

THE USE OF LOCAL WISDOM  
IN SUSTAINING ENVIRONMENTAL  
CONSERVATION:  
A STUDY ON ENVIRONMENTAL  
COMMUNICATION ACTIVITIES  
IN SINDANGKERTA VILLAGE,  
CIPATUJAH, THE PROVINCE  
OF WEST JAVA, INDONESIA

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A B S T R A C T

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**T**he environmental conservation in Indonesia is in critical condition. Arguably, the issue has not been a major concern for most people. Even though various policies have been instigated by the authorities, either directly from the Ministry of Environment of Indonesia or through agencies under it, destruction and over-exploitation of natural resources still occur. Therefore, since the official regulation is not always effective, it is necessary to create good environmental communication strategies in order to increase public awareness about the importance of environmental conservation.

This article is based on a research applying a case study method about the practice of using local wisdom as a means of effective environmental communication in Sindangkerta Village, Cipatujah, one of the rural communities in West Java, Indonesia. The study found that the existing local wisdom has been successfully used to preserve natural resource; either around Sindangkerta beach or in two natural forests belongs to the village's territory. By conducting traditional approach and the diffusion of ancestral wisdom through myth and folklore, the community leaders have made the people of Cipatujah voluntarily participate in preserving the surrounding environment without the necessity to enact legal pressures and sanctions.

It can be concluded that local wisdom is considered one of the effective tools in environmental communication, especially with its proximity to the

local belief. Based on this study, it can be argued that the wisdom within the beliefs and myths are more influential in ensuring compliance among traditional society compared to the official policies and regulations.

**KEY WORDS :** local wisdom, environmental conservation, environmental communication

## INTRODUCTION

### **Background**

The discourse of environmental sustainability is a crucial yet complicated issue. It is crucial because of its urgency in preserving the world and the quality of life in the future. Whereas, the complication occurs because it is not only an issue of conserving natural conditions but also about the interaction amongst all elements of the ecosystem that are interrelated, including the influence of human being as the dominant creature in the circle of life.

The significant position of humans within the ecosystem is a result of its dominance in using the natural resource. In other words, humans have the power to consciously determine the future of environmental sustainability. Beside natural causes, the term “man as ecological dominant” has been recognised for a long time to express what humans could do that affected the condition of the world. Gordon C. Merrill for example, wrote an article in 1958, discussing the evidence of humans’ interference within natural history. The article entitled “The Historical Record of Man as an Ecological Dominant in the Lesser Antilles” mentions some archaeological findings that proved the impact of man towards the extinction of some flora and fauna species in the Lesser Antilles, small Islands in West Indies (Merrill, 1958: pp. 17-22). Furthermore, Richard D. Alexander from the University of Michigan, states the major aspect of environmental change is not natural factors such as climate, weather conditions, food lacks, parasites or predators, but the humans with their power and intellectuality to make use the natural resource.

... humans had in some unique fashion become so ecologically dominant that they in effect became their own principal hostile force of nature, explicitly in regard to evolutionary changes in the human psyche and social behavior... Rather, it was the necessity of dealing continually with our fellow humans in social circumstances that became ever more complex and unpredictable as the human line evolved. Social cleverness, especially through success in competition achieved by cooperation, becomes paramount... (Alexander, 1990 as quoted in Flinn et al., 2004: p. 14)

On this basis, it could be argued that humans are the main biotic factor that can change the structure of flora and fauna. In many cases, the change has caused natural damages because of the over-exploitation and irresponsible human actions such as illegal logging, deforestation as well as animal hunting. Most of these cases happened because of the lack of people's knowledge about the significance of environmental conservation as well as the regulations about natural preservation. This situation is used by illegal traders and smugglers who have the intention to gain revenues from exotic plants and animals trading in the black markets.

This situation is happening now around the globe, including in Indonesia. The Indonesian Ministry of Marine Affairs and Fisheries, as well as the Ministry of Environment and Forestry, have enforced many legal actions against these illegal traders and smugglers. There are increasing numbers of legal operations every year, which producing a huge statistical data about law enforcement and confiscation of the valuable natural resource.

