 2020; Yuniawan et al., 2019), Metaphor analysis (Chukwu & Agwuocha, 2022; Al-Shboul, 2023), Framing of animals in Qur'an texts (Hameed, 2021), discourse in advertising that constructs the environmental image constructively (Younis & Abdulmajee, 2023), and a corpus study on media discourse on sustainability in the new capital relocation project (Suhandano et al., 2023). Although an ecolinguistic approach has been used to analyze a wide range of environmental discourse studies, analyses that specifically examine the framing of forest city ideology in digital media are rare. Therefore, this study aims to analyze how the framing of forest city ideology in digital media shapes discourse on IKN development and its impact on public perception. Specifically, this research will:

1. Identifying how the concept of 'forest city' is represented in news texts from Indonesia's digital mass media through an ecolinguistic approach.
2. Analyzing the forest city ideology in news texts from Indonesia's digital mass media based on the classification of destructive, beneficial, and ambivalent discourses.
3. Examining the impact of the ideological framing of the forest city in news texts on public perception.

This research contributes to the development of ecolinguistic studies and media discourse analysis in the context of sustainable development. Furthermore, this study's results can provide policymakers, journalists, and the public with insights into how language shapes public opinion on large-scale development projects, such as IKN.

II. LITERATURE REVIEW

A. *The Concept of Forest City From the Perspective of Sustainable Development*

The concept of *Forest City* is still relatively new in scientific studies and is often equated with "urban forests." In fact, *Forest City* has a broader meaning than just managing trees in urban areas; it encompasses the concept of urban forestry, which has developed in the United States since the 1960s (Bentsen et al., 2010; Escobedo et al., 2011). Stefano Boeri first introduced this idea through the concept of a "vertical forest," which is a city where buildings, such as schools, offices, and apartments, are filled with vegetation to improve air quality and maintain biodiversity (Liao et al., 2021; Xu et al., 2020). Various countries have adopted it, including Malaysia with its futuristic Forest City, Singapore with its Gardens by the Bay, and China with Liuzhou Forest City, inspired by the Milan project (Guan et al., 2018; Moser & Avery, 2021). Indonesia interprets this concept differently: not reforesting cities, but building cities within forest areas to maintain their ecological function (Mutaqin et al., 2021). However, the application of this concept in the development of the Nusantara Capital City continues to spark debate among academics, environmental activists, and the media.

B. *Ecolinguistics as a Discourse Analysis Approach*

Ecolinguistics is a branch of linguistics that studies the relationship between language, people, and the environment (Eliasson, 2015; Li et al., 2020). In analyzing mass media texts, this approach reveals how language not only describes reality but also shapes people's views and ideologies about environmental issues. The choice of words, metaphors, and *framing* strategies used by the media can reflect specific ideological interests, both supporting and criticizing the sustainable development agenda (Entman, 2007). Various studies show that ecolinguistic analysis can reveal discourse biases, such as in news coverage of smart cities that emphasize economic and technological aspects over their ecological impact (Bär et al., 2020; Esposito et al., 2021). This framework provides a theoretical basis for understanding how Indonesian digital media represents the concept of Forest City in the context of the development of the archipelago's capital city.

C. The Role of Indonesian Mass Media in Shaping Environmental Development Ideology

Indonesian digital media holds a pivotal role in shaping public perceptions of environmental development, functioning not only as an information channel but also as a powerful agent of ideological framing. Through selective representation and narrative construction, the media can legitimize or challenge dominant discourses surrounding major projects such as the Capital City of Nusantara (IKN) and its *Forest City* concept (Burgers et al., 2016; Fletcher & Park, 2017; Pan & Kosicki, 1993; Shanahan et al., 2011). Pro-government outlets often frame IKN as a manifestation of national progress and environmental innovation, employing positive labels like *Smart City*, *Green Development*, or *Future City* to reinforce a favorable image. Conversely, independent or critical media highlight issues of ecological degradation, social inequality, and threats to indigenous livelihoods, thereby contesting the official narrative. These contrasting frames reflect the underlying political-economic interests that drive media representations and demonstrate how digital journalism in Indonesia actively shapes ideological understandings of sustainable development and environmental modernization.

