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DISASTER MITIGATION THROUGH ENVIRONMENTAL LEADERSHIP IN SMP NEGERI 2 BULAWA, BONE BEACH

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Article history:		Abstract:
Received: Accepted: Published:	26 th October 2022 26 th November 2022 30 th December 2022	Disaster is an series of incidents that results in victims of human suffering, loss of property, damage to the environment, facilities and infrastructure and can cause disruption to the life system and people's livelihoods. Basically a natural disaster is an incident that cannot be avoided, but humans can prevent and prepare themselves before the disaster suddenly comes. In carrying out this leadership project, we used a socialization method with a qualitative approach to students at SMP Negeri 2 Bulawa regarding flood disaster mitigation, as well as tree planting actions which are expected to provide an understanding of the importance of disaster mitigation from an early age and foster a sense of love for the environment.

Keywords: Leadership, Outreach, Disaster Mitigation, Environmental Preservation

INTRODUCTION

Mamungaa Timur is a village located in Bulawa District, Bone Bolango Regency, Gorontalo Province, Indonesia. This village is one of the villages that is prone to disasters such as floods and landslides. Therefore, the target for the socialization of our group leadership course project is one of the schools located in the flood-prone area, namely SMP Negeri 2 Bulawa, which is in Mamungaa Village, Kec. Bulawa, Bone Bolango Regency, Gorontalo Province with the theme "Instilling Disaster Awareness in Students Through Environmental Conservation Efforts" and also coupled with tree planting activities. Where the socialization activities that we carry out for students of class VII, VIII and IX are expected to provide an understanding of flood disaster mitigation and foster concern for the environment.

Geological processes, both endogenic and exogenic, can cause danger and even disaster for human life. Geological hazards that exist on earth are essentially the result of geological processes, where these processes cannot be controlled by humans. However, humans can be a causal factor that turns a geological hazard into a geological disaster and determines the level of damage to a disaster, such as high population growth, environmental degradation, etc. Disaster management must be a proactive strategy,

not merely acting after a disaster, but carrying out various activities to anticipate the possibility of a disaster occurring.

According to Law Number 24 of 2007 concerning Disaster Management, a disaster is an event or series of events that threatens and disrupts people's lives and livelihoods caused, both by natural factors and/or non-natural factors as well as human factors, resulting in human casualties, environmental damage, property loss, and psychological impact. According to PP No. 21 of 2008 (in Muhiddin et al., 2021), increasing knowledge to be aware of disaster preparedness can be done through outreach with the aim of educating. This is in line with the activities carried out by BNPB, that disaster awareness socialization is very important to do to reduce the impact when a disaster occurs. Disaster mitigation itself is a series of efforts made to reduce disaster risk, both through physical development and awareness and capacity building. Therefore knowledge about disaster preparedness, understanding of disaster mitigation is very necessary to deal with disasters (Rahmat, 2020).



Vol. 17, December,2022 **ISSN:** 2749-361X

METHOD

The method we use in this project is:

- 1. Dissemination of flood disaster mitigation with a qualitative approach aimed at students at SMP Negeri 2 Bulawa in order to provide understanding and education as well as directions on what steps to take when a threat occurs around to reduce risk.
- 2. Tree planting action, in addition to having a positive impact on the environment, also fosters a sense of love for the environment.

RESULT AND DISCUSSION RESULT

The implementation of this activity is aimed to junior high school students, precisely at SMP N 2 Bulawa. With great enthusiasm, this activity was attended by all students at the school, starting from class VII-IX actively participating in carrying out the activity. Based on the results of observations from this activity, it shows the expected achievement of the activity.

Following are the results of observations of activities that have been carried out:

Growing self-leadership through disaster mitigation.

What is prioritized in this aspect is a general description of attitudes and actions that can be taken to lead oneself in the event of a natural disaster.

2. Become a leader for others through disaster mitigation.

In this context, students are given examples of the correct ways and steps to mitigate other people in the event of a disaster through games and mitigation practices.

3. Grow a sense of concern for the environment

Students are given an overview through a power point display in which there are impacts and benefits related to environmental preservation in order to minimize disasters. This aspect is realized through tree planting activities.

DISCUSSION

The main objective of evaluating the activities carried out by our group is to find out the achievements of students in each aspect which is the standard for evaluating the success of this activity.

Based on the evaluation results of the students who attended this activity, it was seen that the students were very enthusiastic and active during the activities, from outreach to disaster mitigation practices.



Figure 1. Dissemination of Disaster Mitigation

Departing from the activity and enthusiasm of the participants in this activity, our group believes that the aspects that have become the standard for the suc cess of this activity have been fulfilled.

The implementation of tree planting activities is expected to reduce the impact of environmental dam age and increase understanding and awareness of the importance of planting activities to protect and preserve the environment as part of conservation efforts. In government regulation no. 76 of 2008 concerning Forest Rehabilitation and Reclamation (Anon, 2006) in (Devotion, 2020), reforestation is an effort to restore critical land outside the forest area to restore land function.