Table 1.  
Percentage of Fishery Industries' Compliance towards Regulations 2016

No	Indicators	Realisation 2015 (%)	2016		
			Target (%)	Real (%)	(%)
1.	Fishery ships' compliance towards monitoring system regulation	84.31	80	69.78	87.22
2.	Fishing industries' compliance towards existing regulations	95.67	93.37	94.20	101.00
3.	Fishery ships' ability for regulatory check	97.69	96.78	96.07	99.00
4.	Fishery processing industries' compliance towards existing regulations	82.61	88.29	97.33	110.00
5.	Fishery distribution's compliance towards existing regulations		66	91.85	120.00
6.	Fishery cultivation industries' compliance towards existing regulations	79.74	82.23	83.87	102.00
7.	Compliance percentage about the regulations of using fishery areas	45.84	30.00	50.10	120.00
8.	Fishery industry owners' compliance towards existing regulations	36.78	38.00	73.02	120.00

Source: Work report of Ministry of Marine Affairs and Fisheries 2016

Table 2.  
Confiscation Operation Recap from Natural Plants and Animals Illegal Distribution 2015

No	Animal type	Quantity	Information
1.	Deer	6 pieces	Whole skin
2.	Sun bear	1 piece	Skin cut
3.	Panther	1 piece	Whole skin
4.	Panther	3 pieces	Skin cut
5.	Reticulated python	31 pieces	Whole skin and head
6.	Tiger	2 pieces	Whole skins and heads
7.	Tiger	2 pieces	Skin cuts
8.	Tiger	1 piece	Whole skin
9.	Deer	2 pieces	Skin cuts
10.	Panther	2	Whole body offsets
11.	Leopard	1	Half body offset
12.	Black panther	1	Half body offset
13.	Sun bear	2	Half body offsets
14.	Deer	2	Half body offsets
15.	Golden cat	1	Whole body offset
16.	Cendrawasih (Bird of Paradise)	2	Whole body offset
17.	Eclectus parrot	1	Whole body offset
18.	Black-capped lorry	2	Whole body offsets
19.	Javanese tiger	8	Skulls
20.	Bear	1	Skull
21.	Sumatran Serow	4	Skulls
22.	Deer	3	Skulls
23.	Assorted wild animals	217 pieces	Bones
24.	Albatross	1	Alive
25.	Bali starling	1	Alive
26.	Langur	5	Alive
27.	Assorted protected birds	10	Alive
28.	Parts of birds	30 items	20 beaks, 10 tusks
29.	Bali starling	2	Alive
30.	Pig-nosed turtle	8,860	Alive and released
31.	Cendrawasih (Bird of Paradise)	11	Alive and released
32.	Javanese flying squirrel	100	Alive and released
33.	Palm cockatoo	4	Alive and released
34.	Monitor lizard	25	Alive and released
35.	Measurement devices	2 units	

Source: Directorate General Environment and Forestry Law Enforcement 2016

Despite the numerous efforts of law enforcement by official authorities, illegal actions in Indonesia still remain. This is a problematic situation, since possessing natural resource is related to humans' desire for pleasure. It is the reason why many people are willing to take risks in capturing protected plants and animals from wildlife because there are customers who are ready to pay a fortune for them.

Because of the strong relationship between human and the environmental preservation, communication as a social interaction key holds a significant role in terms of developing people's awareness towards environmental sustainability. The environmental communication study is developed in Indonesian higher education institutions in order to deal with this issue. The study is not only about socializing laws and official regulations to the public, but also about creating the best communication strategies to educate people. This effort is needed since it is not enough to only rely on law enforcement to reduce irresponsible natural exploitations.

One of the strategies in communicating the environmental issues is by enacting civic science through dialogue and deliberation. Gregg B. Walker and Steven E. Daniels (2004) discuss this strategy to support the idea about the need to help people think about the future of their living place and contemplate the consequences of the preference of actions they are making. Based on the assumption that environmental discourse relates to a scientific approach, which creates distance with the general public, Walker and Daniels promote the discussion to bring it closer to people's awareness without eliminating the scientific elements. According to Walker and Daniels, civic science provides a conceptual foundation for the effective implementation of environmental policy. It is argued that the policy relies on more than just the interpretation of scientific data, but also need to be integrated with social preferences of interest groups, where scientists, citizens, and decision-makers are able to interact. The interaction amongst these major elements should support the participation within the development, implementation, and monitoring of environmental policy (Walker & Daniels, 2004: p. 138).