III. METHODOLOGY

A. Research Design

To gather comprehensive data, this study employed a mixed-methods design. A qualitative approach was used to analyze the government's ideologies in developing a forest city in IKN through ecolinguistics-based critical discourse analysis of media news texts. A quantitative approach was employed to measure public perception through a Likert-scale questionnaire, aiming to understand the media's role in shaping environmental discourse within the context of sustainable development.

B. Participants and Data Sources

This study involved 39 participants, including lecturers, doctoral program students, and bachelor students, who read news about the concept of forest cities in the context of the development of the Indonesian capital city. Participants were selected through purposive sampling techniques based on their involvement in academic discussions and their understanding of forest city development issues. The data sources in this study fall into two main categories: (1) news texts in Indonesian digital mass media that discuss the forest city concept in the context of IKN development, and (2) quantitative data collected through surveys of participants. News data sources include five national digital media outlets, selected for their relevance and frequency of publications related to the topic: *Tempo*, *Kompas*, *Republika*, *Liputan6*, and *Media Indonesia*. These five media outlets met the criteria by publishing at least seven articles discussing forest cities, as summarized in Table 1.

TABLE 1
DISTRIBUTION OF NEWS TOPICS

Media	Number of News Topics
Tempo	10
Kompas	11
Republika	8
Liputan 6	13
Media Indonesia	10

C. Media Classification

To understand ideological tendencies in media reporting, this study classifies mass media into three categories based on the proportion of pro, ambivalent, and opposing news regarding forest cities:

TABLE 2
MEDIA CLASSIFICATION BASED ON IDEOLOGICAL TENDENCIES TOWARD THE FOREST CITY

Media Classification	Description	Proportion of News
Pro-Ideology (Media A)	Media that supports forest cities as sustainable development solutions, highlighting ecological benefits and green technology.	60% Pro, 40% Contra
Ambivalence (Media B)	Balanced media presents both positive and negative sides of IKN development from various perspectives.	50% Pro, 50% Contra
Contra-Ideology (Media C)	The media, which are critical of forest cities, highlight the negative impacts on the environment and indigenous peoples, including deforestation and sustainability issues.	70% Contra, 30% Pro

D. Data Collection Techniques

The data in this study were collected through two approaches: document analysis and a public perception survey. First, the document analysis involved collecting and analyzing news texts from five digital media outlets that discussed the concept of a forest city in IKN between 2019 and 2024. These texts were then classified into three ideological categories: pro-ideology, ambivalence, and counter-ideology. Second, the public perception survey used a Likert-scale questionnaire (1-5) to measure public views on media news narratives, environmental impacts, and development benefits.

E. Research Instruments

The research instruments used in this study consist of three components. First, the discourse analysis guide is based on Stibbe's (2015) ecolinguistic theory, which categorizes discourse into destructive, beneficial, and ambivalent forms. Second, the data coding checklist is used to identify lexical choices. Third, the questionnaire is designed to measure the public's perception of digital media coverage of the concept of a forest city in the development of IKN. The combination of these instruments enables an in-depth, comprehensive analysis of the ideologies presented in media coverage.

F. Data Analysis Techniques

The data analysis in this study was conducted in three complementary stages. The first stage applies Critical Discourse Analysis with an ecolinguistic approach to uncover ideological representations in mass media texts. The second stage involves frequency analysis and data visualization using the Find feature in Microsoft Word to count word occurrences within a particular group. This is accompanied by manual checks to ensure the accuracy of the results, which are then visualized as bar charts to show the narrative patterns of digital media. The final stage used Descriptive Statistical Analysis of survey data to map public perception of *Forest City's* reporting, which was classified into four categories: unsupportive (0–25%), less unsupportive (26–50%), positive (51–75%), and very positive (76–100%), to describe the level of public acceptance of media narratives, environmental impacts, and development benefits.

IV. FINDINGS

A. Representation of the Forest City Concept in Indonesian Digital Mass Media Texts as Reflected From Lexical Choices

The concept of Forest City in the development of Indonesia's Nusantara Capital City has become a complex discourse in digital mass media. As part of the sustainable development paradigm, Forest City is often represented through lexical choices that reflect certain ideologies across ecological, developmental, and social contexts. Mass media play a significant role in shaping the public's perception of this concept by selecting and using words with positive, negative, or ambivalent nuances.

