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NATURAL DISASTERS AND PUBLIC CONCERN FOR THEIR CAUSES

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ABSTRACT. This article describes the relationship between natural disasters and community negligence by referring to Jens Beckert's institutional theory (2010). This sociological study has relevance for the general public as well as government agencies. More than two thousand natural disasters occur in Indonesia every year, resulting in more than 10,000 deaths. In some cases, natural disasters are difficult to anticipate by science. However natural disasters caused by human negligence are also not insignificant, such as floods, fires and landslides. In this study, we discuss the community negligence factors that contribute to natural disasters. The study was conducted using the survey method via Google Form to a number of respondents spread across the Jabodetabek area. It also processed secondary data from a number of reports on natural disasters on various social media and digital media. Furthermore, this study shows that a number of disasters caused by human negligence are quite frequent. The facts show that Indonesian people quite often act rashly and without thinking about the long-term impact that their actions will bring. Based on secondary data, this article selects several cases of human negligence that have the potential to cause disaster.

Keywords: cognitive frame; human neglilance; institution; natural disaster

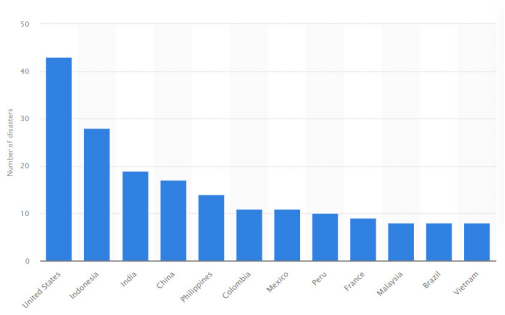
ABSTRAK. Artikel ini memaparkan adanya keterkaitan antara bencana alam dan kelalaian masyarakat dengan merujuk pada teori kelembagaan Jens Beckert (2010). Kajian sosiologis ini, memiliki relevansi bagi masyarakat luas dan juga instansi pemerintah karena Indonesia merupakan salah satu negara yang memiliki jumlah frekuensi bencana alam yang cukup tinggi, yaitu lebih dari dua ribu kasus dengan jumlah korban lebih dari 10.000 jiwa per tahunnya. Dalam beberapa hal, bencana alam, memang sulit diantisipasi oleh ilmu pengetahuan, namun bencana alam yang disebabkan oleh faktor kelalaian manusia jumlahnya juga tidak sedikit, seperti banjir, kebakaran dan tanah longsor. Studi ini bertujuan untuk membahas faktor-faktor kelalaian masyarakat yang menyebabkan terjadinya bencana alam. Studi dilakukan dengan menggunakan metode survey via google form kepada sejumlah responden yang tersebar di wilayah Jabodetabek, dan hasil olahan data sekunder dari sejumlah pemberitaan bencana alam di berbagai media sosial dan media digital. Lebih lanjut, studi ini menunjukkan bahwa ternyata sejumlah bencana disebabkan oleh keteledoran manusia memiliki angka yang cukup tinggi. Fakta memperlihatkan bahwa masyarakat Indonesia cukup sering bertindak gegabah dan tanpa memikirkan dampak jangka panjang yang akan ditimbulkan oleh tindakannya. Berdasarkan data sekunder, artikel ini memilih beberapa kasus keteledoran manusia yang memiliki potensi menimbulkan bencana.

Kata kunci: bencana alam; cognitive frame; kelalaian masyarakat; kelembagaan

INTRODUCTION

Regarding FinanceBuzz (20 Nov. 2022), Indonesia is high up on the rankings of the most at-risk nations. It was hit by 29 disasters in 2020, the highest amount for a country that year. The incidents range from massive earthquakes to landslides triggered by storms and floods, with hundreds of deaths. Based on data published by Ian Ilasco (2021) it is also stated that Indonesia is included in the category of countries in the world that have a high risk of natural disasters. Likewise, as stated by Statista in its report (2021), Indonesia is included in the top five countries that are vulnerable to natural disasters.

