

# Cultural Norms and Practices in Resilience of Indonesians' Natural Disaster Survivors

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## ABSTRACT

As a country located between two rings of fire, Indonesia experiences lots of natural disaster: earthquake, tsunami and eruption. It is expected that people in areas often affected have an ability to live with disasters that can happen anytime. This article reports a series of study aiming to identify the cultural norms and practices associated with the resilience of the natural disaster survivors from Bogor (Sundanese ethnic), Mount Lokon (Minahasa's ethnic), Mount Merapi (Javanese ethnic), and Mount Sinabung (Karonese ethnic) area. Two hundred fiftyfive participants from these four areas took part in this study, using interviews or focus group discussion. Results show that for all, belief in God's sovereignty and *gotong royong* (working as a team) are prevalent. But across cultures, there are differences as well, reflecting each culture's uniqueness. For Sundanese, surrender to God, endurance, and stay with families are important while for Minahasanese and Batak Karonese, doing good is seen as paying respect to Mount Lokon and Mount Sinabung, respectively. For Javanese, paying respect to elders, *nrimo* and *ikhlas* (accepting difficult conditions), and safety rituals, are important cultural norms and/or practices. One implication for this study is that understanding the cultural norms and practices of each culture is important for helping disaster survivors get healed from traumatic experiences and resume into normal life.

**Keywords:** *Culture, Natural Disaster Survivors, Resilience.*

## 1. INTRODUCTION

Indonesia is a country on the equator that lies along Pacific Ring of fire and Alpide Belt with a high number of volcanic mountains among three hyperactive continental plates: Indoaustralia, Eurasia, and Pacific. Earthquakes, tsunamis, and volcanic eruptions are disasters that have been widely experienced in Indonesia and have caused large human casualties and huge material losses. In the year 2019, from January 1 until December 15, there were 3,622 disasters occurred, an increase from 3,397 incidents in 2018 with 90 percent of them were hydrometeorological ones [1]. Earthquakes with a magnitude of 5.0 or lower occur almost daily in Indonesia, while more major earthquakes have occurred about once a year throughout the nation's history. These earthquakes often trigger tsunamis or floods that devastate communities. Indonesia has 136 volcanoes — 61 of which have erupted since 1900 — that are continuously monitored by the country's Center of Volcanology and Geological Hazard Mitigation [2].

Natural disasters occurred in the furthest west of Indonesia to the furthest east and in all five biggest islands (Sumatra, Java, Kalimantan, Sulawesi, and Papua) as well in many smaller islands (Bali, West Nusa Tenggara, East Nusa Tenggara, and Maluku islands). Facing such conditions requires the ability to anticipate potential hazards (disaster mitigation), as well as the ability to recover for those who are affected. The ability to recover is referred to as resilience and for the past 40 years has become an increasingly frequent concept of psychology [3] [4]. It is assumed that resilient is one important characteristic of Indonesian people who live in areas where disasters often occur. Values, norms, and/or cultural practices are crucial elements that may be able to give positive contribution to resilient, or on the other hand, hamper with an individual's development of resilient. In conceptualization on resilient proposed by Mandelco and Perry [5], culture is a factor apart from an individual that affect resilience, while according to Masten and Obradovic [6], cultures are considered as context that help determine quality of an individual's resiliency. Although community's resiliency that was

built up through disasters in Indonesia are starting to be researched, elements of culture as components of risk and protective factors for resilience has not been identified. Most research on resiliency were to find level of resiliency and not to identify element of culture in resilient of community that went through disasters. The researcher and her colleagues tried to fill this gap. Research by Santoso and Suleeman [7] towards resilience quality of Aceh's survivors (who went through tsunami at the end of 2004), and Suleeman, Hafiyah, and Nehemiah [8] towards Halmahera survivors who are currently reside in Bitung (who went through series of volcanic eruptions in 2010) show that conceptualization about resiliency and life style shown by the participants were affected by their values, norms and/or cultural practices. Delgado [9] acknowledges that cultural values are important in the development of individual's resilience. What is important is what should be well-maintained. Cultural norms and practices are values and practices that are important, inherited from previous generations and guide the people in their daily living.