1) Comparative Analysis of Lexical Choices in Digital Mass Media

Table 3 below presents a comparison of the language used in Indonesian digital mass media reporting related to Forest City. From the table, it is evident that different media exhibit variation in their lexical choices, reflecting their respective perspectives on the Forest City concept. The lexical selection in this table is analyzed thematically and grouped by themes.

TABLE 3
COMPARISON OF LEXICAL CHOICES IN MEDIA LANGUAGE USE

Media	Positive Words	Negative Words	Ambivalent
Tempo	Sustainable smart city (10), Biodiversity conservation (2), Restoration (5), Protected Areas (1), Equity (1)	Deforestation and Land Cover Removal (15), Ecosystem and Habitat Damage (22), Land Conversion (9), Hydrology and Natural Disaster Risk (11), Environmental Pollution and Degradation (7), Climate Change and Carbon Loss (7), Coastal and Mangrove Damage (4), Resource Exploitation (12), Social Conflict (3)	However (9), But (2), Ironically (1), While (6)
Kompas	Sustainable Forest City (48), Ecosystem and Resource Management (30), Environmentally Friendly Infrastructure and Technology (35), Positive Impact of Forest City on the Environment (25)	Environmental Damage (3), Criticism of Forest City (3), Negative impacts of urbanization (7), Industrial Plantation and Monoculture Forests (9), Deforestation and Environmental Degradation (7)	However (3), But (4), Temporary (2), Although (3), Or (4)
Republika	Sustainable Forest City (52), Eco-Friendly Technology (16), Forest Restoration and Rehabilitation (16), Social Justice in IKN Development (11)	Forest Destruction and Land Conversion (5), Environmental Damage (6)	But (1), Maybe (1)
Liputan 6	Sustainable Forest City (24), Eco-Friendly Technology (19), Forest Restoration and Rehabilitation (22), Social Justice in IKN Development (10)	Environmental Damage (2), Climate Change Impact (3), Criticism of Forest City (5)	While (4), However (2), But (2)
Media Indonesia	Sustainable Forest City (18), Eco-Friendly Technology (12), Forest Restoration and Rehabilitation (22), Social Justice in the Development of IKN (8)	Environmental Damage (19)	However (1), But (1)

The table shows that the media exhibit varying tendencies in their lexical choices to reflect their perspectives on the Forest City concept. Tempo.co tends to be critical, with the dominance of negative terms, such as the theme "deforestation and forest cover removal (Tree pruning, illegal logging, forest shrinkage, etc.)" and the theme 'Ecosystem and habitat damage (threats to flora and fauna, wildlife decline, habitat destruction, etc.)', which highlights the environmental impact of this project. Kompas adopts a more balanced position, using many favorable terms, such as the theme "sustainable forest city (environmentally just city, beautiful city, green principled building, etc.)", while still including critical elements. Meanwhile, Republika, Liputan 6, and Media Indonesia highlight positive aspects, such as the theme of 'environmentally

friendly technology (green energy, new and renewable energy, hydroelectric power plants, etc.),' and the theme of "forest restoration and rehabilitation (reforestation, reforestation, forest rehabilitation, etc.)," although these media still touch on the negative side in small amounts. The use of the word ambivalent is reflected in the form of a choice of conjunctions, such as the word 'but' in the sentence *"The government carries the concept of IKN as a developed, smart, green, forest city, where 75 percent of the IKN is a green area. However, it is a critical question because the status of 256 thousand hectares is forest if 75 percent of the green area means deforestation of 30 percent for infrastructure development, and so on."*, and connecting the word 'temporary' as seen in the sentence *"According to Rio, the smart forest city promoted by Jokowi is like an artificial forest. In contrast, the natural forest is destroyed, including those that are "adjacent to the IKN"*, which are more frequently found in Tempo and Kompas, suggesting efforts to present more critical and objective reports.

