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Abstract



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This study aimed to learn the preserve of local wisdom in landslide disaster mitigation in Gununglurah Village, Cilogok, Banyumas. By using observational method, this study took place in Gununglurah Village, Cilogok, Banyumas. As many as 20 informants were included in this study comprising the village chief, the village officers, the subdistrict head, the spiritual leaders, the opinion leader, and the custodian. The sampling technique of this study was purposive sampling. In-depth interviews were conducted in this research. The results revealed that the local wisdom had been preserved and implemented wisely to mitigate of landslide disaster in Gununglurah Village, Cilogok, Banyumas, Central Java. The preserve of local wisdom consists of sanctification towards forest and trees, communal work (*gotong royong*) tradition, thanksgiving (*sedekah bumi*) tradition, and life principle or a proverb of *menungsa sing beja kuwe kudu eling maring gusti Allah karo kudu waspada*.

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The Preserve of Local Wisdom to Mitigate the Landslide Disaster in Gununglurah Village, Cilongok, Banyumas, Central Java

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This study aimed to learn the preserve of local wisdom in landslide disaster mitigation in Gununglurah Village, Cilongok, Banyumas. By using observational method, this study took place in Gununglurah Village, Cilongok, Banyumas. As many as 20 informants were included in this study comprising the village chief, the village officers, the subdistrict head, the spiritual leaders, the opinion leader, and the custodian. The sampling technique of this study was purposive sampling. In-depth interviews were conducted in this research. The results revealed that the local wisdom had been preserved and implemented wisely to mitigate of landslide disaster in Gununglurah Village, Cilongok, Banyumas, Central Java. The preserve of local wisdom consists of sanctification towards forest and trees, communal work (*gotong royong*) tradition, thanksgiving (*sedekah bumi*) tradition, and life principle or a proverb of *menungsa sing beja kuwe kudu eling maring gusti Allah karo kudu waspada*.

Keywords: Gununglurah Village, Local Wisdom Preservation, landslide mitigation

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I. INTRODUCTION

Cilongok, a district in Banyumas Regency, Central Java, has hill morphology of steep relief which makes it susceptible to landslide. Some etiological factors of landslide in Cilongok are geological factor, slope of the land, rainfall intensity, hydrological factor, and human activities.¹ One of villages in Cilongok included in the high susceptibility level zone is Gununglurah Village.

Gununglurah Village is located in Mount Slamet piedmont 300–1,345 metres above sea level. The slope of Gununglurah Village is about 10-70°; it is almost perpendicular in the cliff area. The type of slide in Gununglurah Village is landslide. The potentially dangerous location in Gununglurah Village where landslide commonly occurs is Bandayuda.¹ Banyumas Regional Disaster Management Agency noted that a landslide in Gununglurah Village which occurred in November, 23rd 2012 caused 3 damaged houses, 3 slided house yards, and 2 blocked road accesses. The last landslide happened was in December, 16th 2013 and caused the streets in subdistrict 05/05 to slide and crack.²

Landslide disaster mitigation aims mainly to minimize the disaster impact. To reduce the material loss and dead victims caused by landslide disaster, people in the society need to stay alert to the disaster threat.³ Landslide disaster mitigation can be categorized into structural and nonstructural mitigation. Structural mitigation correlates with engineering efforts while nonstructural mitigation is a non physical effort.¹ Local wisdom

is one of non physical nonstructural landslide disaster mitigation efforts.

A review about local wisdom and disaster mitigation in traditional society of Indonesia showed that there was strong correlation between natural resources and human resources. In traditional society, human and nature is a unit because of their similarity as God's creation. It is believed that both nature and human have spirit. Nature may be hospitable if human treats it nicely and vice versa. Some of such studies showed that local wisdom had been practiced on well conservation in Kendal, Central Java, forest conservation in South Kalimantan and Halmahera, environmental preservation, in environmental management of a community in Tha Pong Village, Thailand, and in sustainable development of rural tourism in Special Region of Yogyakarta.⁴⁻⁹ However, study about local wisdom and its function in disaster mitigation has rarely been done.