Walker and Daniels cite Kai N. Lee, the author of *Compass and Gyroscope: Integrating Science and Politics in the Environment* (1993), who explained that managing environmental issue should rely on civic science instead of just science. He considered civic science as one of the methods that integrate the scientific idealism with the political pragmatism.

The challenge of building and maintaining civic science and the institutional relations necessary to do civic science is at the bottom individual. Civic science is political activity; its spirit and value depend upon the players, who make up, modify, implement, and perhaps subvert the rules. (Lee, 1993 as quoted in Walker & Daniels, 2004: p. 138).

Within this perspective, the key players of environmental policy need to have both technical and traditional knowledge. As Walker and Daniels emphasise, “The understanding environmental policy situations is enhanced by integrating ideas from a variety of sources: physical—biological science, political-social science, the local community, and indigenous cultures” (Walker & Daniels, 2004: p. 138). This enhancement supported by civic science orientation, where the scientific and technical knowledge is integrated with traditional knowledge (both indigenous and local). In the process of environmental policy-making, the voices from non-scientific communities are considered together with those of the scientists.

Related to the discussion of using traditional knowledge, this paper specifically looks at the use of local wisdom within the communication between decision makers and communities. Fikret Berkes (1993) describes the concept of local wisdom in environmental management by using the terminology of traditional ecological knowledge (TEK) that developed through the cultural process. He provides the definition as follows;

TEK is a cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment (Berkes, 1993: p. 3)

In this term, knowledge is retrieved as a collective material that is transferred from traditional communication patterns such as folklores, folksongs, cultural values, beliefs or myths, rituals, native language and local rules related to natural resource consumption. It is also applied to bridge the term ecological knowledge, which is more a branch of biology in the western’s scientific conversation, and the traditional people who are mostly not scientists. However, because of dynamic conditions within a community due to the development of new practices and technologies, where certain lifestyles and traditions have changed substantially through times, some prefer the term indigenous ecological knowledge rather than traditional to emphasise the existence of indigenous people. Eillen, Parker and Bicker are those amongst scholars who chose to use the term indigenous knowledge or local knowledge (sometimes they mention it as folk knowledge) to represent the closeness between environmental issues and local people, as well as the contradictions with the western science (Ellen, Parker & Bicker, 2000: pp. 2-27).

Regardless the differences, the essential meaning of local wisdom in Indonesian environmental issues as mentioned in this paper is on the same track with both the traditional and indigenous ecological knowledge. The focus of this paper is to review how local people in Indonesia are influenced by cultural values and traditional communication pattern to preserve the natural resource, without the necessity of forcing the regulations or legal sanctions.

The role of opinion leaders is also involved, which in some degrees bringing the traditional discussion of two-step flow communication.

To bring up discussions about the utilization of local wisdom in environmental communication, this paper takes a case study in Sindangkerta Village, Cipatujah, one of the rural communities in West Java, Indonesia. This village has some areas that need high attention in terms of environmental conservation. One of them is Sindangkerta Beach, a coastal area that becomes a hatching place for some species of sea turtle. This village also has two natural forests that have been inhabited by some rare wild animals and plants.

The uniqueness of this place is that the conservation efforts have been sustained for a long time without a major involvement of the authorities. The Sindangkerta Sea Turtle Breeding Centre, for example, is supposed to be controlled and managed by the Agency of Natural Resource Conservation under the Ministry of Environment and Forestry. However, it has been run almost independently for a while, where local people voluntarily involved in the preservation efforts. It seems that traditional people in Cipatujah have an advanced awareness in terms of environmental sustainability, even though there are neither scientific persons nor law pressure involved. The same thing happens with the conservation of natural forests in this area.

Arguably, there is significant influence from local wisdom within this area that supports the conservation effort. It seems that the influence is stronger than official regulations from the authorities, which guarantee people's obedience against hostile exploitation around their environment. This is certainly an interesting phenomenon to study, which will be discussed more within this paper.