2) Visualization of Lexical Choice Frequency

To provide a clearer picture of the differences in lexical choices in digital mass media news texts, Figure 1 presents a visualization of the frequency of positive, negative, and ambivalent words appearing in Forest City news texts:

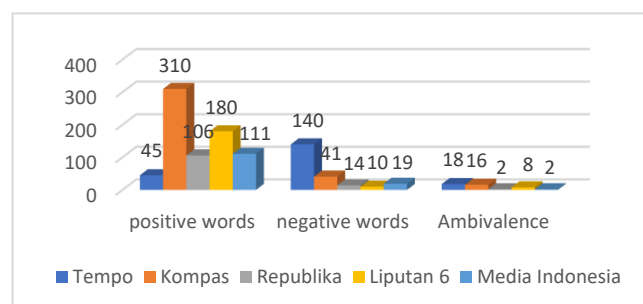


Figure 1. Frequency of Lexical Choices on Digital Mass Media News Texts

Figure 1 shows the frequency of lexical choices in Forest City news in Indonesian digital mass media news texts. Kompas led with 310 positive words, followed by Liputan 6 (180) and Media Indonesia (111), both of which focused on sustainability aspects. Meanwhile, Tempo recorded the highest use of negative words (140), in line with its tendency to be more critical of environmental impacts. Kompas includes 41 negative words, reflecting a balanced approach to reporting. Ambivalent words such as 'however' and 'but' are most frequently used by Tempo (18) and Kompas (16), signaling their efforts to present a more complex perspective than other media, which tend to be more linear.

B. Representation of Forest City Ideology in Indonesian Digital Media News Texts

To understand how the media represent ideologies related to the concept of a forest city in the development of the Nusantara Capital City, Stibbe (2015) identifies three types of discourses that reflect ideological expressions: destructive, ambivalent, and beneficial. Destructive discourse reflects criticism of adverse environmental impacts, while favorable discourse highlights potential ecological and sustainability benefits. However, based on the analysis, no media revealed ambivalent discourse, i.e., a neutral or mixed position, namely a combination of support and criticism of the IKN project.

1) Destructive Discourse

Based on the data presented in Table 3 and Figure 1, Tempo consistently describes the forest city concept used in the development of the Nusantara Capital City as a project with the potential to harm the environment. The critical attitude of this media is evident in the following quotes:

The development of the Nusantara Capital City has the potential to cause massive environmental Damage. The claim that it will be a sustainable forest city is just empty words from officials. (Tempo, 13 Maret 2024 15:09 WIB, first paragraph)

The use of strong language, such as *"cause massive environmental damage"* and *"empty words from officials,"* creates a negative image of the project. These phrases are not only critical but also build a narrative that undermines the government's claims. The criticism is even sharper in another quote that directly links the impact of deforestation to ecological disasters:

This massive clearing and the resultant loss of forest cover automatically have the potential to lead to flooding and landslides. In the last two years, there have been frequent floods in the center of the IKN area in the Sepaku subdistrict, North Penajam Paser Regency. The cause of the flooding is not only the intensive rainfall but also land exploitation that has resulted in the loss of the endemic trees that were primarily responsible for the retention of rainwater. (Tempo, 13 Maret 2024 15:09 WIB, sixth paragraph)

The use of phrases such as *'resultant loss of forest cover,' 'landslides,'* and *'land exploitation'* explicitly illustrates ecological degradation due to massive deforestation and the loss of local vegetation that serves as a rainwater sink. This narrative serves not only as an ecological critique but also as a warning against the often-overlooked consequences of environmental exploitation in development projects.

Within the framework of this study, the use of phrases that highlight ecological damage and the government's inability to realize sustainability claims reflects a discourse of resistance to modern development ideologies. This criticism aims

to expose and challenge the hegemonic discourse that often prioritizes economic benefits and infrastructure growth while overlooking significant ecological impacts. By explicitly addressing land exploitation and natural forest loss, *Tempo* positions itself as a media outlet that challenges dominant narratives and promotes environmental agendas that are often marginalized in development discourse.

The narratives constructed by *Tempo* demonstrate how media language can be utilized as a tool of resistance against State power. By portraying governments as mere words and highlighting tangible ecological impacts, the media serves as an advocate for environmental accountability, encouraging readers to question the consequences of development often encapsulated in sustainability claims. This critical discourse invites the public not only to accept the official narrative but also to examine the ecological and social implications that are often obscured by the political rhetoric of development.

2) *Beneficial Discourses*

The discourse on the development of the Nusantara Capital City, initiated by the Indonesian government, uses the concept of a forest city to emphasize aspects of sustainability and ecological restoration. The media, in this case, include Kompas.com, Republika, Media Indonesia, and Liputan 6, which also reproduce this narrative through language that frames the project as an environmentally friendly initiative, a sustainable city, and green energy, among others.

