



# Documenting Online Short Stories on Tropical Climate

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**Abstract.** This paper investigates digital data collection methods for searching online short stories on tropical climate. Digital platforms and Internet access have transformed the way literary content is produced, consumed, and distributed. It is crucial to study climate-related stories in Indonesia, which are affected by climate change. The study adopts a comprehensive approach with web crawling and data mining to analyze online short stories. It gathers digital data from online short stories about tropical climate on popular Indonesian websites such as Kompas.com and Cerpenmu.com, Wattpad, and Majalahkaras. The study discusses the availability of short story data on extreme weather, biodiversity loss, local knowledge, and social responses to climate change in Indonesia. Transformative literature in promoting environmental education, cultural representation, and climate discussions is of utmost importance in this era, and short story data can serve as evidence of it. In line with the results of the study that emphasizes the literature's potential to educate, encourage discussion, and motivate community-wide efforts toward climate change adaptation and sustainability.

**Keywords:** online short stories, digital data, tropical climate, literary studies

## 1 Introduction

Climate change is a significant challenge in the 21st century. In tropical regions, its impact is particularly severe on vulnerable ecosystems and exposed communities. Literature has proven itself as one of the means to explore the complex human experiences and environmental transformations caused by tropical climate change [1] [2] [3].

Short stories are a literary form that provides strong narratives about human emotions, societal responses, and ecological complexities related to climate. Traditional literary research has examined works in physical archives and published

collections [4] [5] [6] [7], but the digital era has created vast online repositories of short stories on various topics [8] [9] [10] [11] [12], including tropical climate. The proliferation of online platforms and digital media has democratized accessibility to creative works, including short stories with tropical climate themes.

Leveraging digital data collection techniques such as web crawling and data mining to systematically explore the digital landscape of tropical climate narratives. Data mining can identify narrative related to climate change in tropical regions. This paper discusses the use of digital data collection techniques like data mining to gain insights into human experiences, cultures, and environments related to climate change in tropical regions, particularly in Indonesia, with a focus on online short stories with tropical climate themes.

Thus, this paper examines the topic of how can digital data-gathering techniques, such as data mining, be utilized to gain insights into the multifaceted dimensions of human experiences, cultural responses, and environmental narratives related to climate change in tropical regions especially Indonesia, given the abundance of online short stories with tropical climate themes?

## 2 Methods

The development of digital literary studies has influenced literature's data collection and text processing practices [13] [14]. This work takes a technological approach to the study of people's reactions to climate change in the tropics, particularly in Indonesia. The study uses web-crawling and data-mining techniques to thoroughly examine several online short stories dealing with tropical weather. This is achieved by employing web scraping techniques to collect extensive data on tropical climate-related short stories. Literature-related websites, blogs, and digital literary magazines are among the many internet resources used to compile this data. In order to give a fair sample of tales addressing climate challenges in tropical locations, especially Indonesia, we must first establish keywords and search parameters.

Textual data undergoes extensive processing to ensure its quality and consistency. Natural language processing is utilized to glean relevant details from the short stories, such as descriptions of the local weather, the feelings of the characters, and recurring themes. This helps us get a better grasp on how authors have portrayed climate change in their works.

The short stories are analyzed using data mining methods in order to classify them and find recurrent features of genre. The analysis centers on the viewpoints and cultural attitudes of tropical places, particularly Indonesia, with regard to climate change in fiction.

Data mining and analysis were used to classify the short story corpus and isolate recurrent themes. This was accomplished through the process of "data mining." The investigation shed light on regional viewpoints and cultural attitudes towards climate change in tropical countries, with a particular emphasis on the distinctive insights gained from the works of Indonesian authors.

### 3 Results

In digital literary study, one of the most important steps is the collection of data from internet sources. It provides academics with access to a wide variety of data for the purpose of study. Web scraping is the method that is utilised. Web scraping is a method of automatically extracting data from various websites and online repositories. The process involves identifying target websites and platforms containing short stories about tropical climate. This research involves sites like *kompas.com* and *cerpenmu.com*, *Wattpad*, and *Majalah Karas*. One of magazine was chosen due to its rich literary content and diverse authors. Then, web scraping algorithms were developed to access the selected websites and extract information related to short stories, such as textual content, metadata, and contextual information. These algorithms adhere to ethical standards and avoid excessive requests to the website servers and the terms of service of each platform.

After successfully retrieving the short story data, additional data preprocessing is performed to ensure accuracy and consistency. Data cleaning techniques remove irrelevant or duplicate entries and standardize the format of textual content for further analysis. The data is stored in a structured database for efficient management and organization, enabling researchers to extract short stories or themes for in-depth analysis.