Based on that background, the main goal of this study was to learn the local wisdom preservation to mitigate landslide disaster in Gununglurah Village, Cilongok, Banyumas.

2. EXPERIMENTAL DETAILS

This study was carried out in Gununglurah Village, Cilongok, Banyumas, Central Java. The research used observational method. Field observation was done to inspecting the local wisdom preservation in Gununglurah Village, Cilongok, Banyumas as a landslide disaster mitigation effort.

Purposive sampling technique was employed to choose the informants who are regarded as experts in local wisdom in Gununglurah. In the participant observation, the researchers were involved 20 informants, consisted of the village chief, the village officers, the subdistrict head, the spiritual leaders, the opinion leader, and the custodian.

Collecting data used in-depth interview. In-depth interview was done to get data and further information. Data obtained from in-depth interview encompassed knowledge and honorable values of local wisdom in the society of Gununglurah Village, Cilongok, Banyumas in landslide disaster mitigation. The data was analyzed qualitative descriptively.

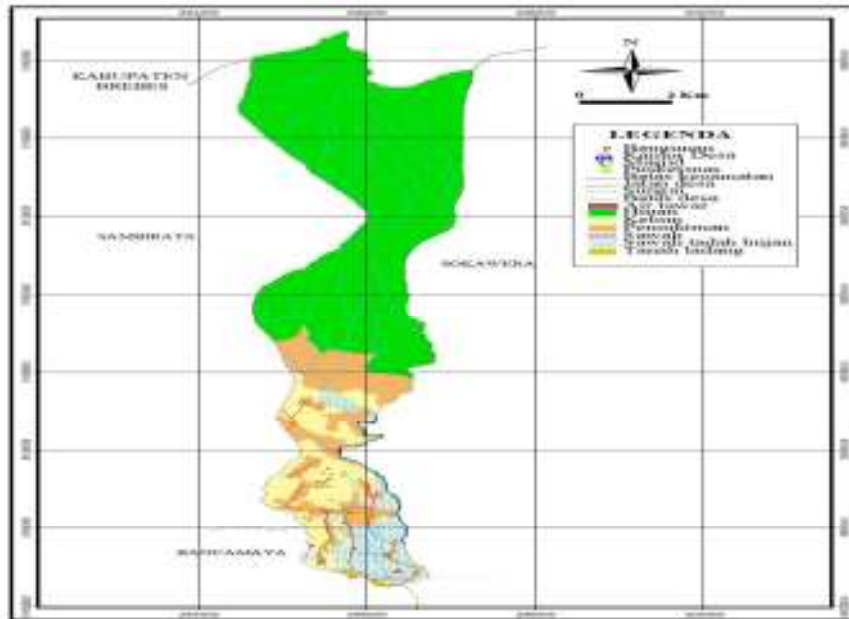


Figure 1. Map of Gununglurah Village, Cilongok, Banyumas, Central Java

3. RESULTS AND DISCUSSION

Gununglurah Village society knew its environment well. A wise behavior toward the surrounding environment had made it a comfortable life. The society lived with nature in an arrangement of need and interaction. Society relied on nature hence people treated the surrounding environment with care in order to keep it evergreen and safe from disasters. The most common disaster occurring in Gununglurah Village is landslide.

Some local wisdom of Gununglurah Village which was taken care by its society and implemented as an effort to mitigate landslide disaster comprised the following:

1. Forest and trees sanctification

Gununglurah Village is surrounded by production forest and Mahameru forest in the southwest slope of Mount Slamet. People of Gununglurah Village make the Mahameru forest as protected forest. According to the ancestors of Pesawahan country in Gununglurah Village, the society inherently made the Mahameru forest area as a sacred place. Mahameru forest area is located around the Krangan water source which is the biggest spring draining to Mengaji River. Because people believed that the forest was sacred, they did not dare to chop down the trees. Even to enter the area, people needed permission from the custodian of the forest. People believed that “something” guarded the forest. Based on the interview with the elders of Pesawahan country in Gununglurah Village, one day an outsider came into the forest to take some of the forest products without permission from the custodian. That outsider ended up lost inside the forest even despite had been trying hard to get out

from it. This kind of belief correlates with cosmic mindset. This mindset forms assumptions that nature has its own life and people believes that some places such as forest are sacred and guarded by “something”. This sanctification toward conservation forest basically is an act to protect the forest from illegal logging and deforestation. Therefore, Mahameru forest become safe and sustainable. People believes that if someone breaks norms and tradition without being warned and punished, it will lead to natural disaster.