Additionally, the Statista report in mid-2022 shows that Indonesia is very vulnerable to natural disasters of all types. Tsunamis and earthquakes have the highest level of vulnerability and are events that until now have not been able to cope with human technology. Several disasters, such as floods have a high vulnerability index (above 8 on a maximum scale of 10). Floods and epidemics are both natural disasters caused by human factors.



Source: https://www.statista.com/statistics/269652/countries-with-the-most-natural-disasters/

Picture 1. Countries with the most natural disasters in 2021

Based on data from the National Disaster Management Agency (BNPB), there are more than ten types of natural disasters that hit Indonesia throughout the year, namely: floods, landslides, storms, droughts, earthquakes, tsunamis, volcanic eruptions, transportation accidents, and others.

In the table above, it is shown that the number of natural disasters has increased from 1,733 cases in 2013, to 2,576 cases in 2018. This continued to increase until it reached 3,318 cases at the end of November 2022. This shows that most cases of

Tabel 1. Natural Disasters in Indonesia and Their Impacts

Types	2013			2018			2022 *		
	number	dead	injured/ displaced	number	dead	injured/ displaced	number	dead	Injured/ displaced
floods	725	232	1.508.240	679	119	1.548.043	1.420	n.a	n.a
landslides	294	189	18.103	474	167	38.315	608	n.a	n.a
storm	502	31	47.543	804	24	17.456	989	n.a	n.a
drought	66	0	2.223.225	129	0	7.798.693		n.a	n.a
earth quake/ tsunami	10	45	64.017	27	572	485.400	25	n.a	n.a
mount eruption	8	5	49.620	52	0	70.977		n.a	n.a
accident	39	259	91	1	2	0		n.a	n.a
pthers									
Jumlah	**1.733**	**805**	**3.895.456**	**2.576**	**4.838**	**10.335.309**	**3.318**	**606**	**6,6 million**

Source: processed from BNPB data *until 30 November 2022

natural disasters have a correlation with human activities, especially floods and landslides. These should be prevented or minimized by the community or the government. The number of residents who have been affected to evacuate has also experienced an increasing trend.

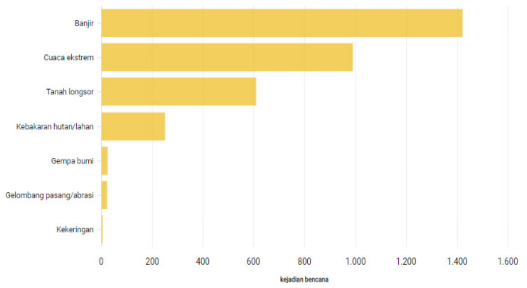
Taking into account the magnitude of the potential for natural disasters in Indonesia, including those caused by humans, this article seeks to find out whether disaster mitigation in Indonesia has been properly understood by the public? By following the institutional concept of Beckert (2010) this article will explain the three main things that underlie people's behavior in anticipating and preventing a disaster, especially regarding their concern about disposing of garbage, anticipating floods and forest fires.

METHODS

In an effort to understand disaster mitigation carried out by the community using the Beckert Institutional model, the data processed for this article uses two data collection techniques. First, primary data is based on the results of a survey via Google-form to the community in the Greater Jakarta area in April 2019. From a total of 781 incoming data, a cleaning process was carried out and 678 respondents aged between 15 and 65 years were processed. From the amount of data input into SPSS, a data analysis of 346 to 573 answers relevant to the questions was carried out. Second, arguments and discussions are based on secondary data from a number of reports on social and digital media. Additionally, various documents in the form of photographs. Literature studies related to natural disasters in various regions are also used to strengthen the arguments and data needed. Primary data were analyzed descriptively using frequency tables while secondary data in the form of photos or images were interpreted and interpreted to understand the situation that occurred.