Kompas.com

Kompas Media is one of the media outlets that consistently constructs a positive narrative related to the concept of a forest city, supporting the development of the Nusantara Capital City project. Of the 11 news topics published, eight support the forest city concept for IKN development, while three address environmental damage. The narrative construction that supports this project not only illustrates optimism about ecological sustainability but also emphasizes the innovative aspect of environmentally based city management. This can be seen, for example, through a quote stating:

President Joko Widodo (Jokowi) once said that the development of IKN in East Kalimantan (East Kalimantan) will begin with the rehabilitation of forests around the area. (Kompas.com, March 27, 2022)

The choice of phrases such as *'begin with the rehabilitation of forests'* shows an effort to construct the image of IKN as a project based on environmental conservation. However, this narrative can be used as a greenwashing strategy, in which grandiose environmental promises are made to distract from the ecological impacts that may result. Another quote also states:

The people (PUPR) Basuki Hadimuljono said that the New National Capital City of Nusantara will become the Future Smart Forest City of Indonesia. Basuki explained the principles that have been planned as the design concept of infrastructure development that is efficient, environmentally friendly, energy-efficient, and productive. (Kompas.com, February 25, 2022)

The use of phrases such as *'future smart forest city,' 'design concept of infrastructure development that is efficient,' 'environmentally friendly,' 'energy-efficient,'* and *'productive'* further strengthens the positive framing of this project. However, from a critical ecolinguistic perspective, the lexical choices can be categorized as part of *green rhetoric* or *greenwashing discourse*, in which sustainability is more of a rhetorical tool than a genuine commitment to ecological balance.

Republika.co.id

Republika also serves as a media outlet that supports and promotes the concept of a forest city in the development of the Nusantara Capital City (IKN). This support is evident in the overall topics published, which consistently convey a positive narrative about the project. One example can be found in a quote that illustrates:

I leave one for design, green building. Because what we want to build is a green area throughout the IKN, with green environments. So, the concept is different from cities around the world," said President Joko Widodo. (Republika, December 20, 2023)

The use of *green buildings*, *green areas*, and *green environments* reflects strong support for developing the Nusantara Capital City project as a sustainability-based city. This narrative not only frames the project as an ecological innovation but also mitigates any potential criticism regarding the environmental impact of massive development.

The discourse employs a linguistic strategy that prioritizes environmental values over other considerations in urban planning. By highlighting terms with positive connotations in ecology, the media helps create the impression that this project is not only modern but also environmentally responsible. In the context of political communication, using terms such as "green building," "green area," and "green environment" is an effective rhetorical tool to enhance the appeal of projects, particularly for audiences increasingly concerned about sustainability.

MediaIndonesia.com

MediaIndonesia also plays a crucial role in supporting the development of the Nusantara Capital City (IKN) by publishing various articles that specifically discuss the concept of the forest city. This media consistently emphasizes sustainability and environmental values in IKN planning, aligning with the government's official narrative on the project. This attitude is reflected in President Joko Widodo's statement quoted by *Media Indonesia*.

So the concept of Nusantara is a forest city. This means that this area must be green, the environment here must also be green, and the buildings must also be green buildings. (Media Indonesia, December 20, 2023).

The discourse framed by *Media Indonesia* reflects the use of language strategies to support development ideologies oriented towards environmental sustainability. The use of phrases such as "the area must be green," "green environment," and "green building" serves as a rhetorical device to reinforce the IKN project's environmentally friendly image. In the

context of ecolinguistics, these terms not only frame the IKN project as a symbol of sustainability and ecological innovation but also serve a persuasive function, building legitimacy for major development projects that could cause significant ecological impacts.

Liputan6.com

Media *Liputan6.com* actively supports the development of the Nusantara Capital City project by publishing 13 articles discussing the concept of a *forest city*. This support is evident in the narrative, which emphasizes environmental sustainability aspects in the development of IKN. One of the quotes highlights:

The Nusantara IKN Forest City was built to restore the currently degraded environment. The main effort is to reforest or replant existing lands. (Liputan6.com, September 12, 2023)

The discourse framing Liputan 6 employs linguistic strategies that highlight ecological improvement as a core element of IKN development. Phrases such as "*restore the environment*," "*reforest*," and "*replant*" reinforce the narrative that the project aims not only to develop urban areas but also to contribute to ecological restoration by rehabilitating degraded land.