## **Methodology**

A study related to cultural anthropology such as investigating the application of indigenous knowledge within certain community's daily life is usually identical with ethnography. However, this study in Sindangkerta Village is not intended to reveal new knowledge about one particular custom of a society. The main purpose of this study is to examine a communication pattern within a cultural condition that has already acknowledged. Therefore, this study is not designed as an ethnographic study, which requires an in-depth investigation and a participant observation with a long-term engagement in the field setting or place. Instead, this research will use existing data and information from Sindangkerta's local people, which will be looked from certain frameworks, such as cultural issues and environmental communication studies.

On this basis, the most appropriate method to be used is case studies. In regard to the research's objective, this study uses the case studies model from Robert E. Stake. Stake introduces three types of case studies in his model: intrinsic, instrumental and collective or multiple case studies (Stake, 2005;

p.447). The intrinsic model is usually applied in regard to understanding a particular case with special uniqueness. Whereas the instrumental case study model is conducted to comprehend or generalize a concept related to a specific issue by using one particular case. The third one, a collective or multiple case studies, is actually the expanded model of the instrumental case study that using more than one case together to investigate one major issue. From the three models, the first type appears to be the most appropriate because of the uniqueness of Sindangkerta Village as the research's subject.

As the practical actions of this method, this study involves direct observations and interviews. The observations are done by visiting sites in Sindangkerta Village that are suitable with the research's objective in terms of environmental conservation efforts. The sites are the local residential where local people live, Sindangkerta Beach and Sirah Cimunjul Forest, one of the traditional forests in Sindangkerta area. Whereas the interviews are conducted towards some key informants in the village, they are Hendri, a volunteer at the Sea Turtle Breeding Centre; Samson, a local resident of the village; and Abah Iwa, one of Sindangkerta's elders who acts as a cultural caretaker and became one of trusted opinion leaders in the village.

## RESULT AND DISCUSSION

### Field Study Resultant

Sindangkerta Village is located in the eastern region of Cipatujah District, the largest district in Tasikmalaya Regency, West Java. The village possesses many beautiful natural sites; including two traditional forests and a notable coastal area consists of various remarkable wild creatures.

Sindangkerta's forests are parts of 3,631-hectare forests area in Cipatujah, the largest forests area in Tasikmalaya Regency that is managed by the people. One of the forests is named Sirah Cimunjul. Besides its richness of natural resource such as woods, bracket fungus, honey and bamboos, Sirah Cimunjul Forest is also a place of some specific animals, including langur or long-tailed monkey, which is now included as a rare animal.

The beach area, which is so-called Sindangkerta Beach, is one of Cipatujah's coastal areas that lay on the southern Tasikmalaya Regency. This beach has a scenic view of Indian Ocean. There is a 15 hectares marine park under the sea named Taman Lingsar (Lingsar Garden), where we can find various sea biotas, such as fishes, coral reefs and the rare green sea turtles that are included as protected animal. On January the 1st every year, there is a unique traditional ritual at Sindangkerta Beach that is called Hajat Lembur Mapag Taun or the Village's Ceremony of Welcoming the New Year. This ceremony has become one of annual tourism attraction.



The study was started by interviewing local people. Samson, one of the local informants who also a university lecturer, was taken as a representative of the village's inhabitants. According to Samson, people of Sindangkerta have always been aware of their surrounding environment. They mostly live in a traditional way to prevent hostile actions that might damage the nature, even though now most of them have already been settled in permanent houses.

Like what Samson usually does, the people of Sindangkerta are using Sundanish language as their main language in their daily conversation. Based on the observation towards their communication pattern, it is argued that Sindangkerta's people are put their most concern on their cultural values and use them as their fundamental guidance within their daily life. It can be seen from the way they chose vocabularies, terms and sayings in the conversation, which reflecting the Sundanish philosophy.

They also have shown their close relationship with nature. Most of their activities are done by using natural resources, sometimes in a unique way. Children of Sindangkerta are even able to create games or entertainment from what they find in nature without causing damage. For example, they could demonstrate how to make music from the combination of leaves and a machete or long knife.