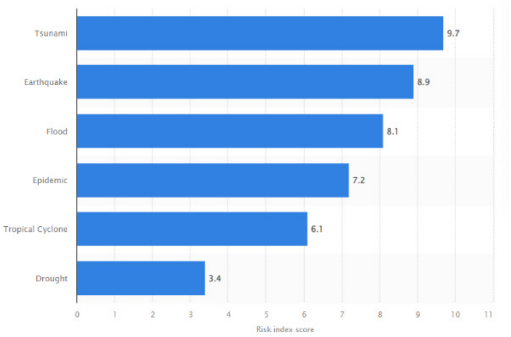
Threats from Natural Disaster

Besides having the potential for large natural disasters, Indonesia also has a relatively high disaster risk index, especially in the form of tsunamis and earthquakes. Natural disasters such as floods, the most frequent and widest spread type of natural disaster, must also be taken very seriously by all parties - the government as well as the broader community.



Source: https://databoks.katadata.co.id/datapublish/2022/12/05/sebanyak-3318-bencana-alam-terjadi-di-indonesia-sampai-awal-desember-2022

Picture 2. Number of natural disaster in Indonesia (1 January-4 December 2022)



Source: https://www.statista.com/statistics/269652/countries-with-the-most-natural-disasters/

Picture 3. Risk of Natural Disaster in Indonesia for Mid 2022

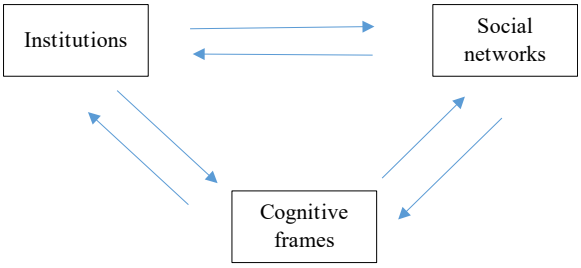
Murray, A. T. (2013) stated that natural disasters can be caused by environmental phenomena and can also be caused by human negligence, such as river pollution, forest fires in Australia (Brooks, B., et al., 2018), and damage to marine habitats and disturbance of human activities as a result of oil spills from tankers (Wan, Z., & Chen, J., 2018). Of course, this serves as a warning that disasters should

be an issue of concern in daily life. Toya Hideki & Skidmore (2014) said that natural disasters have had a positive impact on increasing community solidarity and concern. However, in reality the social aspects that have been built are not significant enough to encourage a positive culture of disaster mitigation (Pratikno, H, et al, 2020). An example is the two types of disasters that occur most often, namely floods and landslides. These two disasters quantitatively account for more than half of the disasters that occur each year, and these two disasters are quite closely related to the behavior of residents. Several forms of natural disasters in Indonesia are related to low public awareness, namely the destruction of mangrove forests along the coast. When the mangrove ecosystem is disturbed, high sea waves can become a natural disaster for community members along the coast (Koda, S.H.A, 2021). However, it is difficult to say that many natural disasters such as tornadoes, droughts, earthquakes and tsunamis have a direct correlation with human behavior.

Azanella (2019) stated that there are two factors that cause landslides, namely driving factors and triggering factors. Both of these factors arise as a result of natural processes and human activities. Driving factors are factors that affect the condition of the soil or rock material. For example, the high intensity of rain, the slope of the soil, the occurrence of weathering and erosion, illegal logging, irrigation development, and agricultural systems that do not pay attention to soil stability. In contrast, trigger factors are the things that cause the movement of material. Examples include earthquakes, volcanic eruptions, building loads, vibrations caused by vehicles and explosions, and so on. Regarding the forest fire disaster, Baioni (2011) in his research in the Madeira Islands (Africa) stated that the main result of land use, both for plantations/agriculture or for livestock areas, has been the reduced function of forests in mountainous areas which are directly related to these natural disasters.

