

# Analyzing Economic Transformation and Environmental Issues in Indonesian Government Planning and Mass Media Content

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Abstract. The concept of economic transformation in Indonesia has been stated in the National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional/RPJMN) document. Furthermore, the Indonesian government should also consider the urgency of environmental issues in transforming the economy to be more sustainable. The aim of this paper is to analyze to what extent the government considers environmental issues in document planning. At the same time, this paper also examined the mass media discourse about economic transformation and environmental issues to understand the information shown to the public. This paper used word-level content analysis as the methodology by collecting the appearing words in the RPJMN document from 2004-2024 and six big mass media news in Indonesia on the economic transformation and environmental topics. The frequency of words that appeared in the document and mass media showed the tendency to focus and importance on an issue in development planning. The results of this study showed that the environmental issue had appeared in the government planning document. However, the word count in RPJMN showed that the subject seemed less than the economy, education, and laws topics, which might express that environmental issues were less important. Moreover, environmental issues have also appeared in the mass media news about the economic transformation alongside the news about the digital economy. The result might indicate that economic transformation in Indonesia had suggested the environmental issue, yet more practical policies are needed to implement the plan.

**Keywords:** economic transformation, environment, government planning, mass media, content analysis.

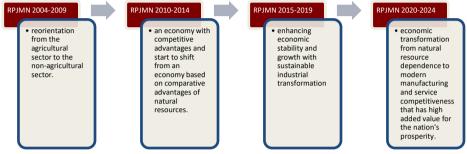
# 1 Introduction

The National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional/RPJMN) contained a conception of Indonesia's economic trans

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formation. The document was created and published every five years after the national general elections. Economic transformation was one of the presidential directions in the most recent RPJMN for the 2020–2024 time frame to carry out the Nawacita mission and accomplish the objectives of Indonesia's Vision 2045. A summary of the evolution of RPJMN's strategic goals related to structural transformation is shown in Figure 1.



Source: Ministry of National Development Planning (reprocessed)

Fig. 1. Economic Transformation in the RPJMN

In general, the economic transformation target in the RPJMN aimed to create value added. The process of change had the main objective of expanding the economic engine by increasing the role of the manufacturing and service sector industries in the time and regional dimensions. Hence, quality growth and equitable distribution of sources of growth are crucial to creating prosperity for the Indonesian people.

The economic transformation part of the RPJMN was mostly in line with the academic view. Scholars agree that economic transformation is an integral part of the issue of structural change, where production activities and the role of labor in the economy shift to other more productive sectors. Structural change comprehensively creates a linear transformation, which is a shift in the role of the primary sector to the secondary sector (manufacturing industry) before shifting to the service sector [1]. However, the linearity of structural change does not occur in developing countries today as many countries have begun to shift from the agricultural sector directly to services before the manufacturing sector becomes established [2]. This symptom also occurs in Indonesia [3, 4].

At the same time, the recent issues in economic transformation also considered the importance of environmental conditions. An ideal plan and development positively impact the economy and guarantee that human needs for green open spaces and a sustainable environment will be fulfilled in the future [5]. Therefore, the economic transformation concept should create a balanced ecosystem and prioritize environmental sustainability.

As per the national development planning document, one of the national priorities mentioned in the 2020-2024 RPJMN was developing the environment, increasing disaster resilience, and combating climate change. Environmental quality was one of the government's concerns because it will affect Indonesia's economic growth, which

is currently still dependent on the commodity and natural resource sectors. In more detail, the environmental policies are focused on improving the quality of life, increasing disaster and climate resilience, and adopting low-carbon development approaches. However, it is still important to measure to what extent the government had considered the environmental issues in the development planning.

The effort to balance economic transformation with environmental sustainability cannot be done by relying on the role of one party. Other stakeholders, such as the public, business actors, financial and banking institutions, investors, media, and other parties, need to be involved and collaborate in environmentally friendly development. Hence, the mass media's role is also significant in delivering information to the public.

The openness of flows, easy access to information, and the dynamics of the global economy can influence people's mindset and behavior in interpreting development orientation. Information and rationality can influence individual decisions and choices in carrying out productive activities in past experiences [6, 7]. Even actors' opinions at the individual, community, or institutional level can shape public perceptions to be realized in attitudes and stances [8, 9, 10].