From a critical ecolinguistic perspective, this discourse represents a form of *beneficial discourse* that promotes the idea of sustainable development. Terminology such as "*reforestation*" carries a positive connotation, describing the government's commitment to improving the condition of the damaged environment. However, this kind of narrative can be problematic if not supported by transparent data on whether reforestation can compensate for deforestation caused by construction activities.

C. Public Perception of Forest City News Narrative in Indonesian Digital Mass Media

Of the 50 targeted respondents, 39 completed the questionnaire. Analysis of the three survey indicators indicates that the public's perception of Indonesian digital media coverage of Forest City as part of the IKN development is generally positive. Regarding the *media news narratives* indicator, 67.18% of respondents had positive perceptions, indicating that most have a generally favorable view of how digital media conveys information about the Forest City project in IKN, although not overwhelmingly so.

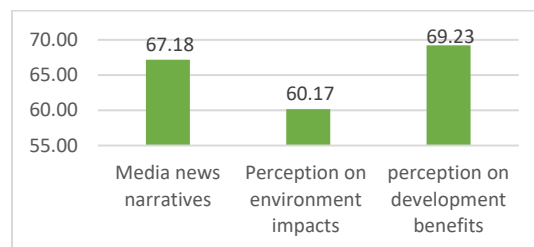


Figure 2. Percentage of Respondents' Perception of Forest City News

The public perception of this development's environmental impact shows a positive value of 60.17%, reflecting optimism despite ongoing concerns about the ecosystem's sustainability. Meanwhile, the *development benefits* indicator recorded the highest score, at 69.23%, indicating that the public is relatively confident in the economic and social benefits of development. However, they are not entirely sure yet. Based on the analysis, these findings indicate that digital media play a significant role in shaping a relatively optimistic view of Forest City's development in IKN, particularly regarding news, environmental impacts, and development benefits.

1) Percentage of Public Perception of Media News Narratives

The analysis of public perception of digital media news narratives about the Forest City project in the Nusantara Capital City revealed variations in respondents' approval levels. In the P3 question about differences in digital media viewpoints, 28.2% of respondents chose scale 4, and another 28.2% chose scale 3, indicating that the public is aware of the variation in news narratives, even though they do not fully agree with it.

Question P9 on the role of the media in shaping public opinion showed strong majority approval, with 38.5% choosing a scale of 5 and 35.9% choosing a scale of 4. It demonstrates a strong recognition of the importance of digital media in shaping public opinion on the Forest City project. Conversely, in question P6 on news objectivity, 25.6% of respondents strongly agreed (scale 5), while 28.2% chose scale 3. These findings show that the public harbors doubts about the neutrality of information provided by digital media.

Regarding information clarity (P10), scale three was chosen by 41% of respondents, the highest among all scales. This indicates that most respondents found the information fairly straightforward, although not always optimal.

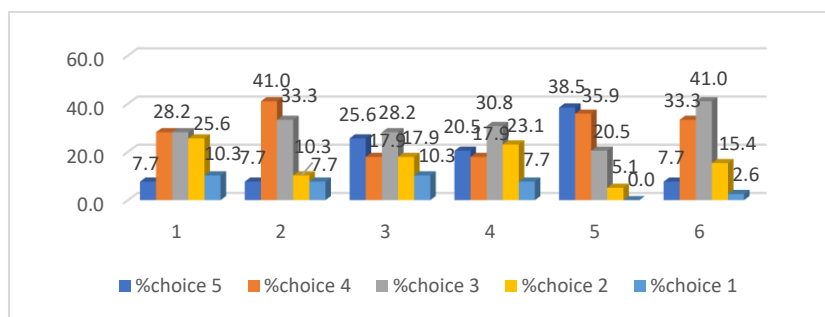


Figure 3. Percentage of Respondents' Choices of Media News Narratives

On the other hand, P4 showed a strong preference for scale 4 (41.0%), indicating that digital media strongly influenced respondents' attitudes toward IKN development. These data suggest that although digital media is recognized as playing an essential role in shaping public opinion and providing information about Forest City in IKN, challenges remain regarding perceptions of objectivity and the clarity of the information conveyed.