Disaster Mitigation in Institutional Perspective

Disaster mitigation is an effort to reduce disaster risk (Faturahman, B.M, 2018). In this context, the risk of a disaster occurring can be seen from the level of public understanding of the dangers posed by the attitude of taking disaster mitigation activities lightly (Adnan, 2019). People ignore various things that have been told about the dangers of not taking preventive measures and do things that are prohibited. Natural disasters caused by people's negligence in disaster mitigation can be analyzed through the institutional model presented by Beckert (2010). In general, the institutional model states that there are three forces that are interconnected and influence each other, namely: institutions, social networks and cognitive frames.



Picture 4. Institutional model for Disaster Mitigation Adapted from Jens Beckert (2010)

Institutions

Institutions take the form of norms and rules that regulate human behavior both individually and in groups in certain aspects. This is especially critical for the prevention of disasters such as floods and fires. We see that institutional aspects that contain values and norms are relatively neglected by society. For example, in the preamble of the Regional Regulation it is stated that it is forbidden to dispose of waste in the wrong place. In light of the fact that it is one of the causes of a catastrophe, punishment must be given to violators. However, it is still relatively low when implemented in a disciplined manner. In fact, perpetrators are considered something that has become a habit. Only in certain locations, such as official offices, modern markets, and in special areas, such as city parks, where there are managers, can rules on littering be enforced. While in other public areas violations still occur. Even the ball fields that are used for sub-district level club matches/bazaars/ music performances are often filled with garbage that is thrown away by spectators or visitors almost every day. Besides internalization regarding orderly behavior in disposing of waste which is still low, the role of institutions in organizing and managing the orderly behavior of the community is very low. Furthermore, institutional issues that need attention frequently occur without any sanctions from regulators (local government officials) or the wider community.

The weak institutional aspect was also mentioned by Rosyidie (2013) as one of the main causes of flooding due to weak licensing and institutional oversight regarding spatial planning. This happens because of changes in land use or spatial planning. The various efforts made by the National Disaster Management Agency (BNPB) often receive less attention from local governments, because local officials prioritize programs from the Ministry of Home Affairs as their superior agency. In the disaster

management activities that occurred in Yogyakarta, North Sumatra, Lombok and Palu, there was a lot of miscoordination in the distribution of aid. Dearborn and Sam Meister (2017) state that failure to anticipate disasters is caused by weak institutional factors in utilizing technology. Relevant institutions are not able to optimize their capabilities in anticipating disasters or in recovering after a disaster. According to Beckert (2010), this problem is also inextricable from the human factor, both in terms of attitudes and ways of thinking, the latter being referred to as a cognitive frame in Beckert's concept.

The government's efforts to build a culture and institutions that care about disasters have been extensive. At the national level, the government has established a National Disaster Management Agency (BNPB) which not only carries out the task of dealing with problems after a disaster occurs, but also plays a role in various disaster mitigation efforts. As Rozy (2017) illustrates, in West Sumatra disaster mitigation efforts have been made based on local wisdom that has become customary so far. The management of natural disasters in West Sumatra is the implementation of Law No. 24 of 2007 which emphasizes a series of efforts contained in regional regulations in prevention, emergency response, and post-disaster recovery. Governor of West Sumatra Regulation No. 32 in 2002 concerning Standard Operational Guidelines regarding disaster management and refugees as well as West Sumatra Regional Regulation No. 5 in 2007 regarding Disaster Management, are regulations that have been designed by the local government to accompany Law No. 24 of 2007.

These rules are then followed by various concrete explanations formulated by the district and sub-district based on the local wisdom of the community. So far, it seems that the people of West Sumatra have been paying enough attention to disaster mitigation in the region. In addition to the local wisdom factor that underlies this, the tsunami disaster that hit Aceh and the big earthquake in West Sumatra in 2009 instilled awareness that building a culture of disaster mitigation is a must.