The aim of this paper is to analyze to what extent the government considers environmental issues in document planning, known as the RPJMN. Since the RPJMN is the primary document for directing development orientation in Indonesia, the analysis of its content might show how far governments oversaw future development of Indonesia towards environmental issues. Concurrently, this paper also examined the mass media discourse about economic transformation and environmental issues to understand the information shown to the public and explain their opinion. This study is the first to analyze the content of government document planning and mass media in economic transformation and environmental issues.

## 2 Literature Review

#### 2.1 Economic transformation and environment

Development policies should be prepared considering environmental conditions, which are one of the crucial pillars of economic development. Development policies based on the environment are solely based on seeking profit and the sustainability of the natural environment. The concept of economic transformation can create a balanced ecosystem and prioritize environmental sustainability. Various countries have applied several concepts to deal with environmental issues, with the theme "green," where economic growth is combined with sustainable environmental sustainability.

The green economy is the first concept that can be applied [11]. The green economy has an idea that prioritizes a sustainable environmental ecosystem, integrated with the economic system, continuous innovation, and involves the community. The second is the blue economy. This concept is usually applied in the marine and fisheries industry by paying attention to environmental balance without destruction [12]. Another concept regarding economic transformation is a circular economy implemented to improve environmental problems in terms of climate change, especially those related to energy and emission reduction [13].

Economic transformation is inseparable from industrial activities, but it has also become one of the most significant sources of environmental problems because of pollution. Industrial pollution can also be a possible cause of major disasters [14]. One of the solutions to this problem is to innovate the green transformation. A combination of technical aspects and social aspects is needed. Improving processes that might negatively impact the environment but still pay attention to the economic aspects needed will provide excellent and sufficient results to support an environmentally balanced economic transformation [15].

The strategies that can be applied to industrial activities to reduce the negative impact on the environment, such as implementing a reduce, reuse, recycle system for the use of energy and raw materials in the production process up to consumption levels, bringing sources of raw materials closer to production sites, good management in processing energy [13].

#### 2.2 The role of government in development planning

Government development planning is used as plans or policies to achieve national goals. One form of the government's work plan is the National Medium-Term Development Plan (RPJMN), written by the Ministry of National Development Planning (Bappenas). Bappenas explains the roles and functions of the RPJMN, containing national development strategies, general policies, and work programs of each Indonesian government ministry/institution and between agencies and also as a macroeconomic framework that contains an overview of the economy, which includes fiscal policy in the form of indicative regulations and funding.

The role of the government is urgently needed to make the development synergized with environmental sustainability. Strictness in regulation and penalties for violators need to be implemented to provide a deterrent effect. It can reduce violations related to environmental destruction. In addition, the government needs to socialize and organize activities that support environmental ecosystems.

The next important thing is collaboration between the central and regional governments by implementing a decentralization system. Local governments are also important in implementing the policies [16]. Local governments are stakeholders who can formulate the actions as the embodiment of the national mission contained in central government plans and regulations. But sometimes, the role of local government is limited because there is no explicit assignment from the central government. To succeed in this strategy, human resources in local government should be ready, understand the goal of the missions, and implement the mission into real action, especially in dealing with environmental problems. Moreover, collaboration with other stakeholders is also needed to support and achieve common goals. It is essential to have a clear framework regarding the tasks for the government and other supporting stakeholders to create the work system [17].

#### 2.3 The significance of the mass media in development planning

Activities related to communication and information sharing are important for the government. Media and technology for information dissemination will impact political ideology [18]. Mass media has an important role that the government can use to share information. Mass media can provide benefits to increase public knowledge about the current conditions of each issue/problem that is currently happening.

Mass media is responsible for providing correct, clear, and objective information. Because the mass media is vital for conveying objectives related to government programs, the government can use mass media to increase public trust, especially when the country is experiencing a crisis, such as during the last pandemic. Information shared in the mass media is successful if the public responds and has attitudes about the issues based on the information they read.

The government uses the mass media to share official information to avoid reporting errors that may have circulated earlier. The strategy is done to prevent panic in a crisis. Through the mass media, news or information from the government can be conveyed more quickly to the public.

The mass media can also drive the government's image in the eyes of the public. The mass media can provide information about the attitude and government's plans in dealing with an issue, influencing the public to evaluate the government's performance. It will make the government more responsive to the community's needs, knowing that news in the mass media can determine public perceptions of government credibility. Therefore, areas with good circulation of mass media usually have governments that are more responsive to the needs of their people [19].