The seeds used in the tree planting activities w ere obtained from coordination with the Gorontalo Prov ince Environment and Forestry Service. The seeds plan ted in the tree planting activity included: ketapang, tab ebuya, soursop etc.



Figure 2. Tree planting



Vol. 17, December,2022 **ISSN:** 2749-361X

According to Pattiwael (2018) in Lanny W, et al (2019) planting tree seedlings is a part of conservation efforts. Therefore, one of the efforts to conserve natural resources can be done by planting trees.

In the implementation of our leadership course project, there are several factors that support or hinder the course of activities including:

- Supporting Factor
 - a. The school supports the activity.
 - b. Enthusiasm of students in carrying out activities.
 - c. Teacher participation during the activity
- 2. Resistor Factor
 - a. Short time in implementing the activity
 - b. Implementation of tree planting activities that have not been maximized
 - c. Lack of property during mitigation practices.

CONCLUSION AND SUGGESTION CONCLUSION

Indonesia is a country with a very high level of vulnerability to natural disasters. However, it is sad that knowledge of the importance of disaster mitigation and awareness of the importance of protecting the environment from an early age is still very low. In law number 24 of 2007 concerning Disaster Management, children are grouped into the vulnerable category. Therefore, it is hoped that the socialization activities that we carry out can provide education about mitigation and can form characters that are sensitive to environmental sustainability.

SUGGESTION

Natural disasters cannot always be prevented from occurring, as well as the material losses and casualties they cause, but it is important to realize that public awareness of the importance of education about disasters from an early age is the key to reducing the impact of natural disasters. In the activities we carry out there are several programs that we hope to continue, namely:

- 1. Providing disaster mitigation training from an early age
- 2. Conduct outreach not only to children but also in a wider scope
- 3. Carry out tree planting actions
- 4. The government should be more proactive because the projects we are doing have limited time and opportunities, so support from the government is needed to support our program.

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REFERENCES

- 1. Doda, N. (2013). Analisis Daerah Rawan Banjir Kota Gorontalo Berbasis Sistem Informasi Geografis (Sig). RADIAL: Jurnal Peradaban Sains, Rekayasa dan Teknologi, 1(2), 112-125.
- DWulansari, D., Darumurti, A., & Eldo, D. H. A.
 P. (2017). Pengembangan Sumber Daya Manusia Dalam Manjemen Bencana. Journal of Governance And Public Policy, 4(3), 407-421.
- 3. Goma, E. I., Saputra, Y. W., Setyiani, N., & Perkasa, G. (2022). Sosialisasi Mitigasi Bencana Banjir Bagi Siswa di SMAN 4 Samarinda. Bubungan Tinggi: Jurnal Pengabdian Masyarakat, 4(3), 1039-1045.
- 4. Haliim, W. (2020). Kebijakan Pembangunan Dalam Konsep Kepemimpinan Partisipatif. Jurnal Kebijakan Pembangunan, 15(1), 91-104.
- Hasan, S., & Budyastomo, A. W. (2021). PEMBERDAYAAN PENANGGULANGAN BANJIR DESA KEMIRI KECAMATAN GUBUG KABUPATEN GROBOGAN. Batoboh: Jurnal Pengabdian Pada Masyarakat, 6(2), 86-99.
- 6. Karim, K., Maknun, T., & Abbas, A. (2019). Praanggapan Dalam Pamflet Sosialisasi Pelestarian Lingkungan Di Kabupaten Wakatobi. Jurnal Ilmu Budaya, 7(2), 241-247.
- 7. Kartikasari, M. N., & Nadiroh, N. (2019). Pentingnya Pendidikan Karakter Dalam Menjaga Kelestarian Lingkungan.
- 8. Kurniawati, D. (2020). Komunikasi Mitigasi Bencana sebagai Kewaspadaan Masyarakat Menghadapi Bencana. JURNAL SIMBOLIKA: Research and Learning in Communication Study (E-Journal), 6(1), 51-58.
- Merta, I. W., Darmanika, I. W. M., & Gifari, R. J. (2022). Penanggulangan Banjir melalui Reboisasi sebagai Bentuk Pemberdayaan Masyarakat Guna Mewujudkan Desa Siaga Bencana. Jurnal Pengabdian Magister Pendidikan IPA, 5(1), 190-194.
- 10. Niode, D. F., Rindengan, Y. D., & Karouw, S. D. (2016). Geographical Information System (GIS) untuk Mitigasi Bencana Alam Banjir di Kota

