

LOCAL PEOPLE PERCEPTION ABOUT FOREST CONVERSION IN “GEGER BINTANG MATAHARI” WEST JAVA INDONESIA

Meria Octavianti¹
Herlina Agustin²
Slamet Mulyana³

¹ Faculty of Communication Science, Universitas Padjadjaran (meria.octavianti@unpad.ac.id)

² Faculty of Communication Science, Universitas Padjadjaran (h.agustin@gmail.com)

³ Faculty of Communication Science, Universitas Padjadjaran (slamet.mulyana@unpad.ac.id)

Accepted date: 3 December 2017

Published date: 15 July 2018

To cite this document: Octavianti, M., Agustin, H., & Mulyana, S. (2018). Local People Perception About Forest Conversion In “Geger Bintang Matahari” West Java Indonesia. *Journal of Tourism, Hospitality and Environment Management*, 3(10), 39-48.

Abstract: Kawasan Bandung Utara (North Bandung Area) is an area of forest administered by Perum Perhutani (A State-owned Forest Enterprise). Much of the forest in that area has been converted into excursion forest. The conversion happened because Perum Perhutani wanted to increase local people's empowerment. Local people could be involved in managing and preserving forest plundered. Because of that background, this paper will describe and analyze local people's perceptions about transformation of forest landscapes from the production forest to excursion forest in Kawasan Bandung Utara, West Java, Indonesia, especially in “Geger Bintang Matahari” of Mount Putri. This study used qualitative method with case study approach. In-depth interview with key informants was conducted to obtain primary data, whereas observation and library study were done to gain secondary data. The result showed that forest conversion in Mount Putri was conducted to preserve the forest and to implement Collaborative Forest Management (PHBM) program between Perhutani and nearby villagers. The high attention to forest conversion led to high expectation and motivation within the community to continuously involve in managing the excursion forest Geger Bintang Matahari. This indicates that the existence of Geger Bintang Matahari is well perceived by the people who live around the forest.

Keywords : Public Perception; Forest Conversion; Environmental Communication

Introduction

Kawasan Bandung Utara (North Bandung area) is a water absorption area that has been able to maintain the natural ecosystem in Bandung, West Java, Indonesia. A basin topography, Bandung needs lots of forests as water absorbers. In fact, according to Perhutani's Deputy

Administrator of KPH Bandung Utara Asep Aan Darsana, the forest area of Kawasan Bandung Utara is now only 25,279 acres or 30% of total water absorption area needed¹.

Though it has been established as a protected and conservation area since 1982 by Governor's Decree number 181, forest destruction in Kawasan Bandung Utara is still going on. As a matter of fact, forest destruction took place from 1998 to 2010 due to massive plunder by local people who lived in villages in the very own forest. This led to lower the forest area in West Java region. In 2016 the forest area of West Java was classified as the most critical in Indonesia, where there's only 13% of the total area of the province—far below the minimum standard of 30%². Some factors that drove this reduction are the conversion of forest area to mining and geothermal area and tourism area as well as forest fires, illegal logging, and many more.

Ironically, we are all aware that forest holds a vital role for people's lives. According to Law number 41 of 1999 regarding forestry, forest is an ecosystem unit in term of a plot of land containing bio-natural resources dominated by vegetation in integrated unity of environment thereof³. Whereas according to Suparmoko (1997: 235), forest is a community association of plants and animals dominated by vegetation in certain area so as to form a micro-climate and certain ecological conditions. Suparmoko also states that the functions of the forest are as follows: (1) to manage water, prevent and resolve flood and erosion, and maintain soil fertility; (2) to provide forest products for community and industry so as to support economic development; (3) to maintain climate and provide good influence; (4) to provide natural beauty in form of nature reserves, wildlife reserves, hunting park, and excursion park as well as a lab for science, education, and tourism; (5) one element of national development strategies.