# **3** Data and Methods

## 3.1 Data

The scope of the study was government planning documents and mass media content from the internet source. RPJMN was the government planning document analyzed in this study. We collected the RPJMN content from 2004-2009 to the last RPJMN, 2020-2024. Hence, we examined four periods of RPJMN. Meanwhile, we managed six big mass media news until 1 July 2022 with "economic transformation" as the keywords. There were 121 articles collected from the data scrapping.

## 3.2 Methods

This study used big data analysis by utilizing online data through web scrapping to capture public discourse in government documents and mass media. A three-stage web scraping process has been offered in the past literature [20]. Stage one retrieves web pages from a web server. The retrieval process is accompanied by checking the input data from the list of web pages, both structured and unstructured data, using Python software with the beautifulsoup library. Stage two extracts the data and stores it in the output file. Data retrieval from the internet tends to be in the form of unstructured structure.

tured data, so further data processing is needed so that it can be analyzed [21]. The last step is to pull and analyze the required data. By using web scraping, content analysis can be done correctly.

Moreover, word-level content analysis was used to examine the economic transformation topic as well as analyze to what extent the environmental issues came up in the economic transformation topic. We summarized how many words related to economic transformation and environmental issues appeared in RPJMN and mass media content. We consider that the more words appearing in a document or article means the topic is more considerable and important.

## 4 **Results and Discussion**

#### 4.1 Central Issues in the Government Planning Document

A systematic search was conducted on Indonesia's National Medium-Term Development Plan (RPJMN) documents for 2004-2009, 2010-2014, 2015-2019, and 2020-2024. Figure 2 shows the top 50 central issues in the four RPJMN periods.

The word "public" (masyarakat) in the RPJMN ranks third for frequency of use. This result indicates that people are the goal of economic transformation efforts. Furthermore, this ranking shows that the public is one of the important actors in implementing economic transformation efforts in Indonesia. The role of the public as one of the main actors of change has been organized and planned by the government as stated in the RPJMN document.

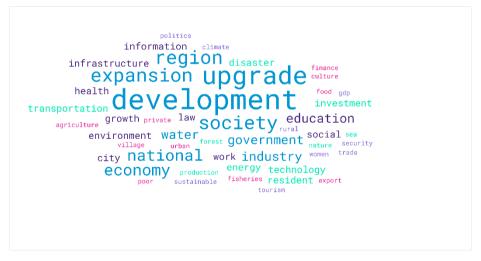


Fig. 2. Top 50 issues in RPJMN

Furthermore, regional issues through the word "regional" (daerah) occupy a higher position than the word "national" (nasional) in planning documents. This condition illustrates that the development plans that the government has prepared are no longer

centralized but also reach the development of regions in Indonesia. It means that the context of Indonesia's development planning has accommodated and even regionalized. In addition, economic issues are still the government's focus in preparing the RPJMN. The word "economy" is ranked seventh, followed by the industrial, education, and legal sectors.

Meanwhile, in the top 50 issues in RPJMN, "water" (air) was the most mentioned environmental issue, with a frequency of 0.36% from all the words mentioned in RPJMN. Although "water" appeared below the word "economy" (ekonomi), it came up above "industry" (industri) and "education" (pendidikan). That might show the significance of water issues in the government planning document.

The word "environment" (lingkungan) also came up with a relatively high frequency of 0.21%. Interestingly, this word is higher than "infrastructure" (infrastruktur) which had been largely informed as the main focus of the government's development planning. The words "social" (social), "health" (kesehatan), and even technology (teknologi) were also mentioned not as many as the word "environment". Other terms such as "energy" (energi), "nature" (alam), "forest" (hutan), "sea" (laut), "climate" (iklim), and "sustainability" (berkelanjutan) had appeared in the top 50 issues in RPJMN. That showed how the government considered the environmental issues in an attempt to develop the economy for the Indonesian people.

## 4.2 Central Issues in the Mass Media

It should be realized that the mass media is an essential source of information for society. An analysis of economic transformation in the mass media is carried out through capitalizing coverage in six online mass media in Indonesia. Results from big data analysis for the online mass media show there is a gap between the word "transformation" and the words "Indonesia" and "economy." It shows that the focus of news coverage in the media is not on the phrase economic transformation as a whole. The word "transformation" is still introductory, not the main focus, so there is a possibility that the public did not get the direction of economic transformation by the government.

Furthermore, several central issues related to economic transformation in the mass media are already in line with the central sub-issues in the RPJMN. Digital issues, digitalization (digitalisasi), technology (teknologi), innovation (inovasi), investment (investasi), and infrastructure (infrastruktur) have surfaced in the media. It shows that some of these issues are important to inform the public to support economic transformation. Apart from that, it is also interesting to find that many issues of economic transformation are related to environmental issues. Moreover, environmental issues are accompanied by sustainable (berkelanjutan), energy (energi), and renewable (terbarukan) issues. It means that the media considered environmental issues as part of economic transformation.