On the other hand, we can see that government policies regarding environmental sustainability have not been fully followed by citizens, for example Law No. 18 of 2008 which regulates waste management including the prohibition on littering. This has also been regulated by Law No. 22 of 2009 concerning road traffic and transportation which provides strict sanctions for motorists throwing garbage on the road. In fact, several regions, such as DKI Jakarta, reinforce this rule with DKI Jakarta Regional Regulation Number 3 of 2013 concerning Waste Management. However, Figures 1, 2 and 3 show that the institutional aspects of the regulations are still not optimal. Moreover, when people's way of thinking (cognitive frame) is focused only on momentary and fleeting interests such as not wanting to go out in the rain or into the rain and then easily throwing garbage into rivers or waterways, or out of car windows, this is a behavior that should not be defended by the community.

Urban areas may face the danger of water shortages or decreased soil levels due to the lack of strict rules governing residents' houses, offices or shopping centers. These rules fail to return some water to the ground. State institutions also do not seem to play an adequate role in managing the use of space in cities, villages, mountains and forests. Likewise, state institutions are unwilling or unable to provide warnings or sanctions against various violations or misappropriations of individual and company activities that create opportunities for disasters to occur. Until now, it has been very rare for us to hear of people or organizations/companies being punished for their littering activities. Even the forest fires that were quite massive in Sumatra and Kalimantan only received a handful of sanctions compared to the many hotspots that were caused.

Social networks

Social networks are social ties that connect one party to another and mutually influence one another. The Indonesian people's attitude toward disaster prevention can be attributed to their very high level of tolerance. These people are accustomed to forgiving and tolerating various forms of indiscipline from diverse parties. This is even when they do not act decisively in the face of a crisis threatening environmental sustainability. Adequacy of tolerance is demonstrated by ignoring something that should be a principle on the basis of tolerance, as stated by Mochtar Lubis (1978). Additionally, lack of tolerance results in carelessness in anticipating various disasters (Adnan, 2006).

It is very rare that social networks can provide warnings and sanctions against perpetrators who do harm that can lead to disaster. As of right now, when there is a disaster, the victims always get help from family, neighbors, relatives, local government, the central government, and social networks in cyberspace. This very positive culture indirectly influences people's awareness that natural disasters are not something that must be completely avoided. Furthermore, violations of laws such as logging in an area are not hindered by the surrounding community,

but provide encouragement or stimulation for other parties to do the same. This is possible due to weak institutional aspects of enforcing rules. Aspects of permissiveness that are considered positive to a certain degree can actually contribute greatly to the emergence of disasters. In fact, this aspect of kinship has been well fostered between the community - including lawbreakers, as well as apparatus - leading to numerous violations of institutional rules.

Cognitive frames

A cognitive frame is the way in which a person or group of people behaves, as well as the way in which institutions can be enforced. The cognitive frame is a reflection of the existing frame of mind and attitude of all stakeholders, both individually and in organizations. Cognitive frames can also reflect concise ways of thinking without extensive analysis. The embodiment of cognitive frames can be seen in people's behavior which has even become a culture. A study conducted by Toya Hideki & Skidmore (2014) concluded that natural disasters have a significant influence on societal trust, which is very relevant to what is visible to the naked eye. The amount of assistance in terms of food, clothing, medicine, and other means of social solidarity.

However, on the other hand, a disaster often causes criminal acts in the form of theft, which is a form of opportunistic behavior (Adnan, R., 2006). When a disaster occurs, such as when a truck carrying basic necessities overturns on the road, many people take part in looting those essentials. Likewise, when social riots occurred in 1998 in Jakarta and several cities in Indonesia, the shops that were burned down were looted by the masses. With a high culture of solidarity in society, the attitude of permissiveness in society towards one violation will encourage the next violation. For example, the tolerance of road users for motorcycles that run against the current in the morning has triggered other motorists to commit violations as well.

Natural Disasters and Community Negligence

We can see the three-dimensional linkages as stated by Beckert in several real cases as follows:

Flood and Water Management

The behavior of disregard for the environment has caused the impact of overflowing water above the ground as stated by Furlong (2017) who said... "*Jakarta is sinking, like Manila and New Orleans before it. A coastal city of just under 10 million inhabitants, it sits at the outlet of the Ciliwung River facing north onto the Bay of Java*. Generally, flooding in various parts of Indonesia results from blocked rivers and drainage systems caused by large piles of garbage such as plastic, furniture scraps, or used goods waste. They cause water to overflow out of canals and fill the streets and surrounding settlements. . Likewise, when the rainfall is high, the water that spills onto the land experiences obstacles to flowing into the sea because the channels are filled and even covered by piles of garbage.