Kumpe tree is one kind of trees sanctified by people of Gununglurah Village. In Javanese, Kumpe comes from the words *dikum* and *dipe* which means its roots are soaked in water and its leaves are upside. Ingas and Taon tree with diameter of 2-4 meter also sanctified by local society. According to opinion leader of Pesawahan Country, the trees do not dare to chop down because they are sacred; it eventually prevents the ecosystem from being damaged. As revealed that the plant is the source of life, and then continues to be preserved through local wisdom.¹⁰ The meaning of the message that is contained in the concept of conservation that every generation must maintain and protect vegetation.⁶

This belief and sanctification toward conservation forest and particular trees keep people from being fearless to do illegal logging, deforestation, and even prevent them from entering the sacred places. This will give positive impact to the environment. The trees, forest, and sacred places will stay well-protected and the environment will be safe from landslide disaster.

2. Communal work (*gotong royong*) tradition

Communal mindset occupied by the society of Gununglurah Village is implemented as communal work for some particular goals; it is called *gotong royong*. *Gotong royong* is an expression of harmonic desire, people awareness, and helpful intention to achieve common goals. This attitude is part of tradition and value system in the society. People living around the forest or mountain slope perform *gotong royong* to preserve and prevent environmental damage so that landslide disaster is avoidable. An instance of *gotong royong* committed by the society of Gununglurah Village along with the local government was one thousand trees planting program in community timber. This activity reflects people awareness to preserve the community timber area thus water supply for Gununglurah villagers is maintained and landslide disaster can be anticipated. It proves that continuous communal work can serve as an effort in forest preservation.

3. Thanksgiving (*sedekah bumi*) tradition

For this reason, they feel that there should be any ceremony that shows their gratitude to the earth. *Sedekah bumi* tradition is still enforced yearly by the society of Gununglurah Village. This tradition is a form of society gratitude toward nature for the harvest. The other word for *sedekah bumi* is *nylameti bumi* (Javanese). People perform the ritual every month of *Sura* and *Sapar*. Thanksgiving in Gununglurah Village is known as *Suran* and *Saparan*. It is implemented in *mushola* (a place for performing prayers in Islam) and led by the elders of society. They perform prayers and have feast together. *Sedekah Bumi* is an ethnic ritual to show the people's high regard to the earth as a place to live in. People depend on earth as it is a place where they do farming, get food and water, and do other activities.¹¹

By performing *sedekah bumi*, people of Gununglurah Village intend to preserve the tradition, maintain the harmony and their relationship, and show their gratitude for God's blessings. In addition, they also ask for protection and safety from any danger and disaster through this ritual. People believe that this ritual will bring in goodness. Earth will be safe and disaster does not threaten if people always perform communal feast. The leader always asks for people safety during the ritual. They assume that if they are thankful for the Earth, there will be peace and Earth will not cause any disaster to human.

4. Life principle or proverbs

Local wisdom may take form as principles followed, understood, and applied by the local society in their daily interaction and interrelation with environment. It is formularized as system of tradition values and norms.¹² Local wisdom tends to describe a specific phenomenon which usually becomes a typical characteristic of the community, for instances are *alonal waton klakon* (society of Central Java), *rawe-rawe rantas malang-malang putung* (society of East Java), *ikhlas kiai-ne manfaat ilmu-ne*, and *patuh guru-ne barokah uripe-e* (society of Pesantren).¹³

The society of Gununglurah Village has life principles or proverbs as their life guidance. Their belief and life principles are thought as good and positive things; they use it as their guidance to mitigate landslide disaster. They use proverbs in Banyumas dialect such as *menungsa sing beja kuwe kudu eling maring gusti Allah karo kudu waspada*. It means that a lucky human kind is a human who always remembers his/her God (in

Islam is Allah SWT) and always in awareness of any disaster that may be life-threatening including natural disasters. This proverb shows that a disaster may come whenever and wherever as Allah SWT desires. Human only live his/her life and is expected to always remember his/her God and to always aware. Environment preservation-related proverbs are warded-off well and implemented in their social life. The society of Gununglurah Village understands very well that if the living environment is damaged, danger and landslide disaster will occur.

