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# The Influence Of Da'wah Messages And Mass Media Dissemination On Environmental Consciousness Among Populations Adjacent To Batang Gadis National Park

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#### Article Info **ABSTRACT** This study is predicated upon the persistent environmental degradation Keywords: da'wah messages, perpetrated by communities inhabiting the periphery of Batang Gadis mass media dissemination, National Park (Indonesian: Taman Nasional Batang Gadis [TNBG]). The environmental consciousness. investigation was undertaken in five villages within the West Panyabungan District, which share a direct boundary with TNBG. The primary objective of this research is to elucidate the impact of da'wah messages and mass media dissemination on the environmental consciousness of the local populace residing near TNBG. Employing a quantitative methodology, the study utilized a structured questionnaire as its principal instrument. The research encompassed a population of 183 individuals, from which a sample of 65 respondents was drawn. Data analysis was conducted using multiple regression techniques and processed through SPSS software. The findings reveal a significant simultaneous influence of da'wah messages and mass media dissemination on the environmental consciousness of the communities neighboring TNBG. However, when assessed individually, it was determined that da'wah messages have a discernible impact on environmental awareness, whereas mass media dissemination does not exhibit a statistically significant effect. To foster heightened environmental consciousness among the local populace, intensifying environmental preservation campaigns through da'wah activities in collaboration with religious leaders is recommended. This is an open access article Corresponding Author: under the CC BY-NC license Muhammad Isa Universitas Islam Negeri Syekh Ali Hasan Ahmad Addary Padangsidimpuan, Sumatera Utara

# **INTRODUCTION**

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God has fashioned the universe and endowed it with a plethora of resources that humanity can harness for its sustenance. A symbiotic relationship exists between humans and the natural world a connection that is both enduring and indivisible. For example, humans, by their very nature, require oxygen to survive. This oxygen is generated by plants, while plants, in turn, absorb carbon dioxide, which humans exhale during respiration. This interdependence among various life forms engenders the equilibrium of the ecosystem. Should any component of this ecosystem experience a fluctuation in quantity, sustain damage, or face extinction, it

The Influence Of Da'wah Messages And Mass Media Dissemination On Environmental Consciousness Among Populations Adjacent To Batang Gadis National Park—Muhammad Isa et.al



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https://ejournal.seaninstitute.or.id/index.php/InfoSains

will precipitate an imbalance in the other components. Such an imbalance could have detrimental repercussions for the remaining elements of the ecosystem, including the very survival of humanity.

Endeavors to preserve human existence on Earth by conserving the natural environment and upholding the equilibrium of ecosystems have long preoccupied humanity. Global leaders have reached a concord that environmental concerns and the safeguarding of the planet from further deterioration must be paramount in the policy frameworks of all nations, including Indonesia. Among the government's initiatives in environmental preservation is the designation of nature reserves and national parks. The aim is to perpetuate diverse forms of biodiversity—encompassing both flora and fauna—while sustaining ecological balance. Furthermore, the government has instituted regulations and statutes to guarantee that these conservation efforts are effectively implemented. The inclusion of the public in these environmental preservation efforts is also being actively promoted. Religious authorities, such as Islamic scholars, are anticipated to disseminate environmental stewardship messages to the populace through da'wah. Similarly, journalists and the media are expected to deliver accurate, insightful, and educational reporting to elevate public consciousness regarding the critical importance of environmental conservation.

One of the forest regions designated by the government of the Republic of Indonesia as a sanctuary and conservation haven for a multitude of plant and wildlife species is Batang Gadis National Park (Indonesian: *Taman Nasional Batang Gadis* [TNBG]). Situated in Mandailing Natal Regency, North Sumatra Province, TNBG spans an area of approximately 108,000 hectares. Within the boundaries of this national park, numerous protected species can be found, including deer, tapirs, tigers, orangutans, muntjacs, and others (Edi, n.d.). The park's management has undertaken extensive public outreach to inform local communities about TNBG, its ecological significance, legal protections, and the regulations that must be adhered to in the park's stewardship.

This outreach initiative is directed towards the communities inhabiting the environs of TNBG. It is anticipated that this initiative will elicit public endorsement for the park and enhance community awareness and engagement in environmental stewardship. Specifically, the aim is to safeguard the diverse array of flora and fauna within TNBG. The public is expected to be apprised of and thoroughly understand the prohibitions in effect, as well as the penalties that will be enforced against transgressors.