Rosyidie (2013) has stated that one of the causes of flooding in several areas in Bandung and Sumedang regencies is a decrease in land conversion, namely conditions that are vulnerable to changes in river water volume and discharge. For example, the condition of the environmental forest in the upstream of the Citarum watershed is very concerning due to forest encroachment or illegal logging. He further stated that the Citarum watershed was no longer able to absorb or hold rainwater resulting in erosion and then the material from the erosion was carried away by the water flowing downstream. Likewise, floods outside of Java also increase from year to year, with one of the main causes due to illegal logging. As in Semarang, Lei (2016) cites flooding as a result of human negligence, which is the primary cause, namely the neglect of maintaining mangrove trees and the insufficient capacity of water reservoirs.

Furthermore, Rosyidie (2013) has stated that policy implementation in environmental management and human behavior is still weak. Of the 458 watersheds (DAS) in Indonesia, 282 are in critical condition (consisting of 222 critical DAS and 60 severely critical DAS) and 176 are potentially critical, which are mainly impacted by land conversion. This can be seen from the various differences between the minimum discharge and the maximum discharge, the area of critical land, the level of erosion and sedimentation, the quality or pollution of water, and so on. The loss of vegetation in the upstream part of the watershed causes the watershed to be unable to absorb rainwater. This results in erosion and causes a lot of water flow to carry sediment downstream. In general, the dirty condition of the river provides justification for residents to then throw various items including garbage into the river. Watershed management in watershed areas as well as efforts to prevent natural disasters are insufficient. Relevant institutions such as the Ministry of Environment and Local Government Agencies have not been able to work effectively.

The mindset of people as well as the habit that is used in many places is to throw garbage into rivers. It has become a habit for residents who live on the outskirts of the river to dump garbage into

the running water. So that when someone throws garbage into the river, social condemnation occurs because it is something that has become a tradition. In general, it can be said that violations of the law by the community are something that is understandable. Social networks in the community are continuing to develop as they influence each other's behavior.

Institutionally, Indonesia does not yet have rules and tools that are suitable for designing cities that are safe from the threat of flooding. These are spatial planning, drainage systems and wastewater management so that it returns to the ground. As of now, there are no laws that govern the construction of houses, buildings, or shopping centers requiring that all wastewater not be dumped into sewers. For example, the development blueprint must include the design of biopore wells before obtaining a building permit.

Improper Disposal of Garbage

The behavior of throwing garbage is a behavior that often causes natural disasters and environmental damage, such as floods and environmental pollution. The behavior of littering is not only a behavior that occurs in the lower class of society, but is also carried out by the upper middle class as seen in the image below:

Image 1 depicts the actions of a resident in a residential area on the riverbank who dumps garbage into the river. Image 2 illustrates how the accumulation of garbage is on land where there is a sign that it is prohibited to dispose of garbage. Furthermore, Image 3 depicts a person driving a private car on a road, showing his hand in an effort to chase away the banana cult. The behavior of acting arbitrarily without thinking about the impact of the waste they throw away creates various problems; disruption to the flow of rivers is the main cause of flooding, creates an unpleasant odor, and destroys the beauty of the environment, and can cause accidents for road users.

Existing piles of garbage can inspire other people to litter, and the behavior of littering can occur repeatedly. The pollution from the site causes discomfort to the people in the area because it has led to pollution of the air, land, and also of the beauty of the site. This not only reflects unethical behavior in dealing with the waste problem, but also reflects the community's indifference to the interests of the community who want a clean and healthy environment. The following pictures show the community's concern about the behavior or behavior of other members of the community who do not care about the health and cleanliness of the environment.