Seeing the alarming condition of the forests in West Java, particularly in Kawasan Bandung Utara, and considering the many benefits of forests, the problems resulted from improper forest arrangement must be a concern of many stakeholders, not only government but also the entire layers of society and other relevant institutions. Aside from its role in national economic system, Perhutani has a role in promoting environmental sustainability system and socio-cultural system, mainly in empowering village communities around the forest. They want to help them to enjoy the benefits of forests. They engage them to take possession of forest surrounding their homes so they share responsibility for managing it and keeping it off plunder. They also engage them to take part in developing forest area for excursion place while maintaining the environmental sustainability.

Based on Government Regulation number 72 of 2010, the purpose and objectives of Perhutani is to run business for public benefit in the form of provision of goods and/or services related to forest management and forest products of high quality at affordable prices based on the principles of sustainable forest management and the principles of good corporate governance. In order to manage forest and its products, they engage local people to take part in developing forest area for excursion while maintaining the environmental sustainability. They engage them to take possession of forest surrounding their homes so they share responsibility for managing it and keeping it off plunder.

1Hedi Ardia. 2015. Sisa Luas Hutan KBU terbilang Minim. Retrieved from <http://bandung.bisnis.com/read/20150505/82444/532981/sisa-luas-hutan-kbu-terbilang-minim>, January 8, 2017.

2Retrieved from <http://www.dpr.go.id/berita/detail/id/13696> on January 10, 2017.

3Forest, types of forests, and benefits of forests. Cited from dishut.jabarprov.go.id/images/artikel/hutan-jenis-hutan-dan-manfaatnya.doc, 10 Januari 2017.

To support the efforts above, Perhutani build a system known as the Community Based Forest Management (PHBM) based on Decree number 136/KPTS/DIR/2001. Through PHBM, they provide opportunities for village communities to take part in forest management to increase their welfare. The Administrator of Forest Management Unit of Perum Perhutani of North Bandung Wismo Tri Kancono states that public has to enjoy the benefit of forest to increase their sense of belonging to the forest. They have to be introduced and engaged to harness the forest in proper ways, without destructing it and disrupting its main function. One of the ways is by converting some conservation forest areas to excursion areas in order to increase revenue from non-wood forest products while maintaining the main function of the forest.

As a result, many forests in Kawasan Bandung Utara are converted to new excursion forests to attract visitors to enjoy natural beauty. Along with the economic improvement of forest community, the emergence of these forests will secure the sustainability and beauty of the forests more and more. Geger Bintang Matahari is one of excursion forests resulted from a partnership between Perhutani and village communities in Mount Putri area. The partnership itself doesn't necessarily go well. The Community Based Forest Management (PHBM) campaign is not free of obstacles and barriers. Common perception of all stakeholders, mainly Perhutani and forest communities represented by LMDH, are the key factor in realizing the excursion forest. Without common knowledge, understanding, and confidence, the sustainable forest will be difficult to realize, and communication is the first and main factor to gain all of them.

Thus, this study sought to find out the perception of local people on forest conversion for excursion, particularly in Geger Bintang Matahari. Specifically, this study will describe the reason why the forest in Geger Bintang Matahari was converted and to what extent the attention, expectation and motivation of the people after the conversion took place.

Literature Review

Previous Research

Several studies on the perception of local people on forest conversion have been conducted. One of them is "Persepsi dan Perilaku Masyarakat dalam Pelestarian Fungsi Hutan sebagai Daerah Resapan Air (The Public Perception and Behavior on the Preservation of Forest Function as Water Absorption Area)" conducted by Umar (2009). The study aims to find out the public perception and behavior on the preservation of forest function as water absorption area. This descriptive analytical study processed data collected from questionnaire distributed to respondents and field observations. The study took place in Kawasan Hutan Penggaron (Penggaron Forest Area), Semarang Regency, Central Java. After analyzing data, the study concludes that the existing cultivation activities in Kawasan Hutan Penggaron disrupt the function of the forest as a water absorption area. Local people perceive that the forest not only serves ecological but also as a source of livelihood. In regard to forest management policy, they don't have any perception on the legal norms of forest management. And in regard to forest management institutions, they don't think that they're a part of any institutions so they don't bound to the institutional rules. In regard to rights and obligations of forest management, the community's perception is strongly related to their interest to enjoy benefits from the existence of forests without obeying any forestry law. In regard to community's behavior (activity), they tend to conduct their cultivation activities in protected (forest) area. Accessibility support and housing infrastructure in Kawasan Hutan Penggaron has converted it to an economic area so it's no longer an isolated area (protection area).