At the normative level, an extensive array of regulations and statutes has been enacted to safeguard biodiversity in Indonesia (Hanif, 2015). Nevertheless, in practice, numerous infractions continue to be perpetrated by the public concerning biodiversity conservation. These transgressions encompass reckless deforestation, the illicit hunting of protected species, unauthorized mining operations within forested areas, and other comparable activities.

As previously indicated, the Indonesian government, through the TNBG authority, has regularly undertaken initiatives to impart information about TNBG to the neighboring communities. Moreover, by engaging religious leaders and scholars, the management of



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TNBG has solicited their assistance in conveying environmental conservation messages to their followers via da'wah. Nevertheless, it appears that the desired impact of these outreach efforts has not yet been achieved. This is evidenced by the persistent occurrence of illegal hunting of protected species, notably deer, within the communities of West Panyabungan, South Panyabungan, Huta Bargot, and Siabu, which adjoin the TNBG territory.

The survey uncovered that the trade in deer meat derived from poaching is a prevalent practice and is not deemed unlawful by certain residents of West Panyabungan District. This trade is conducted openly, and as of the time of this study, there is no evidence of any decisive measures being undertaken by law enforcement against the offenders. Similarly, illegal logging persists. Numerous residents of West Panyabungan continue to engage in timber harvesting without the requisite permits. The timber is utilized for personal construction or is occasionally sold to others. Additionally, the unauthorized clearing of new land within TNBG is still occurring as of this research. These deforestation activities are suspected to have exacerbated the flooding that impacted some residents of Longat Subdistrict in 2022–2023.

The observed phenomenon reveals that, notwithstanding the extensive dissemination of environmental conservation messages and the advocacy efforts by religious leaders regarding the criticality of environmental preservation, the level of environmental consciousness within the community has not yet reached the anticipated standards. This discrepancy presents a compelling subject for further scrutiny. The study was conducted in West Panyabungan District, where 5 out of the 10 villages, including Longat (the district's administrative center), directly adjoin TNBG. All villages in this district are equipped with electricity and have internet access, facilitating the availability of mass media, including radio, television, and online news platforms. Despite this, the persistence of environmentally deleterious activities by certain community members underscores a gap between awareness and action, warranting deeper examination.

This research is pivotal for assessing the extent to which da'wah messages and environmental reporting in mass media influence and cultivate environmental awareness among households in West Panyabungan District, which adjoins TNBG. The study seeks to elucidate the role of religious communication in shaping environmental consciousness within the community. Furthermore, it investigates the impact of media coverage on environmental awareness among the inhabitants of West Panyabungan District.

The term "awareness," derived from the root word "aware," signifies a state of being perceptive and insightful, characterized by an understanding and conviction concerning specific conditions, as well as a comprehension of one's rights and obligations within their milieu. An individual endowed with awareness remains alert and prepared for both present and imminent occurrences in their environment. Awareness encompasses a spectrum of cognitive processes, including memory, cognition, emotion, and other sensory experiences. Spiritual dimensions also influence the development of self-awareness within an individual.

Sumarno Sudarsono, as referenced by Ahmad Afandi *et al.*, posits that self-awareness is the embodiment of an individual's intrinsic identity. A person is deemed to possess a coherent identity when their traits, creativity, value systems, worldview, and behaviors are in



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https://ejournal.seaninstitute.or.id/index.php/InfoSains

alignment and manifested (Afandi *et al.*, 2012). In a similar vein, Joseph Murphy articulates that awareness constitutes a state of acute consciousness regarding one's actions, involving rational thought that governs decision-making and choice, whether in performing actions deemed virtuous or vice-ridden, aesthetically pleasing or displeasing, and so forth (Qomar, 2003).

The environment encompasses all elements surrounding human existence, including the domains where individuals engage with others and which impact various facets of their lives. It is composed of both biotic and abiotic components. The biotic components include living entities such as humans, flora, and fauna, whereas the abiotic components comprise non-living natural elements like water, air, soil, temperature, and atmospheric conditions. Within this milieu, all biological processes transpire, and humans endeavor to fulfill their necessities. Consequently, human activities often involve the exploitation of environmental resources to sustain their livelihoods. This results in a continuous reciprocal dynamic between humans and their environment throughout their existence. Such interactions mean that the state of the environment is shaped by human actions, which in turn affect environmental quality. Conversely, how humans manage and treat the environment significantly influences the quality of human life.

