

# Creative Strategy to Reduce Littering for Hikers

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## ABSTRACT

Since a drastic increase of mountain national park visitors, the littering problems were emerging more than ever. Many hikers, especially the amateurs, keep ignoring the park's rules about littering. Many sanctions be it from national park itself and nature lovers community has been deployed, yet the problems still occurs until now. This research has found a gap between these solutions to mountain's litter problem. The lack of education to prevent hikers from littering is actually, needed. Not just cleaning the existing litters. This research was conducted using descriptive qualitative methods, to acquire data such as interview with the personas, questionnaire, and observation. The results of the study show that many hikers already know of the banning of littering in the mountain, but they didn't know how to prevent that, ironically those littering behaviors related from the methods they use since they packed their apparels. Creative strategy is used as the framework of this comprehensive method. The author adopted a set of simulation process named 5A (Aware, Appeal, Ask, Act, Advocate). This method helped author to place each visual communication in the right time, places and ways, matching with the researches and findings.

**Keywords:** hiking, littering, mountain, campaign, creative strategy

## 1. INTRODUCTION

Exploring new places is a delightful and rewarding experience for many people. Not only tourist attractions in urban areas, tourism in nature has also become a popular destination for many people nowadays [1].

The total number of visitors to nature tourism in 2018 was 85,363,253 people, followed by second place, cultural tourism with 35,149,699 people [2]. One of the natural tourist destinations is mountain, which is managed in a National Park. Types of national park visits are divided into 6 types, namely recreation, climbing, research, excursions, camping, and others. This type of climbing is one of the most unique with the mountain itself, as evidenced by the number of visitors for climbing purposes reaching 41,063 people in 2018 [3].

Nowadays, nature activities are not only exclusive activities of MAPALA / other Nature Lovers Organizations, reaching the summit can now be enjoyed by almost all ages and backgrounds. Starting from children, teenagers, to parents, they also feel the sensation of standing thousands of meters above sea level [4], as evidenced by the author's observations on social media and seeing directly at the climbing spot. It doesn't stop there, In December 2012, a big screen film that presents the beautiful natural panorama of the mountains was released. The film was alleged to be the beginning of a change in people's views on mountain climbing activities [5], The increase in visitors has seen very drastically since 2012, one of which is in the Mount Gede

Pangrango National Park (TNGGP). In 2012, it reached 85,486 people, followed in 2013 by 139,767 people, and

until 2018, where the latest statistical data was collected, The number of visitors was already at 251,222 people [6].

The increase in visitors to Mount Gede Pangrango National Park has unfortunately caused a problem that was previously very few in mountain areas, littering. It was recorded, from the Clean Operation which was carried out on March 13<sup>th</sup> to 15<sup>th</sup>, 2020, from the "Gunung Putri" hiking trail, 517 kilograms of trash were found, while from the "Cibodas" hiking trail, 508 kilograms of trash were found, with a total of approximately 1 tonne of Tengger Semeru National Park (TNBTS) on August 17<sup>th</sup>, 2019, accommodated 1,800 visitors, with a litter acquisition of 990 kilograms or nearly 1 ton [8]. Not to mention, the availability of trash cans on the mountain is very minimal.

In addition, the discovery of a dead leopard choking on pieces of boots [9], in Mount Gede Pangrango National Park indicates that this littering problem is not only limited to forest decimation, but also the creatures that live there.

The problem of littering in the mountains still occurs today, despite the many efforts of various parties, such as the application of a fine system, periodic clean operations from the management and nature lovers community, clearly written a warning sign in front of the climbing post, and social sanctions that are being shown a lot on nature lovers social media accounts. The gap in this problem is the ineffective education on litter anticipation for every hikers. The solutions that have been carried out by various parties to date are limited in the short term. Those reasons made author motivated to design this campaign. Through this campaign, the author hope to educate hikers that protecting the environment can be started from small things on oneself

without relying on other people, in order to hiking without leaving trash and bad impact to the mountain itself.

**1.1. Mountain Litter Management**

The discussion about mountain’s littering problem in Indonesia began when the hiking trend was blown up. At 2013, 1 year after “5cm” movie was booming, the numbers of people went hiking to the mountain was rose dramatically [10]. That movie has shown the beauty, struggles, and solidarity throughout their journey in Mount Semeru. Those beautiful things, made people from all sections, be it them nature lovers or just casual traveler interested in hiking. Unfortunately, all those numbers of people, indirectly causing a huge increase in mountain’s litering problems.

Solutions for managing mountain’s littering in Indonesia has been done, multiple times and multiple ways. First, national park has given sets of regulation about littering and it’s fine. Other than that, they have put a warning sign in the first hiking post to not littering along the track. Another effort has been done by several hikers, a social sanction like recording the suspect and made them viral in social media. All those effort arguably, has succeed in minimizing numbers of litters in mountain, at that time. Curative effort has been done to solve this problem in the short term. A preventive method like basic litter management education is really needed for the long term solutions.