The other study is "*Persepsi Masyarakat Sekarang tentang Konservasi Lingkungan (The Perception of Today's Community on Environmental Conservation)*". The study conducted by Lutfi and Wijaya in 2011 aims to find out the community's perception on environmental conservation and the adoption of perception in their activities. The study used qualitative method to obtain accurate and valid data. The results show that the community's perception on environmental conservation is inseparable from their activities a farmer. Their dependent on environment shapes their perception on conservation inherent in their daily live patterns. But this is changing along with social changes in the community. The interaction between Sekaran community and immigrant students promotes changing views of nature and livelihood. When the livelihood system is no longer rely on the management of natural resources, the perception on environmental conservation changes as well. It is proven by their activity pattern that is not fully committed on environmental conservation. Collective ritual that used to preserve environment has now been changed by personal activity in narrower meaning.

Public Perception

According to Jalaludin Rakhmat (2005: 51), perception is an experience of objects, events, or relationships obtained by concluding information and interpreting the message. Perception is to interpret the sensory stimuli. Interpreting the sensory information not only involves sensation, but also attention, expectation, motivation and memory.

Based on Rakhmat's explanation as an expert in psychology of communication, the writers decided to study perception from three aspects: attention, expectation and motivation. The writers will not discuss sensation and memory in this study because according to Rakhmat they belong to a broader concept—out of perception but still a part of intrapersonal communication system. Thus, the information processing that occurs within the individual, or the so-called intrapersonal communication, comprises sensation, perception, memory, and reflection (Rakhmat, 205: 49).

At the moment the writers only study a process within a man, particularly perception. To study one's perception, we have to understand three factors: attention, expectation and motivation. According to Andersen (in Rakhmat, 2005: 52), attention is a mental process when a stimuli or series of stimuli weakens. Rakhmat adds that there are four external factors that attract one's attention: movement, intensity of stimuli, novelty, and repetition.

In addition to attention, another factor that affects perception is expectation. According to the dictionary of psychology, expectation is a studied bias in which an organism may predict certain future situation by responding a stimulus (Kartono, 1987: 160). Whereas Riggio (1990: 172) states that "expectancy is the perceived relationship between the individual's effort and performance of the behavior". Expectancy is the perceived relationship between the individual efforts and the reality. Thus, expectancy is the individual's presupposition resulted from the relationship between the effort and the desired result that has a certain value to the individuals themselves.

The last factor is motivation. According to Azwar (2000: 15), motivation is a stimulation, encouragement or driving force owned by a person or group of people who want to do and work optimally in implementing something that has been planned to achieve the goals. Whereas according to Malayu (2005: 143), motivation is derived from latin word *move* that means an encouragement or driving force that energizes one to get him to cooperate, work effectively, and integrate with all his resources to achieve satisfaction. The forms of encouragement and stimulation may vary, and one of them is needs.

Abraham Maslow's hierarchy of needs theory states that there are five tier model of human needs that are able to promote motivation within someone. (1) *Physiological needs*, i.e. the needs for food, drink, air, warmth, shelter and many others for physical survival. It is the basic needs. (2) *Safety needs*, i.e. the needs for protection from physical and psychological violence, such as an environment that is free from pollution, protection for work safety and health as well as freedom from fear. (3) *Social needs*, i.e. the needs for love and belongingness. Humans are social beings. Each human who lives in this world needs a family and friends. (4) *Esteem needs*. Maslow states that after fulfilling physiological, safety and social needs, one needs to be admitted by others, have a good reputation and self-confidence as well as recognized by others. (5) *Self-Actualization*. According to Maslow, this is the highest level of needs. It is one's needs to fulfill his personal ambition.