Therefore, environmental awareness is an essential attribute that individuals must cultivate in their interactions with their surroundings. This awareness often manifests as a concern for the quality of the environment in which one lives. Environmental awareness itself denotes a state in which an individual's consciousness is actively attuned to matters related to the environment. Retno Jamanti, in her writings, contends that environmental awareness constitutes a transformation within an individual or group, evident in their thoughts, attitudes, and behaviors that exhibit greater attentiveness and responsibility toward the utilization of environmental resources for sustenance (Jamanti, 2014).

Da'wah, an Arabic term signifying a summons, appeal, or exhortation (Pujiantara & Zulkarnain, 2023), encompasses two primary forms: formative and developmental. Formative da'wah involves endeavors aimed at maintaining and refining existing conditions. In contrast, developmental da'wah focuses on initiating changes or introducing new elements that were previously non-existent. The principal aim of da'wah is to guide humanity—encompassing both believers and non-believers—toward a virtuous path endorsed by Allah SWT, thereby fostering a life of fulfillment and harmony in this world and the hereafter.

Many perceive da'wah merely as "tabligh" or sermons predominantly centered on worship and religious rites. However, da'wah also addresses social issues, including environmental preservation. Fundamentally, da'wah seeks to elevate the quality and dignity of human existence, aspiring to secure both worldly prosperity and a favorable afterlife. The aims of da'wah are closely aligned with national development objectives, particularly the enhancement of the welfare of the Republic of Indonesia's citizens (Astuti, 2006).

Through da'wah initiatives, messages of moral and ethical significance can be imparted to the community through religious discourse. Each religion, including Islam, provides doctrines designed to ensure human well-being in both this world and the hereafter. Da'wah



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ESSN 2797-7889 (Online)

https://ejournal.seaninstitute.or.id/index.php/InfoSains

messages are derived from the principal sources of Islamic teachings—the Quran and Hadith, which are central to Islam. Consequently, Islamic da'wah materials are inextricably linked to these sources. Messages lacking origins in the Quran and Hadith are deemed ineffectual and are prohibited by Islamic jurisprudence.

Many Islamic teachings underscore the necessity of prudence and sagacity in the utilization of natural resources to fulfill human needs. Islam positions itself as "rahmatan lil alamin," which translates to "a mercy to all creation." The term "rahmat" embodies a wide array of meanings, encompassing safety, well-being, health, and a lush, aesthetically pleasing environment. Islam is perceived as a wellspring of inspiration across various facets of life, with the intent of elevating the human quality of life, including health and environmental stewardship.

A da'wah preacher, leveraging their influence over the target community, can impart constructive messages regarding environmental preservation, consistent with the Quranic and Hadith teachings. These da'wah messages are articulated in comprehensible language, tailored to align with local cultural norms and values that harmonize with Islamic principles. The aspiration is that these messages will cultivate greater environmental awareness among the community, encouraging more responsible use of natural resources and bolstering environmental consciousness. In this manner, the Islamic mission of *rahmatan lil alamin* can be effectively actualized.

Extensive research has elucidated a nexus between da'wah and its messages with public consciousness concerning environmental stewardship. In her study, Mailiza established a positive and statistically significant correlation between da'wah practices and community awareness of forest conservation in Babahrot District, Southwest Aceh Regency. Her findings reveal that integrating environmental conservation messages into da'wah content and disseminating them through various religious gatherings can significantly enhance community awareness, thereby promoting proactive measures in forest preservation and discouraging activities detrimental to local forests (Mailiza, 2019).

News encompasses factual information, contemporary ideas, and current opinions that are both compelling and precise. It is a vital component for the public—whether as readers, listeners, or viewers. In the modern era, news has evolved into an essential and pervasive aspect of public life. As articulated by Charnley, as referenced by Retno Jamanti, the news is characterized by its expeditious dissemination of facts or opinions, containing elements that are either captivating or significant or a combination of both, for a considerable segment of the population (Jamanti, 2014). Consequently, news can be described as the rapid relay of crucial facts or opinions through designated media channels to a wide audience.

The press constitutes an indispensable component of the news system, exerting considerable influence over the propagation of information within society. Environmental concerns or natural calamities resulting from environmental degradation can ascend to prominence in mass media coverage. Inda Fitryarini references Maxwell McCombs, who asserts that societal perceptions of importance are contingent upon the media's prioritization of issues. In essence, when the mass media accentuates certain topics as significant, the



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public, as recipients of news, will similarly perceive these issues as salient, and conversely (Fitryarini, 2013).