Figure 1. A local child was trying to teach an American citizen how to make music from a leave and a machete

Another example of how people of Sindangkerta are strongly connected to nature could be seen at the Sindangkerta's public library. The library has been initiated a few years ago. It was settled firstly at one house building amongst the residential area. However, it seemed that the public service did not attract much attention from the people. Furthermore, the library was moved to the governmental building, to provide more access to the public. Yet again, nobody was willing to come.

Eventually, Samson and his colleagues who initiated this service did some research and found that the problem was not the service that is not attractive enough. According to Samson, the real problem was the place where the service was located. It was found that the traditional Sundanish people in Sindangkerta preferred to have an open-air place for social gathering rather than a permanent building. It related to the traditional values about how Sundanish people connect to the environment and build a familiar social gathering to exchange information. An open-air site would allow people to have fresh air, which means they would have the direct connection to nature. Once the connection was built, the boundaries were broken and the social gathering would run well.

Subsequently, Samson and his colleagues move the library from a permanent building to a “*saung*”, a traditional hut that has no wall. It was placed at one of the residents’ courtyard. As the result, almost immediately, people came and started to gather. They came for the books or just to have an informal meeting with each other. Eventually, the public library became a centre of people’s activity.

Samson mentioned that the use of the natural resource is actually a people’s way to respect Mother Nature that has provided whatever humans need to live their life. What people need to do is to learn how to use the resources wisely. Therefore, people of Sindangkerta are used to take benefit from their environment without over-exploiting it, because they understand that the resources need to be preserved and appreciated.

This philosophy has been embedded to most of the people in Sindangkerta Village. That is the reason why they disagree with the existence of the iron sand mining project near Sindangkerta Beach. It has potentials to



Figure 2. Research team member with Hendri (right) at the Sea Turtles Breeding Centre, Sindangkerta

ruin sea biotas in that area, especially the green sea turtles that choose this place as their spawning location. However, as claimed by Samson, people do not have the power to dismiss the project because the Tasikmalaya Regency office has officially approved it.

The study then continued to the beach area, where the sea turtles breeding center is located. The informant at the site was Hendri, the person in charge of the centre. Hendri is a local resident who was assigned by the Cipatujah Resort of the Agency of Natural Resource Conservation. Even though he was officially employed, practically his is more like a volunteer, because the payment is far from the minimum standard and the centre's facilitation is far improper. However, Hendri showed a remarkable dedication towards the job to protect the existence of green sea turtles and help them to breed. He was not too influenced by the financial situation because helping sea turtles had become his way to respect the nature, as taught by the local wisdom.

According to Hendri, green sea turtles have constantly come to this beach for a long time. As usually happen with sea turtles, once they found a suitable place for spawning their eggs, they would always return to the same place. Sea turtles have a geographical and topographical memory that makes them remember the place. The visit of this rare creature has attracted tourists as well as ecologists to come. However, as Hendri noticed, the existence of this breeding place is threatened. Besides the poor facilitation at the breeding center, as well as the existing iron sand mining that potentially extinguishes the natural habitat of the sea biotas, the site is facing dangerous future because of the abrasion that increasingly sweeps the coastal areas. The village needs to plant green plantations to intercept the abrasion movement, such as sea pandan leaves, mangroves or angšana trees.



Figure 3. Research team was observing baby sea turtle inside a breeding tank

Regardless the poor condition of the centre, it was observed that Sindangkerta people in majority really keen in keeping the existence of the sea turtles within their area. For many years, the number of turtle's egg theft, as well as turtle's body parts trading, is very low. This is unlike the situation in the other regions, such as Pangandaran beach in Ciamis Regency, where we could still find some people sell turtle's shell and skin for a souvenir. It seemed there is no one in Sindangkerta has the intention to do that. Moreover, the residents voluntarily report to the centre when they found dead or injured sea turtles or met someone – usually not an original resident of Sindangkerta – who tried to sell the body parts or eggs. According to Hendri and Samson, this is happening because people are really bounded by the cultural values to maintain every element of their surrounding environment.