There are several requirements in order to perceive and be aware of perception: (1) an object to perceive; (2) senses or receptors to receive stimuli; (3) attention as the first step to perceive. Through a selection of stimulation, one can deliver his/her respond to or opinion on a certain object. Perception can be measured from how an individual values an object. The measurement can use a questionnaire in order to obtain information about/viewpoint of a certain problem based on one's senses. The result is right or wrong perception (Winardi, 2002).

According to Sunaryo (2004), there are two kinds of perception: 1) external perception (the stimuli come from the outside of the individual); 2) self-perception (the stimuli come from the inside of the individual). According to Notoadmodjo (2003), after one knows what the stimulus is, he/she should value it. Thus, he/she is expected to implement it.

The Definitions and Types of Forests

According to Law number 41 of 1999 regarding forestry, forest is an ecosystem unit in term of a plot of land containing bio-natural resources dominated by vegetation in integrated unity of environment thereof⁴. Whereas according to Suparmoko (1997: 235), forest is a community association of plants and animals dominated by vegetation in certain area so as to form a micro-climate and certain ecological conditions. Suparmoko also states that the functions of the forest are as follows: (1) to manage water, prevent and resolve flood and erosion, and maintain soil fertility; (2) to provide forest products for community and industry so as to support economic development; (3) to maintain climate and provide good influence; (4) to provide natural beauty in form of nature reserves, wildlife reserves, hunting park, and excursion park as well as a lab for science, education, and tourism; (4) one element of national development strategies.

According to Forestry Service of West Java, by function the types of forests are as follows: (1) Protected Forest. It serves as a protection for life support systems. (2) Conservation Forest. It has certain characteristics and serves as a preservation for the diversity of plants and animals and their ecosystems. Conservation forest comprise: (a) Forest Preserve is a forest with certain characteristics that serves as a preservation for the diversity of plants and animals and their ecosystems as well as a life support area. It comprises nature preserve, wildlife reserve and hunting park. (b) Nature conservation forest is an area of land or waters with certain characteristics that serves as a protection for life support systems, a preservation for the

4 Forest, types of forests, and benefits of forests. Retrieved from dishut.jabarprov.go.id/images/artikel/hutan-jenis-hutan-dan-manfaatnya.doc, accessed on 10 Januari 2017

diversity of plants and animals, and a sustainable use for natural resources and the ecosystems. Nature conservation forest comprise national park, forest park (TAHURA) and natural park. (3) Production Forest. It is a forest area for forest products to meet the needs of public, development, industry and export. There are three types of this forest: limited production forest (HPT), permanent production forest (HP), and convertible production forest (HPK).

METHOD

To reveal the perception of local people on forest conversion in Mount Putri, particularly in "Geger Bintang Matahari", the writers used qualitative method. This was that the study sought to build a complex and comprehensive picture of the perception of the community on the forest conversion in their neighborhood by analyzing words stated by the informants and reporting their viewpoints in detail, where all of those were conducted in natural setting (Creswell, 2010: 15).

This study used case study approach to give a comprehensive description about the reason why the forest was converted and the community's perception and expectation of Geger Bintang Matahari. This is in accordance with Mulyana (2002: 201) who states that case study is a comprehensive analysis and explanation on many aspects of an individual, a group, an organization (community), a program, or a social situation. By comprehensively studying an individual, a group or a phenomenon, the writers seek to provide a comprehensive and in-depth viewpoint on the subject under study.

According to Yin (2010), a case study research can be conducted based on six different evidences: documentation, archive, interview, direct observation, participant observation, and physical device. In this study, the data are collected from direct observation, interview, and literature study. Direct observation is applied to the activities of Perhutani and the villagers of the excursion forest of Geger Bintang Matahari. The researchers conducted an in-depth interview with Wismo Tri Kancono, the Chief Administrative Officer of Perhutani, five key administrators of Forest Villagers Association (LMDH), five visitors from Bandung and two out-of-town visitors. This observation and interview are conducted to acquire primary data for this study. Whereas secondary data are collected from literature study on many documentations and archives related to the topic under study.