2) Percentage of Public Perception of Environmental Impacts

The analysis of public perception regarding the environmental impact of the Nusantara Capital City development, which adopts the forest city concept, reveals a diverse distribution pattern across three indicator questions. In question P2, which examines the extent to which the Forest City concept supports environmental sustainability, the respondents predominantly selected scale 3 (35.9%) and scale 4 (28.2%). Although only 20.5% of respondents chose a scale of 5, these findings suggest that the majority exhibit moderate to high confidence in the concept's potential to support environmental sustainability.

The P5 question, which measures the extent to which these projects are considered to help achieve sustainable development goals, shows a similar distribution, with a predominant selection on scale 3 (46.2%) and scale 2 (20.5%). Only 12.8% of respondents strongly agreed (scale 5), indicating that the public is still not entirely convinced of Forest City's significant contribution to sustainable development.

On the other hand, in question P13 regarding the potential of projects to damage natural ecosystems, 51.3% of respondents chose a scale of 2, indicating that more than half disagree with the statement that this project will damage existing ecosystems.

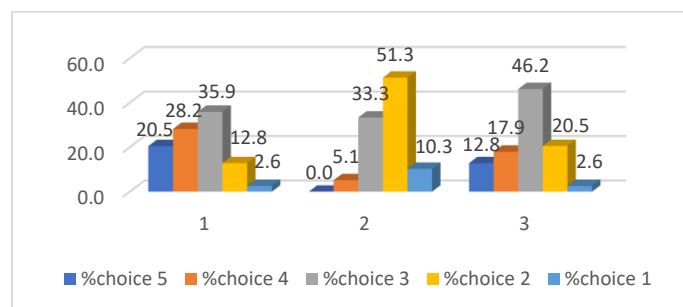


Figure 4. Percentage of Respondents' Choice of Environmental Impact

However, with 33.3% of respondents selecting scale 3, a segment of respondents remains neutral or skeptical about the environmental impact of this project. Therefore, this analysis suggests that while the public recognizes the potential benefits of Forest City in promoting ecological sustainability, there are significant concerns and uncertainties about its impact on natural ecosystems and its contribution to achieving sustainable development goals.

3) Percentage of Public Perception of Development Benefits

The analysis of public perception regarding the benefits of IKN development under the Forest City concept reveals that responses lean toward the positive, though doubts persist in several areas. In question P7, which examines the potential long-term benefits for the Indonesian people, 35.9% of respondents chose scale 4, followed by 33.3% who selected scale 3. Respondents who strongly agreed (scale 5) accounted for only 15.4%, indicating that, despite recognizing the long-term benefits, the majority of the public remains unconvinced.

Question P11, which measures the potential to create local economic opportunities, yielded similar results, with a predominant selection of scale 4 (38.5%) and scale 3 (23.1%). Only 15.4% of respondents strongly agreed that the project would generate economic opportunities. In comparison, 10.3% chose scale 1, indicating that a small segment of respondents remains skeptical of the project's positive financial impact.

In P12, which examines the improvement of people's quality of life in the future, the highest percentage is recorded at scale 4 (35.9%), followed by scale 3 (25.6%).

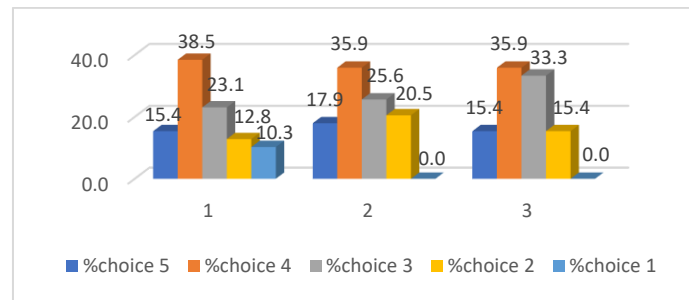


Figure 5. Percentage of Respondents' Choices of Development Benefits

Respondents who strongly agreed (scale 5) accounted for 17.9%. In contrast, none of the respondents chose scale 1, indicating that, in general, the public has positive expectations for the potential to improve the quality of life from the development of Forest City. These findings show that there are considerable expectations regarding the benefits of Forest City development, especially in terms of community welfare and local economic opportunities. However, there are still doubts that must be addressed, especially by providing clearer, more transparent information about the positive impact of this development.