This particular study tried to identify the cultural norms and practices associated with the resilience of the survivors of natural disasters. To serve this purpose, four different locations have been chosen for their uniqueness in the nature of the disasters occur. These locations are Bogor district in West Java, Kinilow district surrounding Mount Lokon in North Sulawesi, Sleman district where Mount Merapi is located in Central Java, and Sinabung district where Mount Sinabung is located in North Sumatra. Each of these four areas has specific ethnic group including its unique cultural characteristics: Sundanese, Minahasanese, Javanese, and Karonese, respectively. Provided below is a brief description of the cultural background of each of these ethnic groups together with the disaster area they live in.

Bogor District in West Java Province has the highest rainfall in Indonesia and several areas experience avalanche since hundreds of years ago. Sukamakmur and Cibadak villages are selected since these two have steeps easily affected by the landslides [10]. Along the valleys of 30 m deep, the village road with 10 m width can be reduced to 4 m if rain does not stop for more than two days with the ground moves loosely. Several areas affected by landslide are not safe for housing anymore but only with difficulties that the village leaders were successful in evacuating the villagers to a safer place. The term Sundanese refers to people live originally in West Java Province. Sunda has a root of *su*, meaning having good characteristics, including *cageur* (healthy), *bageur* (good behavior),

*bener* (righteous), *singer* (alert), and *pinter* (smart or cunning).

Mount Lokon, located in Kinilow District in North Sulawesi Province, is 1580 m height. Regarded as one of the most active volcanoes in Indonesia, it has a series of eruption since a few hundred years ago. The eruption, small in nature, can happen several times in a day, and several times in a month, following by a much bigger eruption. Since the year 2011, it has never stops erupted, made the people in this are perceive this as their routines. The people regard Mount Lokon as *Opo* (or grandfather) who takes good care of them. They believe that whenever Mount Lokon erupts, it means that someone had dishonored moral or ethical rules. So, to prevent disaster occurs, people in the surrounding areas should act good and avoid conflicts. Tatawaran and Tompaluan, two smaller volcanoes close to Mount Lokon are perceived as barriers that save people from the damages coming from Mount Lokon's eruptions.

Mount Merapi, located in Sleman District of Central Java Province, is also one of the most active volcanos in Indonesia. Since the year 1548, it has erupted regularly. The latest big eruption was in 2010 that made 19,000 villagers who lived within a 10-km zone from Merapi crater were evacuated for months. Due to the lava produced by eruption, it has fertile soil and this made the people feel reluctant to go away for a safer place. Javanese culture with Yogyakarta palace as its center refers to the cultural norms and practices of Javanese people living in the southern part of Central Java Province. Among other cultures in Indonesia, Javanese culture is very accommodative with other cultures while reserving its basic essence [11]. It is also called cultural syncretism [12]. Since many centuries ago, Javanese people who highly value religion and religious beliefs show willingness to learn about other religions even though some may claim that the Javanese people do not learn other religions deeply [13]. Hinduism, Buddhism, and Islam have given some influence toward Javanese beliefs (called *Kejawen*) that are practiced now [14].

Karonese lives in Kabanjahe district, North Sumatera. There are several sub-ethnics of Batak in Sumatera with the largest population is Batak Toba. Batak Karo is regarded as the second largest population. Since the year 1600, Mount Sinabung has been erupted but since 2010, a series of eruption really destroy the area and several villages were engulfed [15]. Since then, a level III or level IV has always applied for the volcano alert.

In short, the problem statement for this study is: What are the cultural norms and practices related with

the resilience of the disaster survivors from Bogor (Sundanese ethnic), Mount Lokon (Minahasa's ethnic), Mount Merapi (Javanese ethnic), and Mount Sinabung (Karonese ethnic), respectively?

## 2. METHODS

### 2.1. Ethical Considerations

The proposal of the study explaining the purpose of the study, the research procedure, and the research instrument for participants in Bogor, Kinilow, Sleman was approved by Directorate of Research and Community Service Universitas Indonesia while for participants in Sinabung area the proposal was approved by The Faculty of Psychology Ethics Committee. The permission to do research was then sent to each of the village leaders. After they gave their permission for the researcher to collect data from the villagers, they were then asked to select which of their villagers would be appropriate to participate in this study.

### 2.2. Research Design

A qualitative research paradigm was chosen for this study since it would provide opportunities for participants to express freely their views and feelings about the disasters they have gone through. Through phenomenology research design, the participants' transcripts are analyzed to identify themes on how the cultural norms and practices relate with their resilience [16].