After the research process, digital data of online short stories with tropical climate themes has been filtered and organized into a coherent table. The analysis involved web scraping to collect short story data from leading online platforms, as well as data pre-processing, clustering analysis, and association rule mining to uncover themes in literary works. Through careful approach, primary themes emerged that reflect human experiences, cultural responses, and environmental narratives related to climate change in tropical regions. The final product is a tabular summary of the number of short stories available on each platform and the frequency with which they feature elements of a tropical setting. Table 1 provides a helpful visual representation of literary expressions on various internet platforms that focus on climate change. This table summarises our findings about the most frequent topics in tropical climate-themed short stories published online.

**Table 1.** Major themes in digital short stories

Frequent sources	Number of Short Stories	Major Themes
Kompas.com	50	Extreme weather events
		Biodiversity
		Local Flora
Cerpenmu.com	105	Kind of trees
		Ecological balance
		Nature and couture
Whatpad	67	Indigenous knowledge on tropical trees
		Social response to environment

In a collection of fifty stories, Kompas.com examines the toll that natural disasters take on people and their surroundings. The effects of global warming on tropical ecosystems are a major focus, making biodiversity an essential issue. Furthermore, Kompas News investigates the role of indigenous flora in human society.

Cerpenmu.com is a website with 105 short stories on trees and their importance in reducing global warming. As a means of combating climate change, these narratives also stress the value of ecological stability.

There are 67 short stories on Wattpad all concerning indigenous peoples, tropical plants, and the importance of preserving tropical ecosystems so that they can weather the effects of climate change.

Majalahkaras.kemdikbud.go.id emphasizes the value of collective action in combating climate change, as well as societal responses to environmental concerns.

The results in Table 1 demonstrate the range of literary responses to climate change in the tropics. These short stories are available online, and their themes raise awareness and inspire conversations on climate resilience and sustainability.

## 4 Discussion

Findings from digital data analysis of online short stories on tropical climate provide light on the relationship between literature and climate change in Indonesian literary studies. Famous websites like Kompas have begun publishing short stories with environmental themes including climate change, biodiversity loss, and ecological equilibrium. The importance of environmental concerns in modern Indonesian literature is reflected on Cerpenmu.com. The effects of climate change on Indonesian society and environment are reflected in these recurring themes. Native perspectives on tropical trees shared on Wattpad further highlight the significance of cultural canonization in Indonesian literature. Traditional knowledge and environmentally responsible behaviors of Indonesia's indigenous populations deepen the discussion of climate change. These ideas help us grasp the significance of retaining indigenous knowledge in responding to environmental concerns and the range of cultural responses to climate change.

Majalah Karas's central theme is the social responses to environmental problems. The importance of literature in combating climate change through community and group action is highlighted by "go.id." This concept depicts the evolution of environmental activism in Indonesia and promotes local people's efforts towards eco-friendly growth and protection. Kompas also talks about the local flora and the important part trees play in combating global warming.

Cerminku.com encourages literacy and green activism in Indonesia. These stories do a good job of explaining ecological concepts and educating the public about environmental issues.

This study is a game-changer for the field of Indonesian literary studies since it proves the power of literature as a platform for climate dialogue. Short stories published online often tackle controversial topics like climate change and aim to provoke thought, alter worldviews, and motivate readers to take action. Indonesian

literature has the potential to mobilize audiences and bring attention to the intricate web of connections between humans and their ever-evolving natural surroundings. The research findings present opportunities for further research on literature in Indonesia. Researchers can delve into specific themes, study different genres and writing styles in depicting climate change, and examine the impact of these narratives on readers' perceptions and attitudes towards environmental issues. This research contributes to a better understanding of the relationship between literature, culture, and the environment in the context of climate change in the tropical regions of Indonesia.

## 5 Conclusion

The analysis of main themes in short stories from various websites such as Kompas.com, Wattpad, and [Majalahkaras.kemdikbud.go.id](http://Majalahkaras.kemdikbud.go.id) sheds light on diverse dimensions of human experiences, cultural responses, and environmental narratives related to climate change in tropical regions, particularly in the context of literary studies in Indonesia. Prominent themes like extreme weather, biodiversity, and ecological balance in the short stories collected from leading websites reflect the significance of environmental issues in contemporary Indonesian literature. These themes mirror the experiences and concerns of Indonesian society regarding the impact of climate change on communities and ecosystems in the archipelago. Additionally, the focus on indigenous knowledge about tropical trees highlights the importance of cultural representation in Indonesian literature, enriching the discourse on climate change with traditional wisdom and sustainable practices within local communities.

The study results also highlight the literature's formative function as a platform for climate conversation. The primary ideas show how writing on climate change may make readers feel things, change their minds, and motivate them to take action. Science and ecological ideas can reach a wider audience through literature, leading to a more educated and ecologically conscientious populace. As a result of these findings, the study of literature in Indonesia can go in new directions. Researchers can examine how different climate narratives affect their readers by focusing on particular themes, genres, and writing styles. Findings from this study help illuminate the connection between literature, culture, and the environment in the context of climate change in the tropics, as well as the role literature has had in raising awareness of climate issues in Indonesia. Findings highlight the literature's potential to educate, encourage dialogue, and motivate community-wide efforts toward climate change adaptation and sustainability.

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