V. DISCUSSIONS

The development of the Nusantara Capital City, also known as IKN (*Ibu Kota Nusantara*), with the Forest City concept, has become a topic shaped by various ideological interests in Indonesian digital media news. Media supporting IKN development under the forest city concept tend to present a positive framing of the project, emphasizing aspects of sustainability, innovation, and modernity while minimizing potential ecological impacts. In contrast, independent or critical media, such as *Tempo*, highlight the adverse effects of development, including deforestation, biodiversity loss, and threats to local communities. Some studies also indicate that *Tempo* tends to be more critical of IKN development (Aliyah et al., 2024; Arioputro & Nugroho, 2024). The framing used by these two media types reveals that news about Forest City serves not only as a conduit of facts but also as a shaper of political discourse, influencing public opinion (Aliyah et al., 2024). Media supporting the development of the capital city employ linguistic techniques such as euphemisms and hyperbole, using phrases like "green cities of the future" or "sustainable urbanization solutions" to legitimize the project. Meanwhile, critical media use terms like "exploitative projects" or "threats to natural ecosystems" to warn about negative impacts that are often not shown in the dominant narrative.

The media's use of different framing strategies aims to influence public attitudes towards the concept of a forest city and the development of Indonesia's new capital city. This statement is confirmed by several previous studies that say underframing media has an essential role in influencing opinion, understanding, the public, gaining support, and contributing to the divergence of policy debates (Colistra, 2012; Chong & Druckman, 2007; Brulle et al., 2012; Tewksbury et al., 2000; Chapman & Gerber, 2019; Powell et al., 2015). The results of a public opinion survey then strengthened the initiative, showing that distributing forest city news as part of a mega project in Indonesia's new capital city had a positive influence and garnered community support. Previous researchers also expressed the same thing that digital media news has an impact on public attitudes (Bär et al., 2020; Gorodnichenko et al., 2021; Han et al., 2020; McCombs & Valenzuela, 2020; Ramírez-Plascencia, 2020) and that the IKN development project has a positive impact on the community (Adella et al., 2024; Aningtyas et al., 2024). Based on these findings, the media is shown to not only disseminate information but also shape social construction in support of environmental policies.

Although this study has employed a mixed-methods approach to obtain comprehensive data, it still has limitations in examining the fundamental differences between the discourse on sustainability in digital media and the realities at the IKN construction site. This research is limited to a survey of public perception regarding the development of IKN using the concept of forest cities. Although the survey results indicate that the community has a positive attitude towards the development of the IKN, particularly in economic and social terms, there remains public concern that it harms the environment. Then, another limitation of this study is the use of a relatively small sample. Other factors, such as educational background and media influence, require further analysis to gain a comprehensive understanding of how public attitudes are formed.

Therefore, although this study provides a basic framework for analyzing the forest city discourse in the context of IKN development, further research is needed to expand on the analysis and better understand the political, economic, and environmental dynamics related to IKN development or the relocation of the new first lady. In addition, a comprehensive approach through critical discourse analysis and field studies can provide a deeper understanding of whether such mega projects offer benefits in ecological, economic, and social aspects, or if they are merely symbolic projects that obscure environmental and social impacts.

VI. CONCLUSIONS

This research highlights the complexity of ideology in presenting forest cities as a sustainable development initiative

within the context of the Indonesian Capital City (IKN) project. Using an ecolinguistic approach, this study found that the media has a crucial role in shaping opinions and influencing public attitudes through the construction of various forms of discourse. The analysis also reveals a polarization in the narrative, with media that support government policies often employing a positive framing, portraying forest cities as innovative green city models that promote sustainability. In contrast, more critical media highlight the project's negative impacts, including deforestation and environmental damage. In addition, public perception surveys indicate that the public tends to be optimistic about the positive effects of IKN development; however, environmental problems persist. The findings of this study confirm that the discourse on sustainability in the development of IKN, using the concept of a forest city, is not only a technical issue but also a material for differences influenced by political, group, and economic interests.

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