Image 1 http://www.psikogenesis.com/2021/10/psikologi-dan-perilaku-membuang-sampah.html

Image 2. https://news.detik.com/berita-jawa-tengah/d-4374395/warga-tak-paham-aturan-swakelola-banyumas-banyak-tumpukan-sampah

Image 3. ws.detik.com/berita/d-5224310/didatangi-polisi-pemilik-mobil-buang-sampah-di-kalimalang-tak-ada-di-rumah

Image 4. https://www.brilio.net/foto/view/news/2020/10/08/193407/1327395-spanduk-lucu-sampah.jpg

Image 5. https://news.harianjogja.com/read/2019/07/27/500/1008520/pembuang-sampah-sembarangan-di-solo-disumpahi-jomlo-selamanya

Image 6. https://news.detik.com/berita/d-2544687/jangan-buang-sampah-sembarangan-di-kebun-di-tangsel-atau-didoakan-seperti-ini

Figures 4, 5 and 6 not only show a lack of information that prevents people from disposing of waste at these locations. Rather, it is an expression of the anxiety and anger of local residents at the behavior of irresponsible people. The perpetrators are not ignorant of the ban on littering at that location. Because socialization regarding the prohibition of littering has been regulated by various regional regulations, regulations in offices or workplaces as well as messages conveyed via radio and television. Furthermore, various signs have also been placed in many open spaces to encourage people not to litter. The banner, therefore, reads as an expression of anger, a reflection of how powerless the official institutions seem in dealing with these violators.

Forrest fire

Regarding Mongabay publication *(Jong, H.N., 2021), "Indonesia, a country that suffers from recurring fires every year, saw an increase in land and forest fires this year, with flames burning an area twice the size of London.* Besides being caused by extreme weather such as El Nino, forest fires generally occur due to human negligence (Rasyid, 2014), especially those that occur in Sumatra and Kalimantan. Likewise, a study conducted by Pereira et al. (1997) states that human negligence is the main factor in its occurrence. Likewise, a study conducted by Lailan Syaufina and Sofia Fitriana (2021) regarding the occurrence of forest fires in the Majalengka KPH was mostly caused by human activities.

In general, there are four main factors that lead to fires, which often occur: burning to open new land, accidentally causing sparks and then leaving them, using fire as a weapon to settle land disputes, and burning land is an easy way to cultivate the natural wealth around it. These land fires were caused by indigenous people or migrants or entrepreneurs who planned to process the area for industry. Furthermore, what is interesting is the inability of arsonists to deal with widespread forest fires, which are sparked by burning in limited areas. Even related institutions experience difficulties preventing and overcoming forest fires. Furthermore, the low sanctions received by those who break the rules encourage other parties related to land clearing to carry out similar activities. Their social network has an adverse effect on recklessness in the face of disasters in this case.

Simple Mindset and Unfinished Behavior

It is apparent from the various disasters that have occurred that people have an incomplete way of thinking and behaving. This non-serious and incomplete behavior can be seen from the results of Lukas Lei's research (2016) regarding the flooding that occurred in Semarang which is characterized by the behavior of residents of settlements on the banks of the river who do not care about the environment, as well as the inability of related institutions to manage water overflow, especially in the rainy season. Similar to forest fires, the lack of sanctions against parties violating sustainability in river basins has encouraged other parties to commit other violations as well.

From the number of respondents who responded to these questions which were distributed via the Google form, only 25% or a quarter of the respondents who were involved in an activity thought about the impact in detail and as many as 40% admitted that it was sufficiently detailed. In other words, the data above can be interpreted to mean that in fact quite a few people are being reckless. One might even say that they are indifferent to the impact.