Through mass media, the public endeavors to probe the verities of life and conditions, seeking to engage with their environment and affirm their identity as social entities. The mass media ought to convey information, including that concerning environmental matters, with objectivity, precision, critical insight, and constructiveness. The role of mass media in bolstering sustainable development is paramount, given that development initiatives are inextricably linked to environmental issues, which are in turn closely interwoven with the quality of human life.

Mass media function as channels for disseminating information to the public through diverse mediums, including both print and electronic formats. Hafied Cangara, as cited by Retno Jamanti, delineates several salient characteristics of mass media, as follows: 1)Institutionalized: This indicates that mass media operations are managed by a multitude of personnel, encompassing the gathering, processing, and presentation of information. 2) Unidirectional: The majority of mass media communication operates in a one-way flow, precluding interactive dialogue between the communicator and the audience. 3) Employs Technical Apparatus: This includes devices such as radio, television, newspapers, magazines, and other analogous tools. 4) Extensive and Simultaneous: Mass media transcend temporal and spatial constraints, enabling the simultaneous dissemination of information to a wide audience. 5) Universal Accessibility: This suggests that messages conveyed through mass media can be accessed by individuals regardless of their ethnicity, religion, gender, or age (Jamanti, 2014).

Extensive research has elucidated the role of mass media in shaping public consciousness regarding environmental stewardship. Zaida Chandra Praditya, in her scholarly inquiry, ascertained that media reportage exerts a pronounced influence on the environmental conservation awareness among adolescents in Dlingo Village, Mojosongo District, Boyolali Regency. This underscores the notion that increased exposure to environmental news, including natural calamities precipitated by ecological degradation, heightens public cognizance of the imperative to conserve and safeguard the surrounding natural environment (Praditya, 2016).

In light of the foregoing, the hypothesis for this study is posited as follows.

- 1. The Impact of Da'wah Discourse on Environmental Cognizance within Communities Adjacent to Batang Gadis National Park (TNBG)
  - $H_{\circ 1}$ : Da'wah discourse exerts no discernible influence on the environmental cognizance of communities adjacent to Batang Gadis National Park (TNBG).
  - H<sub>a1</sub>: Da'wah discourse exerts a significant influence on the environmental cognizance of communities adjacent to Batang Gadis National Park (TNBG).
- 2. The Impact of Mass Media Reporting on Environmental Cognizance within Communities Adjacent to Batang Gadis National Park (TNBG)
  - H<sub>02</sub>: Mass media reporting bears no impact on the environmental cognizance of communities adjacent to Batang Gadis National Park (TNBG).



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ESSN 2797-7889 (Online)

https://ejournal.seaninstitute.or.id/index.php/InfoSains

- $H_{a2}$ : Mass media reporting bears a significant impact on the environmental cognizance of communities adjacent to Batang Gadis National Park (TNBG).
- 3. The Impact of Da'wah Discourse and Mass Media Reporting on Environmental Cognizance within Communities Adjacent to Batang Gadis National Park (TNBG).
  - H<sub>o3</sub>: Da'wah discourse and mass media reporting collectively exert no influence on the environmental cognizance of communities adjacent to Batang Gadis National Park (TNBG).
  - H<sub>a3</sub>: Da'wah discourse and mass media reporting collectively exert a significant influence on the environmental cognizance of communities adjacent to Batang Gadis National Park (TNBG).

#### **METHODS**

This study is classified as quantitative research, characterized by an emphasis on objective measurement and statistical analysis. A principal aim of this study is to test hypotheses established a priori. The research was conducted among residents who possess plantation land either within or directly abutting Batang Gadis National Park (TNBG). The investigation took place in villages contiguous to TNBG. From the ten villages/sub-districts within West Panyabungan District that share a border with TNBG, five were selected. According to data sourced from the Village/Sub-district Offices, the total population comprises 183 individuals, distributed as follows.

**Table 1.** The population of plantation landowners in TNBG within five villages in West Panyabungan District in 2024

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No.	Village/Sub-district	Number of Individuals
1	Sirambas Village	32
2	Longat Sub-district	40
3	Hutatonga Village	31
4	Runding Village	71
5	Barbaran Jae Village	9
	Total	183

Source: Village/Sub-district Office

From the identified population, a sample was extracted to serve as respondents. The sample size was computed using the Taro Yamane formula as follows:

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{183}{1 + 183 (0.1)^2} = 64.66 \approx 65 \text{ people}$$

According to this calculation, a sample of 65 individuals was designated for this study. The sample was proportionally allocated across each village as detailed below.