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- Manado. Jurnal Teknik Elektro dan Komputer, 5(2), 14-20.
- 11. Noor, D. (2014). Pengantar Mitigasi Bencana Geologi. Deepublish
- 12. Pahleviannur, M. R. (2019). Edukasi sadar bencana melalui sosialisasi kebencanaan sebagai upaya peningkatan pengetahuan siswa terhadap mitigasi bencana. Jurnal Pendidikan Ilmu Sosial, 29(1), 49-55.
- 13. Putri, N. U., Jayadi, A., Sembiring, J. P., Adrian, Q. J., Pratiwi, D., Darmawan, O. A., ... & Ikhsan, U. N. (2022). PELATIHAN MITIGASI BENCANA BAGI SISWA/SISWI MAS BAITUSSALAM MIFTAHUL JANNAH LAMPUNG TENGAH. Journal of Social Sciences and Technology for Community Service (JSSTCS), 3(2), 272-279.
- Qodriyanti, A., Yarza, H. N., Irdalisa, I., Elvianasti, M., & Ritonga, R. F. (2022). Analisis Sikap Peduli Lingkungan Siswa di Salah Satu MAN pada Materi Pelestarian Lingkungan. JURNAL EKSAKTA PENDIDIKAN (JEP), 6(1), 111-116.
- Qurrotaini, L., Putri, A. A., Susanto, A., & Sholehuddin, S. (2022). EDUKASI TANGGAP BENCANA MELALUI SOSIALISASI KEBENCANAAN SEBAGAI PENGETAHUAN ANAK TERHADAP MITIGASI BENCANA BANJIR. ANNAS: Jurnal Pengabdian Masyarakat, 2(1), 35-42.
- 16. Rahmawati, S., Asmadi, D., Andriansyah Andriansyah, M. R., Hasanuddin, I., & Hidayaturrahmi, H. Pengabdian Kepada Masyarakat Dengan Pendekatan Bakti Sosial dan Pelatihan Secara Berkelanjutan di Wilayah Provinsi Aceh
- rauzana Ruzana, A., Dharma, W., & Zardan, M. (2022). Sosialisasi Mitigasi Kebencanaan Berbasis Masyarakat Di Desa Peunayong. COMSEP: Jurnal Pengabdian Kepada Masyarakat, 3(1), 119-124.
- 18. Reski, K. (2022). FEKTIVITAS PROGRAM PENANAMAN POHON DALAM MELESTARIKAN LINGKUNGAN HIDUP PASCA BANJIR DI DESA RADDA KECAMATAN BAEBUNTA KABUPATEN LUWU UTARA. Journal I La Galigo: Public Administration Journal, 5(1), 78-85.
- Sari, U. A., Yasri, H. L., & Arumawan, M. M. (2020). Sosialisasi mitigasi bencana banjir melalui pendidikan kebencanaan berbasis kearifan lokal. JMM (Jurnal Masyarakat Mandiri), 4(4), 518-526.

- Sitohang, T. R., Simbolon, G. A., & Pakpahan,
 S. (2022). Peningkatan Pengetahuan
 Masyarakat Tentang Pengelolaan Sampah
 Dalam Upaya Pencegahan Banjir. JURNAL
 KREATIVITAS PENGABDIAN KEPADA
 MASYARAKAT (PKM), 5(6), 1918-1926.
- 21. Suryani, A. I., Riyanto, S., & Zuriyani, E. (2020). Sosialisasi Mitigasi Bencana Banjir melalui Penanaman Pohon di Kenagarian Sungai Durian Kabupaten Padang Pariaman. Jurnal Abdi Insani, 7(1), 1-8.
- 22. Tafsir, M., Djaharuddin, D., Razak, N., Rajab, A., & Lalo, A. (2022). Kepedulian Terhadap Lingkungan: Penanaman Pohon Ketapang Cendana Di Lapangan Desa Pattalassang, Kabupaten Gowa. Jurnal AbdiMas Bongaya, 2(1), 22-28.
- 23. Ungirwalu, S. M. (2012). KEPEMIMPINAN PARTISIPATIF (Sebuah Kajian Teoritis). Societas: Jurnal Ilmu Administrasi dan Sosial, 1(1), 17-31.
- 24. Wunarlan, I. (2019). Adaptasi Penduduk Terhadap Bencana Banjir Di Kota Gorontalo. Prosiding SEMSINA, I-7.
- 25. Yoti doda. (2022). Analisis Daerah Rawan Banjir Kota Gorontalo Berbasis Sistem Informasi Geologi. *Dikmas: Journal peradaban sains,* rekayasa dan teknologi
- 26. Yuniarto, B. (2013). Membangun kesadaran warga negara dalam pelestarian lingkungan. Deepublish.
- 27. Zahir, A., Jusrianto, J., Nur, H., & Parubang, D. (2022). Sanitasi dan Bakti Sosial Dalam Pencegahan Bencana Banjir di Kawasan Pesisir Aliran Sungai Rawan Banjir. Abdimas Singkerru, 2(2), 99-104.