**2. METHODS**

The methods used in this writing are qualitative and quantitative. Qualitative research aims to better understand events in real terms, because the data is obtained directly from the words of the informants. This method is useful for getting more in-depth data. While the qualitative method is used less to calculate how many perpetrators littering on the mountain.

Data collection methods used were observation, literature study, questionnaires, and interviews. Observations were made during the climb on Gede Mountain, West Java for two times with different paths. Literature studies are obtained through articles on hiking and nature lovers sites. While the questionnaire was conducted using the Google Form platform, and interviews were carried out directly to three personas who were deemed to meet the criteria as the target market for this campaign.

**3. RESULT AND DISCUSSION**

Based on the data obtained from the interviews, it is known that they are not as bad as initially thought. They are enthusiastic about activities in nature, looking for peace and excitement. However, their mindset and behavior regarding the impact of littering on the mountains, and their anticipation are still low. The interviewees actually knew about the prohibition of littering on the mountain, but they did not know how to prevent it. They littering on the mountain for several reasons, such as being disgusted by

sticky trash supplement sachets (immune booster or honey), not wanting to pollute the bags and pockets, so the trash is thrown away in the track. Some are considered small trash, like candy wrappers, so they just throw them in the track when no one is looking. The absence of trash cans on the mountain, ironically supports their level of unconsciousness to properly dispose of trash. Lack of education from both the national park and their fellow hikers about anticipating their carrier for not producing many litter is also the reason amateur hikers know nothing at their first experience. They do not know about what their careless behavior have killed animals or changed the behavior of animals such as monkeys and wild boar. They don't think that far when they littering. When given information about the issue, they are just starting to think about its impact, and are reluctant to repeat it. However, they do some research before climbing, including good photo spots on the track, things that must be considered, and proper packing procedures, so that the carrier is comfortable to use. Unfortunately the zero waste packing procedure was not included on one of their research. It can be concluded, they are not mere teenagers who are simply looking for existence and popularity through hiking trend, but my sources indicated that they actually like adventure and obstacles, but they are not educated about mountain’s litter management. Based on the data from the questionnaire that was followed by 22 participants, the answer to the reason they littered on the mountain was because it was dirty, complicated, and their carrier were already heavy, so it was tiring to pick up trash. Besides, they also don't know the impact of throwing trash on the mountain. Based on the data from the questionnaire, when asked about the reasons for bringing plastics to the mountain, the answers were mixed. Among others are mineral bottles and plastic food packaging is very practical to carry, simple and easy to carry, ergonomic. Besides that, carrying plastic packaging is considered normal and there are no restrictions, logistics packaging is also easier. Another reason is that when you go home, the burden is reduced because you just throw it away. Meanwhile, based on the data from the questionnaire, from 22 participants, 90.9% answered that they had thrown trash on the hiking trail. 9.1% answered never. This indicates that many of these hikers are the cause of the garbage problem on the mountain.



**Figure 1** First questionnaire

Based on questionnaire data, 77.3% of hikers encountered animals on the mountain, and 22.7% haven’t. In this case, it

could mean a good thing or a bad thing because of the possibility of human activity that pushed animals into the hiking trail. An encounter with wild animal, especially predator, usually doesn't end up well, for human or the predator itself. So, an encounter should be evaded as much as possible.



Figure 2 The appearance of animals when climbing is increasingly intense

In addition, it also conducts a research on daily used media. According to the interview data, the platforms used by the interviewees were Whatsapp, Instagram, Youtube, Line, and Facebook as the media they access every day. Based on their behavior and insights, here the visual communication designs to empower this campaign. The key visual consists the untold story about fatal problems in the mountain, thanks to the littering problems. These key visuals serve as the first stage of the campaign, awareness. The first key visual speaks about one of the problem caused by littering, in mountain area. It describes the increasing encounter between humans and wild boars on the camp or hiking trails. Mount Cikuray, Mount Papandayan, Mount Kembang, and Mount Sindoro hiking trail are acknowledged for having the most frequent wild boar encounter. The picture shows wild boar with her piglet, sneaking on human's camp, while the human is littering. The second key visual speaks about another problem caused by littering. This one is definitely more devastating, because it spoke about animal's life. It's the story from Mount Gede, West Java this year, about the death of leopard by suffocated when it tried to eat and swallow a human boot. The last one brought another story came from the death of animal, again. This one is about a dead tiger found, with tin can inside its throat. Ironically, it happened in the same place as previous story, Mount Gede Pangrango National Park. Some of these key visuals will be used as awareness and appeal stage on this campaign, and using many platforms such as Instagram, youtube, and website. The other problems will be shown as well, such as death of tiger in Mount Pangrango, wildfire as the result from burning trashes, etc. The visual using realist illustration style, combining multiple items into one insightful story, based on reality that happens in the mountain. Below these visuals, there are trashes, mainly hiking-familiar items, usually carried by hikers in Indonesia. They are instant noodle's packaging, with it's seasoning and sauce package, also margarine packaging, tea bottle and its cap. All those

items captured and added blur effect by the author. Those items add a messy and dirty effect on each visual.