Data analysis is conducted by using interactive model conveyed by Matthew B. Miles & Michael A. Huberman (1992 in Salim: 2001). The model describes that data analysis is conducted through three stages: (1) *sorting*, i.e. focusing on simplifying, abstracting, and transforming raw data from field or so-called data reduction; (2) *data display*, i.e. describing compiled information for (3) *conclusion drawing and verification*. The writers seek to find the meaning of every phenomenon on the field and record orderliness, clarification pattern, possible configuration, causality groove, and proposition. During the research, each conclusion is continuously verified to acquire validity and solidity.

DISCUSSION

Geger Bintang Matahari is an excursion forest located in Mount Putri, Desa Jayagiri, Kecamatan Lembang, West Bandung Regency. According to Perhutani's Administrator of KPH Bandung Utara Wismo Tri Kancono, the excursion forest officially opened on June 28, 2016 is named Geger Bintang Matahari because the visitors can enjoy the sunrise and sunset scenes during the day and millions of stars during the night. Geger derived from Sundanese, the mother tongue in the region where the forest is located. It means long mountain slopes. Thus, this place is called "Geger Bintang Matahari".

Located at 1587 meters above sea level, Geger Bintang Matahari is an excursion forest administered by Perum Perhutani of KPH Bandung Utara. This forest conversion is held as an effort to maintain forest sustainability. This is also the application of Community Based Forest Management (Pengelolaan Hutan Bersama Masyarakat/PHBM), a program of Perum Perhutani. PHBM is designed to manage forest resources in form of a partnership between Perum Perhutani and the villagers around the forest or other stakeholders in order to preserve the functions and benefits of forest resources optimally and increase Human Development Index (Indeks Perkembangan Manusia/IPM) in a flexible, participatory, and accommodating manner.

The Community Based Forest Management (PHBM) program is established through Perhutani's Decree number 136/KPTS/DIR/2001. PHBM is a forest management shared between Perum Perhutani, forest communities and other stakeholders in order to preserve the functions and benefits of the forest optimally and proportionally. After a while, PHBM is improved to PHBM plus through Decree number 268/KPTS/DIR/2007. Through PHBM plus, it is expected that forest resources management will be more flexible, accommodating, participatory, and socially responsible so that it may contribute to the improvement of IPM towards self-reliant forest villagers and sustainable forest (Masyarakat Desa Hutan Mandiri dan Hutan Lestari).

This study shows that the public perception on forest conversion from production to excursion in Geger Bintang Matahari is highly positive. According to Jalaludin Rakhmat (2005: 51), perception is an experience of objects, events, or relationships obtained by concluding information and interpreting the message. Perception is to interpret the sensory stimuli. So, the positive public perception shows that the communities have a good interpretation on the presence of this excursion forest. Excursion forest is a part of nature conservation forest area—a forest that provides protection for life support system, preservation for the diversity of plants and animals as well as sustainable exploitation for natural resources and the ecosystem. The positive perception is gained because the communities who live around Gunung Putri area have a positive attention, motivation and expectation on the presence of Geger Bintang Matahari.

The community's attention to this forest conversion is so high because they think excursion forest is something new. They never thought before that the forest near their homes would be crowded by people from everywhere. They only thought that a place to farm. A native informant stated that he never thought a forest he used to farm could be a tourist attraction that brings in many visitors.

“Boro-boro kabayang ieu leuweung bakal sarame ieu. Awalna ge, bapak mah reuwas, emang bisa kitu leuweung ieu jadi tempat wisata, rame ku wisatawan (I never imagined this forest would be this crowded. At first I was surprised. Could a forest be a tourist attraction, full of visitors?”

In addition to novelty, community's attention is getting higher because forest conversion has changed their habits. At first they only worked as a farmer. But, after the establishment of Geger Bintang Matahari as a tourist attraction, many of them changed career. Geger Bintang Matahari as the implementation of Community Based Forest Management (PHBM) program shows that there are movement in the neighborhood. Previously, the management system used was the state-based forest management. But after PHBM applied, the community-based forest management is used. Represented by Forest Villagers Association (LMDH), the villagers have

a big role in forest management, from planning and implementation to evaluation. The expected result is that the provision of resources and the benefits can be shared mutually. While for further implication is that forest management is adapted to local needs and traditions. Community Based Forest Management (PHBM) emphasizes that, as a subject, community must really take part in the managing mechanism. One of the informants, who is also a staff of Geger Bintang Matahari, stated that the management of this tourist attraction is a synergy of several stakeholders: Perhutani as the land owner, LMDH as the representative of the villagers, and the village apparatus.