Table 2. Sample distribution per village

No.	Village/Sub-district	Number of Individuals
1	Sirambas Village	12
2	Longat Sub-district	14

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No.	Village/Sub-district	Number of Individuals
3	Hutatonga Village	11
4	Runding Village	25
5	Barbaran Jae Village	3
	Total	65

Source: Data Processed

To resolve the research issues, multiple linear regression analysis was utilized. The mathematical model for multiple linear regression is expressed as follows.

$$Y = a + b_1 X_1 + b_2 X_2 + e$$

Where: Y = Environmental awareness

 $X_1$  = Da'wah messages  $X_2$  = Mass media reporting

 $b_1$ ,  $b_2$  = Regression coefficients for the independent variables

e = Error term

Subsequently, a research instrument in the form of a questionnaire was devised and distributed to respondents for completion. The questionnaire was constructed based on the indicators of the research variables as outlined below.

Table 3. Indicators of variables

No.	Variables	Indicators
1	Da'wah messages (X1)	Transformation of character
		Enhancement of quality of life
		Augmentation of the quantity of good deeds
		Theological understanding
2	Mass media reporting (X2)	Frequency of reporting
		Level of attention
		Duration
		Content of news
3	Environmental awareness (Y)	Concern for environmental quality
		Attention to the environment
		Engagement in environmental protection activities
		Improvement of environmental quality

Source: Journals and Books

The developed questionnaire was subjected to both validity and reliability assessments to ascertain its adequacy as a data collection tool. Data analysis for this study was conducted using SPSS software, version 22. For validity assessment, an item was deemed valid if the calculated r value surpassed 0.300. Conversely, items with an r value below 0.300 were regarded as invalid.

Reliability testing followed, with the criterion that a questionnaire item was considered reliable if Cronbach's alpha value exceeded 0.60. In contrast, items with Cronbach's alpha value below 0.60 were deemed unreliable. After the questionnaire passed both validity and reliability tests, it was administered to 65 respondents for completion. Subsequently, the data gathered from the completed questionnaires were subjected to multiple regression



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ESSN 2797-7889 (Online)

https://ejournal.seaninstitute.or.id/index.php/InfoSains

assumption tests, including assessments for normality, linearity, multicollinearity, and heteroscedasticity.

If the data met all the regression assumptions, the next step involved calculating the multiple regression equation and the coefficient of determination. To evaluate the significance of the simultaneous impact of the independent variables (da'wah messages and mass media reporting) on environmental awareness, an *F*-test was conducted. In contrast, to determine the significance of each independent variable's (da'wah messages and mass media reporting) effect on environmental awareness, a *t*-test was performed.

#### **RESULTS AND DISCUSSION**

# Validity and Reliability Testing

The output from SPSS for validity and reliability testing is delineated as follows.

**Table 4.** Validity assessment of questionnaire items for da'wah messages (X1)

Variables	Item Statement	<i>r</i> Coefficient Value	Conclusion
Da'wah messages (X1)	X11	0.656	Valid
	X12	0.767	Valid
	X13	0.843	Valid
	X14	0.678	Valid
	X15	0.673	Valid

Source: SPSS Data Processing Output

A minimum validity threshold is set at an r value exceeding 0.300. Consequently, all items in the questionnaire for the variable da'wah messages (X1) are deemed valid, as all r values surpass this threshold.

Table 5. Validity assessment of questionnaire items for mass media reporting (X2)

Variables	Item Statement	<i>r</i> Coefficient Value	Conclusion
Mass media reporting (X2)	X21	0.753	Valid
	X22	0.706	Valid
	X23	0.808	Valid
	X24	0.869	Valid

Source: SPSS Data Processing Output

All items in the questionnaire for the variable mass media reporting (X2) are deemed valid, as all r values exceed 0.300.

Table 6. Validity assessment of questionnaire items for environmental awareness (Y)

Variables	Item Statement	<i>r</i> Coefficient Value	Conclusion
Environmental awareness (Y)	Y1	0.647	Valid
	Y2	0.779	Valid
	Y3	0.764	Valid
	Y4	0.628	Valid

Source: SPSS Data Processing Output



Volume 14, Number 03, 2024, DOI 10.54209/infosains.v14i03

ESSN 2797-7889 (Online)

https://ejournal.seaninstitute.or.id/index.php/InfoSains

It can be concluded that all items in the questionnaire for the variable environmental awareness (Y) are valid, given that all *r* values exceed 0.300. Subsequently, reliability testing was performed to evaluate the consistency of the instrument. This was achieved by analyzing Cronbach's alpha values for each variable, detailed as follows.