The data indicates that people tend to act only on matters that are related to their affairs. In other words, concern for the surrounding environment is relatively low. This reckless attitude can also be reflected in the attitude or behavior of the respondents to the question: "Are you involved in a written report of the activities you participate in?" Based on the answers to these questions, it can be seen that more than a third of the respondents were not willing to be involved in compiling written activity reports. Respondents' answers can be analogous to the low level of public awareness of protecting their environment. In other words, people tend to only pay attention and care about what is being done at the moment and pay only mild attention to the impact. It can also be an indicator of incomplete behavior, and reflects a way of thinking that is not comprehensive and does not think about long-term impacts.

Tabel 2. Involvement of Respondents in Preparing a Written Report on an Activity

Questions	Yes, in detail	Yes, detail enough	Yes, at such	Not, at all	n = 346
Thinking about the side effects of the actions taken	24,9 %	40,2 %	27,7%	7,2 %	
Questions	**Yes**	**Yes at glance**	**Just in verbal**	**Not, at all**	**n = 573**
Participated in the preparation of written reports in detail and thoroughly	26,4 %	35,6 %	18,3 %	1 9 , 7 %	

Sumber: author

This incomplete and comprehensive mindset is also reflected in phenomena that we often encounter in our surroundings. For example, the condition of electric wires covered by leaves which can easily cause major accidents as shown in the following figure.

Image 7 and 8 show that it is not only land and tree owners who do not care about the danger of short circuits, but many parties who should be held responsible. Social institutions, both RT and RW as well as responsible parks, seem to have forgotten to cut trees on the streets which endanger public safety. In other words, negligent towards conditions that have the potential to cause disaster. The images above shows the low level of cognitive frames on the part of all parties regarding the threat of disaster that would be caused by tree trunks and leaves that could cut off power lines and could trigger a fire. A careless culture that does not pay attention to this impact can also be seen from the many forest fires, which are caused by the negligence of residents in throwing away cigarette butts or not putting out fires after clearing new land (Dennis, Rona.al, 2015)

Nevertheless, there are also positive things the Indonesian people have to offer in relation to something that has a negative impact. This is evident in the activities that he takes part in, either at home or in places of activity such as school and work. Generally, people will pay attention to an activity they participate in related to aspects of planning and preparation. That is, if they see something that is illogical, they tend not to continue participating in the activity.

Related to the above, respondents generally argued that the preparation aspect was very significant. If they are not "careful" in this regard, their activities will fall apart and they will encounter problems.

Table 3 above shows that in the midst of a concerning condition regarding low public awareness of the possibility of a disaster occurring, there are also opportunities for disaster mitigation efforts because there are indications that most communities have an established culture of planning and preparation before carrying out an activity. After internalizing the culture of people who care about disaster mitigation, it is hoped that the quantity and quality of natural disasters that occur in Indonesia can decrease significantly.

Tabel 3. Pay attention to the following when engaging in an activity:

Questions	Yes, in detail	Yes, detail enough	Yes, at such	Not, at all	n = 568
Planning aspect	35,7 %	41,7 %	21,8%	0,7 %	
Questions	Yes	Yes at glance	Just in verbal	Not, at all	n = 568
Preparation aspect	32,9 %	44,4 %	2 1 , 3 %	1,4 %	

Source: author

CONCLUSION

The many natural disasters that have occurred in Indonesia are not only triggered by geographical conditions, but also caused by human carelessness. According to Beckert's concept, institutions, social networks, and mindsets are interconnected and continually reproduce a condition as a result of their interaction. This means that carelessness and a lack of concern for disasters continue to result in natural disasters caused by the human factor. According to the study, a weak culture contributes to disasters of various types.

There are positive things that policy makers can do to raise awareness among the public and thus protect the environment. In addition, they can make various efforts to mitigate disasters. Therefore, the active involvement of all parties is required so that natural disasters caused by the human factor can be reduced to the lowest level. Efforts being made by the central government and regional governments need to be integrated into a broad framework. This will bring together the institutions, social networks and mindsets of all components of society so they

Image 7

Author as private documentation

Image 8

become more caring. Of course, the problem of the culture of people who care about the environment and the role of institutions in preventing disasters really needs to be improved.

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