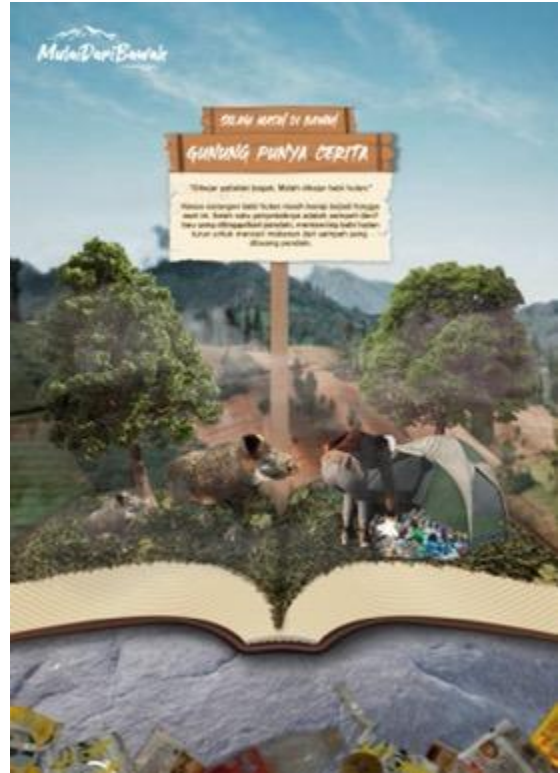


Figure 3 First key visual speak problem



Figure 4: second key visual speak another problem





**Figure 5** Third key visual the story of death animal

Behind these key visuals, there was a comprehensive creative strategy. Starting from obtained insight from several interviews, “It’s just a small litter, wouldn’t even become a thing if I throw it here. From the underestimated small litter, becoming big problem later”. That insight came from several targets whose littering because they think it won’t be much problem, when the reality, it actually does. Departing from the insight, the author came with a big idea, “It starts from the small things”. Small things may refer to small litter that hikers threw away that causing big problems in another day, or small and basic steps which hikers should know about anticipating and managing their litters.

This campaign named “MulaiDariBawah” (Starts from below), which means all preparation that needed for preventing much littering in the mountain, starts from below, before they went hiking. Packing tips to minimize littering potential, things we should know in the mountain about litters and the inhabitants. What this campaign want to say is protecting environment has become our own responsibility since we decided to step on the mountain. Small things aren’t to be underestimated, but to be appreciated and learned. How this campaign would say is show the problem. This campaign will show the unheard problems caused by littering in the mountain, how fatal it could be. After that, this campaign will educate hikers with insightful steps which sometimes skipped and underestimated.

Simulation of the adoption process is using 5A, which are Aware, Appeal, Ask, Act, and Advocate. At the aware stage, there will be a video played on youtube ads. That

video shows falling pile of litters, in front of our eyes (POV style). Couple seconds later, a wild boar came, and charge into our face, making those litters thrown apart. Continues from the video, there will be several items as well in other media. There will be youtube banner ads, Instagram post, and pop-up banner ads on website. Next, move to the second stage, appeal. In appeal, there will be three Instagram stories and an Instagram post serie consist stories of problem that happens in the mountain. After showing those problems, new visual will emerge. These visuals and copies, serve as some kind of adventurer handbook, which consist tips about hiking without much littering. There will be fifteen steps, which indirectly divided into three stages. Before hikers went to the mountain, in the mountain, and on the way home (basecamp). After appeal stages done, this campaign continue to ask stages. This stage consist the main source of information and education, continuing from Instagram posts. Unlike previous stages, this stages using microsite as the media. After hikers read and understand the education and information. They will go into the next stages, act. In this stage, their knowledge will be tested and evaluated, by some kind of evaluation quiz. Finishing this quiz, will grant hikers appreciation badge, a symbol of worthiness as a wise and good hiker. After they learn and applied the education given, they are suggested to capture what they get and apply from this campaign, such as how they pack they things and what important things they used in the mountain. After capturing those pictures or videos, they will share and advocate to the other hikers or would-be hikers so they will join this campaign, therefore preventing littering problem circle. They will share on their social media account, on their Instagram post and stories, and might share their badge as well, to promoting and advocating this campaign.

#### 4. CONCLUSIONS

Lack of education about litter management during climbing is one of the reasons for the increasing amount of litters on the mountain. Many curative efforts would only solve this problem in short term. Because once they cleanse the mountain that day, tomorrow, next week, or next month, Those mountains would have a same amount, or worse of litters.

Prevention method is really needed right now for the long term. Without education to prevent this increase in the amount of litters, sooner or later, all our fear might become true. Animals will lose their habitat, they might die or they adapt, and looking for food by going to the mountain feet, near human habitat, which ironically, when they do, human usually ended up killing them nonetheless.

For the mountain itself, would suffer equal destruction as well, such as erosion caused by plastic inside the soil, or desolation caused by wildfire, which might led to dried water springs. All those negative effects eventually would also affect us. So, it is hoped that with the campaign for educating hikers to be more competent in managing litter during climbing, it might be a successful long-term solution for solving the problem of mountain litters.

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