“Bapak ngiringan ngelola ieu kawasan. Unggal dinten bapak aya di dieu. Sanes bapak wae, tapi tatangga nu sanes oge seueur nu ngiringan. Ngke tiap sasih, aya pertemuan. Babagi. Aya perhitunganna sabaraha kangge perhutani, sabaraha kangge desa, sabaraha kangge pengelola anu ngurus ieu kawasan (I take part in the management of this place. I come here every day. I’m not the only one. Many of my neighbors also participate. Once a month, we have a meeting. We share the profit between Perhutani, the village, and the organizers of this place.”

Geger Bintang Matahari is not the first excursion forest created through PHBM program. The first one from PHBM program in Kawasan Bandung Utara is Puncak Bintang. It shows a huge success. Not only from forest sustainability, Puncak Bintang provides positive contribution to nearby communities. Seeing that fact, not only the attention of villagers in Geger Bintang Matahari that becomes positive, but also the expectation of the villagers around the excursion forest. Whereas Riggio (1990: 172) states that “expectancy is the perceived relationship between the individuals’ effort and performance of the behavior”. Expectancy is the perceived relationship between the individual efforts and the reality. Thus, expectancy is the individuals’ presupposition resulted from the relationship between the effort and the desired result that has a certain value to the individuals themselves. The success of Puncak Bintang grows positive expectation within villagers.

Beside attention and motivation, the presence of Geger Bintang Matahari also grows motivation. According to Azwar (2000: 15), motivation is a stimulation, encouragement or driving force owned by a person or group of people who want to do and work optimally in implementing something that has been planned to achieve the goals. Whereas according to Malayu (2005: 143), motivation is derived from latin word *move* that means an encouragement or driving force that energizes one to get him to cooperate, work effectively, and integrate with all his resources to achieve satisfaction. The forms of encouragement and stimulation may vary, and one of them is needs.

As a program of PHBM, Geger Bintang Matahari provides the principle of mutual sharing and positive motivation for the community. This mutual sharing principle, in which consists of space sharing, role sharing, time sharing, and benefit sharing, becomes the source of community's motivation. Space sharing in PHBM means Perhutani and the villagers share the forest area either imaginary or physically. The excursion forest area in fact is administered by Perum Perhutani, but the villagers can be a part of it. By the same token, the village road belongs to the villagers, but it can be used for the access to the excursion forest. By this "space sharing" concept, the community has rights and obligations towards clearly shared spaces. These rights and obligations are the implementation of role sharing, another sharing concept. The community may have many roles in the excursion forest area based on their rights and obligations. They can take part in the effort to achieve the goals of the excursion forest. Beside space and role sharing, the community may share time in playing their role in the shared spaces.

The three concepts highly affect benefit sharing, the last concept. After the villagers play all of their roles, they can enjoy the benefits of Geger Bintang Matahari. The benefits are in form of profit sharing from every activity in the excursion forest.

The sharing concept in the development of Geger Bintang Matahari grows positive motivation within the villagers. Abraham Maslow's hierarchy of needs theory states that there are five tier model of human needs that are able to promote motivation within someone. (1) *Physiological needs*, i.e. the needs for food, drink, air, warmth, shelter and many others for physical survival. It is the basic needs. (2) *Safety needs*, i.e. the needs for protection from physical and psychological violences, such as an environment that is free from pollution, protection for work safety and health as well as freedom from fear. (3) *Social needs*, i.e. the needs for love and belongingness. Humans are social beings. Each human who lives in this world needs a family and friends. (4) *Esteem needs*. Maslow states that after fulfilling physiological, safety and social needs, one needs to be admitted by others, have a good reputation and self-confidence as well as recognized by others. (5) *Self-Actualization*. According to Maslow, this is the highest level of needs. It is one's needs to fulfill his personal ambition. The community feels that the five needs stated by Abraham Maslow are gradually fulfilled with the presence of Geger Bintang Matahari that promotes the concept of sharing. The positive motivation affects the public perception on the presence of Geger Bintang Matahari as an excursion forest that contributes for the development of the community and the improvement of the livelihood of the nearby villagers.

