ENVIRONMENTAL EDUCATION THROUGH ELO RIVER RAFTING
ECOTOURISM MAGELANG REGENCY

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ABSTRACT
This community service aims to improve tour guides’ skills in delivering environmental education in English and enhance their environmental awareness attitude. The activity implementation method is direct method from preparation, implementation, evaluation, and discussion of follow-up efforts. The activity results indicate that the activity run well in accordance with the pre-determined targets and outcomes. The activity conducted provides an illustration that the training generates added value in environmental education conveyed in English to the visitors as well as to the tour guides in their attitude toward the environment. Follow-up efforts to be executed next year include creating a profile of each tree around the Elo River and environmental-themed photo spots.

Keywords: Environmental Education, Environmental Awareness Attitude.

INTRODUCTION
Tourism activity is an activity of enjoying an object and its attractiveness (Pamungkas, 2013; Asmin, 2018). Tourism activity trend currently experiences a shift from mass tourism to environmentally friendly or back to nature tourism or known as ecotourism. Ecotourism is a responsible natural tourism activity in an area by considering several elements such as education, understanding, support to natural resources conservation efforts and increase in local community’s income (Peraturan Menteri Dalam Negeri Nomor 33 Tahun 2009 tentang Pedoman Pengembangan Ekowisata di Daerah). It indicates that ecotourism activity requires learning and educational activities in enhancing tourists’ knowledge in the effort of maintaining the environment. Ecotourism is also beneficial as a means in improving community economy (Muttaqin et al., 2011).

One of tourism activities that offers natural beauty in Magelang Regency is Elo River rafting. The rafting activity is conducted by traveling down the river along 11 km. The rafting location map is displayed in Figure 1.

Figure 1. Distance Map of Borobudur Temple with Starting Point of Elo River Rafting
The Elo River rafting area is located at Jl. Raya Borobudur KM.3, Selag, Pabelan, Mungkid, Ngaseman, Magelang, Central Java. Figure 1 shows that the distance between the Elo River starting point and Borobudur Temple is 11.6 km. It indicates that it has a significant potential for development. The Elo River rafting tourism is a priority in tourism development in Magelang Regency and Central Java.

The Elo River rafting activity is an activity using an inflatable raft. The activity depends on beautiful and environmentally-friendly environment. A depict of one of the Elo River rafting environments could be seen in Figure 2.

![Figure 2. A portrait of garbage by the Elo River](image)

Figure 2 reveals that in one of Elo River sites used as a rafting activity, garbage is still found and it could reduce visitors’ convenience. Therefore, it requires education for operators, visitors, and tour guides as well as the surrounding communities to maintain the environment in the Elo River. It is in line with Aulia & Hakim (2017) that river utilization for rafting could become a medium to improve environmentally-friendly attitude.

Environmental education is crucial to be conveyed to the Elo River operators, tour guides, and visitors to well maintain the environment; thus, environmental preservation and conservation efforts are a necessity. (Muhlisin, 2013). It is important to instill awareness to everyone on an obligation to maintain an environment for common sustainability in achieving a balanced and harmonious environment. It is due to environmental damage that causes by low knowledge and environmental awareness attitudes (Suseno et al., 2019).

Based on the aforementioned, efforts are needed to improve tour guides’ attitudes toward environment and skills in providing environmental education to visitors. Hence, a lecturer team from Universitas Tidar that consists of Dr. Ahmad Muhlisin, M. Pd., Moch. Malik Alfirdaus, M. Pd., and Siswanto, M. Pd will perform a community service through an activity of environmental education for the tour guides.

**METHOD**

The environmental training implementation in an effort of improving tour guides’ skills in delivering environmental education and their attitude towards the environment was conducted through several activities. The activities are explained in detail in the following section.

1. Preparation of activity implementation

Preparation for the activity implementation started with determining the number of participant, activity locations, and facilities and infrastructures needed during the activity.

2. Activity implementation

The activity carried out by providing pretest on knowledge of and attitude towards the environment to the tour guides and delivering knowledge of environmental education to the tour guides that must be conveyed to the visitors in the beginning of rafting activity along with explanation of environmental-themed posters.

3. Activity evaluation

The activity conducted by evaluating the tour guides’ proficiency in delivering the environmental education and posttest on attitude towards the environment.