### 2.3. Sampling Technique

Participants were recruited through their village leaders, usually men. Those who were selected had characteristics described in the following section. The recruitment through the village leaders would help the researcher to get information about the events in inquiry since the village leaders knew very well the experiences of the villagers under his or her supervision. In addition, this would also help saving some time to persuade the villagers to participate since the villagers usually complied to their leader.

### 2.4. Participants and Their Characteristics

Participants were representing those living in these four areas: Bogor (Babakan Madang dan Sukamakmur villages), Kinilow, Sleman (Krinjing and Srowolon Purwobinangun Pakem village), and Sinabung area (Sukatendel, Tigan dreket, Perbaji and Kebayaken villages). The characteristics of the research participants were as the following: living in that

specified area in their whole life, never moved to any other place, and representing one of five age groups: 15 – 20 years old, 21 – 30 years old, 31 – 40 years old, 41 – 50 years old, or above 50 years old. Other requirements were present when the disaster occurred and were suggested by their village leader. Before proceeding to the data collection, each participant was introduced to the study's objective and when he or she agreed to participate, each was asked to sign an informed consent. The specific number of participants from each location is 27 from Bogor (age range is 15 to 55 yo), 18 from Kinilow (age range is 15 to 57 yo), 65 from Sleman (age range is 15 to 65), and 61 from Sinabung (age range is 15 to 74 yo). A total of 171 participants took part in this study.

### 2.5. Data Collection Technique and Data Analysis

Two data collection techniques were used: personal interviews and focus group discussion. Personal interviews were preferred than focus group discussions so that more interactive conversation would follow; however, some participants were reluctant to have individual interaction with the researcher or her research assistants. For them, focus group discussion was applied so they could freely share their opinion and feeling among their fellow villagers. This was true for participants from Bogor. Questions to dig participants' understanding about resilience when disaster happened were posed, but for this report, only answers related with the religious aspect of their resilience were analyzed by identifying themes relevant to the research question. FGD guidelines were constructed based on resiliency characteristics brought forward by Wagnild [17]. There were five characteristics, i.e. meaningfulness, perseverance, equanimity, self-reliance, and existential aloneness. Other than that, there were questions about cultural values in facing disaster related to the disasters that the participants went through. To expedite the conduction of FGD, researchers used standardized and open guidelines. Samples of questions emphasizing the cultural norms and practices can be seen below:

1. When you decided to leave your home to a safer place, what was in your mind? How did you feel about leaving your home? What motivated you to leave your home?
2. Looking back, what factors influencing your fate at this moment? Please explain.
3. What messages do you have for younger generations so that they are ready to face whatever situation they will go through?

Data were analyzed according to cultural norms and practices that were mentioned by the participants when they answering those three questions.

### 3. RESULT

Across these four ethnic groups there are similarities and also differences in cultural norms and practices associated with resilience. Surrender to God and accept the disaster as part of God's will is common in all participants. One striking similarity is that all perceive living on a specific land that is inherited for generations is an honour. This means that leaving their land and moving to a safer place to avoid the disasters is not a priority. Working together in solving problems (*gotong royong*) also practiced in all ethnic groups. As people live in the mountainous area, Minahasanese, Javanese, and Karonese perceive land as sacred; therefore, regular worship to Supreme Being should be observed dutifully to avoid disasters. By doing that, human sacrifices are not needed. Eruptions are useful to make the soil fertile. Disasters might still occur since one or more persons would commit sin. Whenever this happens, the effect would happen to everyone in the area, not only to those sinners. So far, they try to avoid death and danger by escaping to a much safer place. But, when death happens, they just have to accept it as their fate.

As for the differences, Sundanese emphasizes endurance and staying with the families since they find roots in the family system. Minahasanese emphasizes doing good by paying respect to Mount Lokon so that it would never erupt again. Javanese emphasize *nrimo* and *ikhlas* as accepting difficult situations and being surrender to whatever could happen in their lives. In addition, they also work diligently, leaving no time feeling regretful of what had happened. Karonese emphasize that God as Divine Being is in control of everything. Minahasanese, Javanese, and Karonese, regardless of their religion, either Islam or Christian, also practice worshipping together to build a sense of belongingness as fellow villagers affected by the disasters. For Javanese and Karonese, moving to a safer place is not a sacred act since it would separate them from getting closer to the mountain who has always blessed them abundantly. Minahasanese, Javanese, and Karonese also emphasize being thankful for whatever they have receive from God or the Divine Being. Compared to the other three ethnic groups, Sundanese observe religious rituals more dutifully.