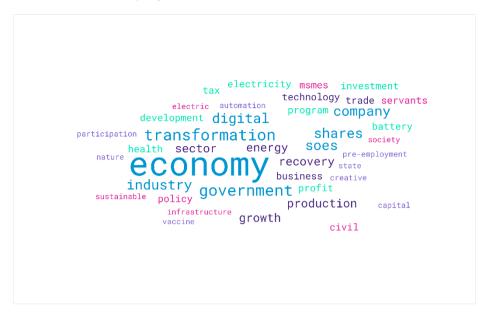


Fig. 3. Focus and Direction in Mass Media

Figure 3 presents the focus and direction of issues in the mass media. "Government" (pemerintah) and "business" (bisnis) have the biggest intonation so far. It can be interpreted as the important role of government and business in economic transformation as well as the sustainability of government

Apart from that, state-owned enterprises (BUMN), industry (industri), sector (sektor), digitalization (digitalisasi), profits (laba), and stocks (saham) are also important points of news. Variation type of national reporting indicates that the mass media is relatively sensitive to the direction of national development and simultaneously informs the latest developments and dynamics of economic development. The mass media is vital in overseeing program sustainability and updating the latest information to harmonize planning, program implementation, and anticipating the dynamics.

Actor	Freq.
Goverment	5,66%
Society	2,23%
Micro, Small, and Medium Enterprises	2,06%
Indonesia	1,70%
Industry	1,61%
G 20	1,56%
Minister of Tourism and Creative Econ	omy 0,85%
Business 20	0,62%
National Development Planning Agence	y 0,52%
Ministry of Industry	0,43%

Table 1. Actors in mass media content

The news about the government (pemerintah) places it in the top position of the 10 highest actors. The government ranks at the top with a frequency of 5.66%, followed by the public (masyarakat), small-medium enterprises (UMKM), Indonesia, and industry (industri) at 2.23%, 2.06%, 1.7%, and 1.61% respectively. The specific institutional actors rank next such as the G20, B20, Bappenas, and the Ministry of Industry (Kementerian Perindustrian). Meanwhile, public actors only have one representative, the Minister of Tourism and Creative Economy (Menteri Pariwisata dan Ekonomi Kreatif).

This result showed that the government was the main actor in the economic transformation. The public and small-medium enterprises also played significant roles as the beneficiaries and executors of economic transformation.

Phrase	Freq.
<b>Economic Transformation</b>	2,27%
Digital Transformation	2,13%
Investment	1,96%
Economic Growth	1,68%
Economic Recovery	1,66%
Digital Economy	1,35%
Green Economy	0,99%
Cooperation	0,71%
Human Capital	0,71%
Pandemic	0,66%

Table 2. Issues in mass media content

On the other hand, the three highest ratings for the news about economic transformation include digital transformation at 2.13% (transformasi digital), investment (investasi) at 1.96%, and economic growth (pertumbuhan ekonomi) at 1.66%. Economic transformation in Indonesia seems to be highly focused on the digital economy issue. It could also be seen in the sixth rank. The digital economy also appeared with a frequency of 1.35%.

An interesting thing from this issue is that the green economy (ekonomi hijau) is included in the top 10 of mass media attention with a frequency of 0.99%. It means that, besides the news focused on the digital economy, the consideration of environmental issues was still crucial in the economic transformation discourse.

# 5 Conclusion

The government played the most important role in directing development policy in Indonesia. They created RPJMN as the primary development planning document for five years. The content analysis of RPJMN showed that the economy was the main focus of its document. It was supported by the fact that Indonesia was still in the low-er middle-income country rank, which tried to boost its growth to be an advanced economy.

However, the exciting thing in RPJMN was that the government has also focused on the environmental issue, even on other topics such as social and health. This fact showed that environmental issue was also one of the main focus of the development policy from the government. It also meant that the economic transformation in Indonesia had also considered the importance of environmental conditions.

Furthermore, as the public primary information, mass media also showed a similar result. According to mass media content, the government was the main actor in economic transformation. Economic transformation in the news was highly related to digitalization and environmental issues. The result would reflect that Indonesia's economic transformation had raised the subject of the environment, but more practical policies are required to carry out the strategy to achieve sustainable development.

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