Table 7. Reliability testing results

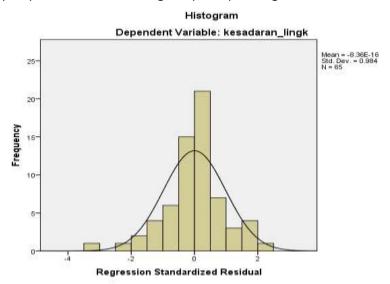
Variables	Cronbach's Alpha	Number of Items	Conclusion
Da'wah messages (X1)	0.771	5	Reliable
Mass media reporting (X2)	0.819	4	Reliable
Environmental awareness (Y)	0.658	4	Reliable

Source: SPSS Data Processing Output

The table demonstrates that all questionnaire items for each variable are deemed reliable, as each Cronbach's alpha value surpasses the threshold of 0.6.

# **Normality Test**

The SPSS output yielded the following frequency histogram.



Source: SPSS Data Processing Output **Figure 1.** Frequency histogram

The histogram illustrates that the distribution approximates a normal curve. Therefore, it is inferred that the data are derived from a population with a normal distribution.

#### **Linearity Test**

The SPSS output is summarized as follows.

Table 8. Summary of linearity test results (using the deviation from linearity criterion)

Variables	Significance	Alpha	Condition	Conclusion
Y*X1	0.910	0.05	Significance > Alpha	Linear
Y*X2	0.380	0.05	Significance > Alpha	Linear

Source: SPSS Data Processing Output



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The table indicates that the relationships between the variable environmental awareness (Y) and the independent variables (i.e., da'wah messages [X1] and mass media reporting [X2]) conform to linear regression models.

#### Multicollinearity Test

The results from SPSS are summarized as follows.

**Table 9.** Summary of multicollinearity test results

Variables	VIF Value	Conclusion
X1	1.090	No multicollinearity detected
X2	1.090	

Source: SPSS Data Processing Output

The table indicates that multicollinearity is absent in the regression model, as the Variance Inflation Factor (VIF) values for each independent variable are below the threshold of 10, specifically 1.090 (< 10).

#### Heteroscedasticity Test

The SPSS output is summarized as follows.

Table 10. Summary of heteroscedasticity test results

	Significance Value in			
Variables	Unstandardized Residuals Column	Alpha	Condition	Conclusion
X1	0.889	0.05	Significance > Alpha	No heteroscedasticity
X2	0.802	0.05	Significance > Alpha	detected

Source: SPSS Data Processing Output

The table reveals that there is no evidence of heteroscedasticity in the regression model, as the significance values exceed the alpha level, indicating a uniform variance of residuals.

#### Multiple Linear Regression Analysis

The results from SPSS are delineated in the following table.

**Table 11.** Multiple linear regression analysis results

Coefficients <sup>a</sup>								
U	Unstandardized Coefficients Standardized Coefficients							
Model B Std. Error Beta <i>t</i>								
1 (Constant)	6.326	1.809		3.496	.001			
da'wah_messages	.429	.087	.537	4.941	.000			
mass_media_reporting	.065	.075	.095	.872	.387			
a. Dependent Variable: environmental_awareness								

Source: SPSS Data Processing Output

The multiple linear regression equation is given by the following.

$$Y = 6.326 + 0.429 X_1 + 0.065 X_2 + e$$

1. The constant value of 6.326 indicates that if all independent variables are set to zero, the baseline level of environmental awareness for the communities surrounding



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ESSN 2797-7889 (Online)

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Batang Gadis National Park (TNBG) would be 6.326 units.

- 2. The regression coefficient for da'wah messages is 0.429, suggesting that an increase of one unit in da'wah messages corresponds to a 0.429-unit elevation in environmental awareness.
- 3. The regression coefficient for mass media reporting is 0.065, indicating that a one-unit increment in mass media reporting leads to a 0.065-unit increase in environmental awareness.

# **Hypothesis Testing**

## F-Test (Simultaneous)

The following table presents the results of the simultaneous F-test obtained from SPSS.

Table 12. F-test results

ANOVA a								
Model	Sum of Squares	df	Mean Square	F	Sig.			
1 Regression	73.598	2	36.799	15.071	.000b			
Residual	151.387	62	2.442					
Total	224.985	64						
a. Dependent Variable: environmental_awareness								

- b. Predictors: (Constant), mass\_media\_reporting, da'wah\_messages

Source: SPSS Data Processing Output

From Table 12, it can be inferred that the null hypothesis (H<sub>03</sub>) is refuted, given that the significance value is below the threshold of 0.05 (0.000 < 0.05). This result indicates that both da'wah messages and mass media reporting collectively exert a substantial impact on the environmental awareness of the communities surrounding Batang Gadis National Park (TNBG).