**RESULT AND DISCUSSION**

The community service activity aimed to provide environmental education and improve attitude towards the environment was carried out by UNTIDAR team (Dr. Ahmad Muhlisin, M. Pd., Moch. Malik Al Firdaus, M. Pd., & Siswanto, M. Pd. The activity results are explained in the following sections.

**Environmental Education Training**

The training activity was followed by representative tour guides of each Elo River
rafting operator. The activity carried out by delivering environmental education related to maintaining the environment around the Elo River. It integrated with English skill training. Examples of activities conducted by the tour guides are as follows.

“Bapak Ibu selama pelaksanaan arung jeram dimohon untuk tidak merokok”

Please, do not smoke during rafting activity

Figure 3. No Smoking Poster

“Katakan YES, pada hidup sehat, katakan No pada Merokok”

Say YES to healthy life and No to smoking

“Jadikan setiap hari adalah hari tanpa merokok”

Make every day a no smoking day

“Jauhi Rokok”

Stay away from smoking

“Bapak Ibu pada saat pelaksanaan dan istirahat mohon untuk membuang sampah pada tempatnya”

Please throw the garbage in its places during rafting activity and while you take a break

Figure 4. Poster of Suggestion to throw garbage in its places

“Sayangi lingkunganmu dengan tidak membuang sampah di sungai”

Love your environment by not throwing garbage in the river

“Buanglah sampah pada tempatnya”

Throw garbage in its places

“Bapak Ibu mohon untuk menggunakan air sesuai keperluan dan menutup kembali kran air jika tidak digunakan”

Please use water wisely and turn off taps after use

Figure 5. Poster of Using Water Wisely
Please do not cut trees around the Elo River during the rafting activity.

The activity of delivering environmental education to the visitors before the rafting activity is expected to enhance the visitors’ attitude toward the environment. This activity was capable of improving positive attitude towards the environment (Kesuma, 2016). It is supported by a research result from Krisyanti et al., (2020) that environmental education campaign has a positive effect on environmentally friendly attitude.

Figure 6. Poster of Benefits of trees for the Environment

- “Manfaat pohon bagi lingkungan”
- Benefits of trees for the environment
- “Menurunkan suhu udara”
- Reduce air temperature
- “Menyaring udara dari CO2”
- Filter air from CO2
- “Mengatur aliran air dan meningkatkan kualitas air”
- Arrange water flow and improve water quality
- “Tempat hidup bagi hewan”
- A habitat for animals

The achievement of environmental education activity by the tour guides was indicated by their English skill in delivery the content to the visitors. It carried out through direct speaking English practice by each participant in delivering the environmental education.

Environmental Awareness Attitude

Environmental awareness attitude obtained from pretest and posttest on the implementation of environmental education training activity. It used the following indicators: 1) attitude towards smoking; 2) attitude in managing waste; 3) attitude of using water wisely; and 4) attitude of using the tree. The average score of pretest and posttest of the environmental awareness attitude is illustrated in Figure 7.

Figure 7. Average Score of Environmental Awareness Attitude

Figure 7 indicates that the average posttest score of the environmental awareness attitude was higher than the average pretest score. It can be inferred that the environmental education training was able to improve environmental awareness attitude.

Education could be enhanced through tourism activity that integrates environmental education (Setyobudi & Saliman, 2018; Widiyanto et al., 2019). Environmental education could be improved by utilizing environmental-themed poster media (Putri & Kurniawan, 2017; Krisyanti et al., 2020).
CONCLUSION AND SUGGESTION

Based on the activity carried out, it can be concluded that PKM activity in environmental education conducted to Elo River operator association by UNTIDAR Team that consisted of Dr. Ahmad Muhlisin, M. Pd., Moch. Malik Alfirdaus, M. Pd., and Siswanto, M. Pd was run smoothly in accordance with the pre-determined targets and outcomes. The targets and outcomes included tour guides’ skill in delivering environmental education to the visitors in English and increased in their environmental awareness attitude.

The environmental education training by practicing English directly in delivering environmental education using posters was effective in improving attitude towards the environment. Follow-up efforts in the next year are conducted by creating a profile of each tree and environmentally based photo spots around the Elo River as an added value in the Elo River rafting tourism.

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REFERENCES