The local wisdom had been understood and implemented wisely to mitigate of landslide disaster in Gununglurah Village, Cilongok, Banyumas.

4. CONCLUSIONS

Based on the study results, it is concluded that that the local wisdom had been preserved and implemented wisely to mitigate of landslide disaster in Gununglurah Village, Cilongok, Banyumas, Central Java. The preserve of local wisdom consists of sanctification towards forest and trees, communal work (*gotong royong*) tradition, thanksgiving (*sedekah bumi*) tradition, and life principle or a proverb of *menungsa sing beja kuwe kudu eling maring gusti Allah karo kudu waspada*.

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References and Notes

1. Suwarno and Sutomo, Metode Mitigasi Longsorlahan di Kecamatan Gumelar Kabupaten Banyumas Provinsi Jawa Tengah. *Jurnal Forum Geografi* 21, 1 (2007).
2. Banyumas Regional Disaster Management Agency, *Laporan Kejadian Bencana Kabupaten Banyumas Periode Tanggal 01 Desember 2013-31 Desember 2013*. Badan Penanggulangan Bencana, Banyumas (2013).
3. Paimin, *Teknik Mitigasi Banjir dan Tanah Longsor*, Tropenbos International Indonesia Programme, Balikpapan (2009).
4. Siswadi, T. Tukiman, P. Hartuti, Kearifan Lokal Dalam Melestarikan Mata Air (Studi Kasus di Desa Purwogondo, Kecamatan Boja, Kabupaten Kendal). *Jurnal Ilmu Lingkungan* 9, 2 (2011).
5. Fahrianoor, T. Windari, Taharuddin, R. Mar'i, and Maryono, The Practice of Local Wisdom of Dayak People in Forest Conservation in South Kalimantan. *Indonesian Journal of Wetlands Environmental Management* 1, 1 (2013).
6. Tamalene, M. Nasir, M. H. I. Al Muhdhar, E. Suarsini, F. Rochman, The Practice of Local Wisdom of *Tobelo Dalam (Togutil)* Tribal Community in Forest Conservation in Halmahera, Indonesia. *International Journal of Plant Research* 4, 4A (2014).
7. Thamrin and Husni, Kearifan Lokal dalam Pelestarian Lingkungan (The Local Wisdom in Environmental Sustainable), *Kutubkhanah* 16, 1 (2013).
8. Chaiphap, Weerakul, T. P. N. Sakolnakorn and A. Naipinit, Local Wisdom in the Environmental Management of a Community: Analysis of Local Knowledge in Tha Pong Village, Thailand. *Journal of Sustainable Development* 6, 8 (2013).
9. Vitasurya and V. Reni, Local Wisdom for Sustainable Development of Rural Tourism, Case on Kalibiru and Lopati Village, Province of Daerah Istimewa Yogyakarta. *Procedia - Social and Behavioral Sciences*, 216 (2016).
10. United Nations University Institute of Advanced Studies (UNU-IAS), Traditional Knowledge and Biodiversity. *International Organizations Center, Pacifico-Yokohama, Japan, Minato Mirai, Nishi-ku Yokohama*, 1 (2013).
11. F.S. Hidayatulloh, *Sedekah Bumi Dusun Cisampih Cilacap*, *el Harakah*, 15, 1 (2013).
12. Zulkarnain, A. Asdi, F. Rudi, Kearifan Lokal dalam Pemanfaatan dan Pelestarian Sumberdaya Pesisir (Studi Kasus di Desa Panglima Raja Kecamatan Concong Kabupaten Indragiri Hilir Propinsi Riau). *Jurnal Agribisnis Kerakyatan*, 1, 1 (2008).
13. N. A. Ridwan, *Landasan Keilmuan Kearifan Lokal*, *Ibda'*, 5, 1 (2007).