#### T-Test (Partial)

Based on Table 11, it can be inferred that the null hypothesis Ho1 is repudiated, as the significance value is below 0.05 (0.000 < 0.05). This suggests that the variable of da'wah messages exerts a statistically significant partial effect on the environmental consciousness of the communities surrounding Batang Gadis National Park (TNBG).

Conversely, Ho2 is upheld since the significance value exceeds 0.05 (0.387 > 0.05). This denotes that the mass media reporting variable does not impart a statistically significant partial effect on the environmental consciousness of the communities surrounding Batang Gadis National Park (TNBG).

# Coefficient of Determination

The subsequent table displays the SPSS output for the coefficient of determination

Table 13. Adjusted R-squared value

#### Model Summary b

Model	R	<i>R</i> -Squared	Adjusted <i>R</i> -Squared	Std. Error of the Estimate
1	.572ª	.327	.305	1.563

a. Predictors: (Constant), mass\_media\_reporting, da'wah\_messages



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ESSN 2797-7889 (Online)

https://ejournal.seaninstitute.or.id/index.php/InfoSains

b. Dependent Variable: environmental\_awareness

Source: SPSS Data Processing Output

The table reveals an adjusted *R*-squared value of 0.305. This indicates that 30.5% of the variance in environmental consciousness among the communities surrounding Batang Gadis National Park (TNBG) can be elucidated by the variables of da'wah messages and mass media reporting. The remaining 69.5% of the variance is attributable to factors outside the scope of this study.

#### RESULTS AND DISCUSSION

# The Impact of Da'wah Messages on Environmental Awareness in the Vicinity of Batang Gadis National Park (TNBG)

The findings of this study reveal that the variable of da'wah messages exerts a partial influence on the environmental consciousness of the community surrounding Batang Gadis National Park (TNBG). This outcome corroborates Mailiza's research, which demonstrated that da'wah elements significantly affect communal awareness regarding forest conservation in Babahrot District, Southwest Aceh Regency (Mailiza, 2019). Furthermore, this study is consistent with the work of Pujiantara et al., which identified that the ecological da'wah initiative spearheaded by Tuan Guru Hasanain Juaini in West Nusa Tenggara engendered persuasive communicative effects, leading to heightened environmental awareness within the community. This resulted in an expansion of green areas, enhanced cleanliness of rivers and irrigation channels, and the accrual of economic benefits for Pesantren Nurul Haramain of West Nusa Tenggara (Pujiantara & Zulkarnain, 2023).

To cultivate environmental awareness within the community surrounding TNBG, it is imperative to engage with religious scholars and leaders. This approach enables the dissemination of environmental conservation messages through religious sermons and study sessions. This strategy is particularly viable given that the population in West Panyabungan District, adjacent to TNBG, adheres exclusively to Islam. The efficacy of this approach is underscored by the findings of this study, which reveal that da'wah messages exert a significant influence on the environmental awareness of the local populace. Regression analysis further elucidates that the correlation coefficient for the da'wah message variable surpasses that of other variables, indicating that enhancements in this variable will yield a more pronounced effect on environmental consciousness.

# The Impact of Mass Media Reporting on Environmental Awareness in the Vicinity of Batang Gadis National Park (TNBG)

The findings of this study reveal that mass media reporting exerts only a partial influence on the environmental awareness of the community adjacent to Batang Gadis National Park (TNBG). This observation diverges from prior research indicating that mass media reporting typically affects environmental consciousness. For example, Retno Jamanti's investigation demonstrated that news coverage of floods in *Koran Kaltim* significantly impacted the environmental awareness of residents in Temindung Permai, Samarinda (Jamanti, 2014).



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Similarly, Anggraini's research highlighted that the persistent reportage by *Cenderawasih Pos* significantly contributed to fostering environmental stewardship, particularly within the mangrove forests of Teluk Youtefa, Jayapura, Papua (W, 2020).

The results of this study diverge from the previously cited research. This divergence is attributed to the normalization of media coverage regarding natural disasters linked to environmental degradation. Such reporting—frequently featured on platforms like television—has become routine for the public, resulting in a state of desensitization. While such coverage may initially capture attention, the repetitive nature of these reports gradually diminishes their impact, rendering the events as "mundane."