CONCLUSION

The forest villagers around Mount Putri perceive positively the presence of Geger Bintang Matahari as an excursion forest that is able to attract visitors while maintaining the sustainability of the forest. This positive result is based on the attention, expectation, and motivation that rise within the villagers thanks to the presence of Geger Bintang Matahari. The communities also show a high expectation where they expect Geger Bintang Matahari will be an excursion forest that manages to maintain forest sustainability as well as contributes positively to the improvement of socio-economics conditions of the nearby communities. An implementation of Community Based Forest Management (PHBM) program of Perum Perhutani, Geger Bintang Matahari is able to grow a positive motivation to fulfill life necessities within the villagers.

REFERENCES

- Admin dishut.jabarprov.go. (2016). Hutan, jenis hutan, dan manfaatkan. Accessed through dishut.jabarprov.go.id/images/artikel/hutan-jenis-hutan-dan-manfaatnya.doc on January 10, 2017
- Admin Swara Pangandaran. (2016). Hutan Pangandaran Perlu Dipulihkan. Accessed through <http://swarapangandaran.com/hutan-pangandaran-perlu-dipulihkan/> on January 10, 2017 at 11.00 a.m.
- Agus Salim. (2001). Teori dan Paradigma Penelitian Sosial. Yogyakarta: Tiara wacana
- Creswell, J. W. (2007). *Qualitative Inquiry and Reserach Design: Choosing Among Five Approaches*. New Delhi: Sage.
- Kartono dan Gulo.(1987). Kamus Psikologi. Bandung: Pionir Jaya
- Luthfy & Wijaya. (2011). *Persepsi Masyarakat Sekaran tentang Konservasi Lingkungan*. Jurnal Komunitas Universitas Negeri Semarang. Accessed through

<http://journal.unnes.ac.id/nju/index.php/komunitas/article/view/2290/2343> on January 8, 2017, at 09.30 p.m.

- Mulyana, Deddy. (2002). Metodologi Penelitian Kualitatif. Bandung: PT Remaja. Rosdakarya.
- Malayu, Hasibuan. (2005). Manajemen Sumber Daya Manusia. Edisi Revisi. Jakarta: Bumi Aksara
- Notoatmodjo, Soekidjo. (2003). Pendidikan dan Perilaku Kesehatan. Jakarta : PT. Rineka Cipta.
- Odjie. (2016). Hutan Tersisa 13%, Konservasi Kawasan Hutan Jabar Mendesak. Accessed through <http://www.dpr.go.id/berita/detail/id/13696> on January 10, 2017, at 09.20 a.m.
- Rakhmat, Jalaludin. (2007). Metode Penelitian Komunikasi. Bandung: Rosdakarya
- (2005). Psikologi Komunikasi. Bandung: PT Remaja Rosdakarya.
- Riggio, R.E. (1990). Introduction to Industrial and Organization Psychology. London: Scott, Forestman and Company.
- Suparmoko. (1997). Ekonomi Sumberdaya Alam dan Lingkungan. Yogyakarta: BPFE-YOGYAKARTA.
- Sunaryo. (2004). Psikologi Untuk Keperawatan. Jakarta:EGC
- Umar. (2009). *Persepsi dan Perilaku Masyarakat dalam Pelestarian Fungsi Hutan sebagai Daerah Resapan Air: Studi Kasus Hutan Penggaron Kabupaten Semarang*. Master's Degree Program on Environmental Science: Dipenogoro University of Semarang.
- Winardi. (2002). Motivasi dan Pemotivasi dalam Manajemen. Jakarta: Raja Grafindo Persada
- Yin, R. K. (2010). *Studi Kasus: Desain dan Metode*. Jakarta: Rajagrafindo Persada.