#### 3.1. Discussion

When difficulties strike, Abu-Raiya and Pargament [18] have argued that religion and religious activities are considered beneficial. This argument receives

evidence from this study's participants. Since centuries ago, scholars have observed the bonding between the Javanese people and Mount Merapi [9]. It's of no wonder to see rituals to worship supernatural power and spirit of Mount Merapi are routines in the community's life. Older generations would teach younger generations that Mount Merapi is a source of life, not a destroyer at all. Sundanese, Minahasanese, and Karonese people also have similar bonding with their land. Each of the respective local governments also receives resistance from people if they were to be evacuated whenever a warning sign of disaster appears. However, the religious activities the people are engaged in are beneficial to calm them down, and make them acceptable of the difficulties; they'd rather see the disasters as means to grow in faith, and whatever happen is part of God's plan [19]. Both Christian and Islam believers perceive religious activities as effective.

The participants admit that they cannot move to a safer place within a short notice. In order to be resilient, they put their belief in some authority, or supreme being who would help them endure the pain and all difficulties arising from the disasters. Since the disasters happen to everyone in the area, there is no need to feel bitter and it ensures them that disasters occur not from their own mistakes. Engaging in religious activities with other community members make them realize that God is always in control [20]. Those who believe in God should accept whatever happens, including unexpected disasters that come without any warning like tsunami and avalanche. One important implication for the study's results is that local authorities should take into account the reluctance of the people to be evacuated while also be prepared to help those having traumatic experiences from losing their loved ones and/or valuable belongings.

Unfortunately, not enough publication done on the cultural norms and practices for Sundanese and Minahasanese, not like Javanese and Karonese. For Javanese people, harmony with nature and other beings is important [11]. Even though nature can destroy human lives but at the same time through nature very life is blessed; human cannot live without nature including all sources that nature provides. Metaphysical is important in *Kejawen*. Javanese people believe that supernatural beings take good care of human lives; therefore they should be worshipped regularly. Earthquakes and eruptions are perceived as parts of how nature takes care of human [19]. Disasters will bring blessing, not curse, if supernatural beings are worshipped regularly. An important feeling, peaceful (called *slamet*) will be attained if people

worship dutifully [11]. People who pray to attain *slamet* have two purposes: praying for safety, happy, and contentment in everyday life (*nyuwun kawilujengan*) and to be free from all difficulties [21]. Paying respect to parents and other authoritative figures and elderly is also perceived as crucially important and *slametan* is the specific rite to set this prayer [13, 22]. It usually starts with praying together and ends with eating together. *Nrimo* and *rela*, refer to patience and acceptance are seen as means to achieve *slamet* [11, 21]. That way, people will not will hurt or be apathic in experiencing difficulties. This study finds that Javanese still exercise these cultural norms and practices.

As for Karonese, at least five cultural values that have been practiced for generations are identified by Sembiring [23] and Surbakti [24]. These are harmonious and peaceful (referring to how the elderly should intervene when conflicts arise among family members), prosperity (Karonese emphasize being happy and thankful to God when they have reached what they want to; to achieve what they want, however, they need to work hard), religious (paying respect to God and their ancestors and pray to them because God and the ancestors always take good care of them), taking good care of nature and environment, and working together so that they can get things done sooner and less effort. This study confirmed the values of prosperity, religious, taking good care of nature and environment, and working together.

### 3.2. Conclusion

This study identified certain cultural norms and practices associated with resilience among natural disaster survivors from Bogor, Kinilow, Sleman, and Sinabung areas, all experience natural disasters continuously. An emotional attachment to the land they have been living for generations make them prefer to stay even though this means that they cannot always avoid the disasters. Religious activities exercised by each group include praying regularly to God or Divine Being and fellowship with other believers. These make each of these ethnic groups feel peaceful, and they feel strengthened to face the difficulties, regardless of the religion background they come from. Future research might explore similar study in other Indonesian ethnic disaster survivors to validate whether they also portray similarities and differences as unique cultural aspect of resilience. For example, it would be interesting the identify the cultural values related to posttraumatic growth, psychological and subjective well-being, and so forth.

## AUTHORS' CONTRIBUTION

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