Nonetheless, this does not suggest that environmental conservation reporting lacks significance. On the contrary, there is a pressing need to refine media strategies and presentation techniques to mitigate viewer apathy. News should be presented engagingly, incorporating innovative and creative elements to sustain public interest. For example, merging news content with interactive dialogues, documentary features, and other dynamic formats can enhance the appeal and effectiveness of the coverage.

## **CONCLUSIONS**

Based on the findings and discourse presented, it can be inferred that the da'wah message variable exerts a substantial influence on the environmental awareness of the community around Batang Gadis National Park (TNBG). The data analysis reveals a significant positive correlation between da'wah messages and environmental awareness. This underscores that augmenting environmental awareness can be effectively facilitated through the amplification of da'wah messages centered on environmental preservation. It is advisable to enhance the dissemination of such messages to foster greater public engagement in conservation efforts. It is further concluded that mass media reporting exerts no significant influence on the environmental awareness of the community surrounding TNBG. In this milieu, the public regards media coverage of environmental issues, such as natural disasters, as a commonplace occurrence, resulting in diminished attention to such reports. To address this, it is recommended that stakeholders and the community involved in the conservation of TNBG intensify their environmental campaigns by collaborating with religious leaders and scholars. Employing da'wah messages focused on environmental stewardship could enhance public engagement. Additionally, the presentation of conservation-related news in mass media should be refined with innovative and imaginative strategies. Such enhancements are likely to render the news more captivating and thereby achieve the intended positive impact.

## **REFERENCES**

Afandi, A., Neolaka, A., & Saleh, R. (2012). Kesadaran Lingkungan Masyarakat Dalam Pemeliharaan Taman Lingkungan Di Jakarta Pusat. *Menara: Jurnal Teknik Sipil*, 7(1), 14. https://doi.org/10.21009/jmenara.v7i1.7947

Astuti, D. (2006). Strategi Dakwah Dalam Pelestarian Lingkungan Hidup. *SUHUF*, *XVIII No O*(Mei 2006), 49–62.



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ESSN 2797-7889 (Online)

https://ejournal.seaninstitute.or.id/index.php/InfoSains

- Edi. (n.d.). MANFAAT EKONOMI DAN EKOLOGIS KAWASAN TAMAN NASIONAL BATANG GADIS (TNBG) DALAM KERANGKA PEMBANGUNAN LINGKUNGAN BERKELANJUTAN.
- Fitryarini, I. (2013). Pemberitaan dan Persepsi Masyarakat Tentang Lingkungan Hidup di Media Cetak Lokal Provinsi Kaltim. *Jurnal Ilmu Komunikasi UPNYK*, *11*(1), 19–29.
- Hanif, F. (2015). *Upaya Perlindungan Satwa Liar Indonesia Melalui Instrumen Hukum dan Perundang-Undangan* (Vol. 2, Issue 2). http://www.iucnredlist.org,
- Jamanti, R. (2014). Pengaruh Berita Banjir Di Koran Kaltim. *Jurnal Ilmu Komunikasi*, *2*(1), 17–33.
- Mailiza. (2019). HUBUNGAN DAKWAH DENGAN KESADARAN MASYARAKAT DALAM PELESTARIAN HUTAN DI KECAMATAN BABAHROT KABUPATEN ACEH BARAT DAYA. In *UIN ARRANIRY* (Vol. 8, Issue 5). UIN Ar-Raniry Banda Aceh.
- PRADITYA, Z. C. (2016). PENGARUH MEDIA MASSA TERHADAP KESADARAN MENJAGA KELESTARIAN LINGKUNGAN HIDUP PADA REMAJA DESA DLINGO KECAMATAN MOJOSONGO KABUPATEN BOYOLALI TAHUN 2016 SKRIPSI (Issue June). UNIVERSITAS WIDYA DHARMA KLATEN.
- Pujiantara, P., & Zulkarnain. (2023). Dakwah Ekologi Berbasis Eco-Pesantren Pendekatan Dakwah Komunikasi Persuasif Tuan Guru Hasanain Juaini. *Al-Insan*, *4*(November 2023), 61–90.
- Qomar, M. (2003). Kesadaran Pendidikan (pp. 1-18).
- W, M. D. A. (2020). Peran Media Dalam Pelestarian Lingkungan Di Kota Jayapura. *Jurnal JENDELA*, 8(2), 59–72. https://ojs.ustj.ac.id/jendela/article/view/807