The last phase of this study was at the Sirah Cimunjul Forest. As mentioned before, Sindangkerta Village owns two of few forests in Cipatujah. The forests are categorised as *hutan rakyat* or managed by the local residents. Unlike the other forests in Tasikmalaya, which are designated by the government to be exploited as people supply resource, the local people are allowed to determine the purpose of *hutan rakyat*. People of Sindangkerta apparently have decided to make Sirah Cimunjul Forest as a conservation area for wildlife and water source.

According to Abah Iwa, one of Sindangkerta's elders, this forest has been treated as an unofficial protected forest. It is unofficial because there are no official constitution or governmental act stating the protection. The status was actually enacted traditionally by Sindangkerta residents, based on their local wisdom. This is quite a rare phenomenon because the forest

condition is preserved for a long time without any legal pressure. Evidently, people's obedience in Sindangkerta to guard the natural environment of Sirah Cimunjul is stronger than other places that have officially protected forests. There has never been illegal hunting, logging or over-exploitation in this forest.

Abah Iwa claimed, it is not because of the strict governmental regulations that guarantee people's compliance, but the traditional values and wisdom that people respect the most. The main factor is the local belief that forbids



Figure 4. Research team was exploring Sirah Cimunjul Forest, accompanied by Abah Iwa, one of local elders.

people to disturb the forest or to carelessly use the resource. Within the local wisdom, the elders convinced Sindangkerta's people that this forest is a water source that supports farms and plantation around it. Furthermore, the forest's inhabitants, especially the Javanese langurs as the biggest population, are intentionally created by The Almighty to be the guardians of the forest. Some people even believe that the langurs are actually the incarnation of supernatural creatures that live in the forest. Because of the belief, there is no one of local residents courageous to hunt the animals.

Regardless the myths or the superstition, the local wisdom is transferring good moral message from generation to generation. The main idea is the significance to protect the environment, to guarantee people's life sustainability in the future. Abah Iwa observed that the wisdom worked well in Sindangkerta. As the result, the natural resource, including the langur's colony, is preserved until now.

The ability of Sindangkerta in preserving the forest has attracted authorities attention. The officers from West Java Regional Body of Environment Management, one of the authorities, seemed to support the conservation effort in this forest. They even built a tower in the middle of the forest, which was designated for forest's caretaker, explorer and scientist to monitor the langur's colony. However, as Abah Iwa stated, the attention was not seriously paid.

The tower construction was not finished and there was no further maintenance. As the result, the tower is now abandoned because it is too dangerous to climb. The conservation was left to the people of Sindangkerta to manage using their own local wisdom.

## Discussion

The phenomenon in Sindangkerta has shown the significance of the elders as opinion leaders within the society. Their function is similar with what Elihu Katz and Paul Lazarsfeld (1955) explains in their *two-step flow theory of mass communication*. Although this concept concerns in the context of mass media contents, the principle is applicable in this case study. The theory emphasises the use of 'personal influence' by opinion leaders in intervening direct



Figure 5. Research team was observing the abandoned monitor tower in the middle of Sirah Cimunjul Forest

message from the source before it affects audience's reaction. It is also pointed out that opinion leaders have the influence on people, which is strong enough to change their attitudes and behaviours (Katz & Lazarsfeld, 1955). In the case of Sindangkerta, the elders absorbed the messages about the environment. The messages came from the authorities' regulations as well as from nature itself. After that, the elders transferred the absorbed messages to the public by using cultural values and local wisdom, which increase the level of people's obedience.

The involvement of the elders in distributing conservation message is an evidence of positive implementation of the term man as ecological dominant. Sustaining the argument from Merrill (1958) and Alexander (1990) about how humans with their power could determine world's environmental condition, Sindangkerta case shows that humans could use their dominance in a positive way. Humans actually have all the power to exploit natural resource at Sirah Cimunjul Forest and Sindangkerta Beach, but it was humans too who decided to prevent the damage. Because of humans' dominance to control the nature, the elders were able to convince Sindangkerta's residents to preserve the forest and the beach without any legal actions or legal pressure from the government. It could be said that local wisdom and traditional values have become significant factors in directing the dominance into a good way.

Local wisdom context the Sindangkerta's elders distributed is also on the same track with the civic science argument (Walkers & Daniels, 2004). The elders have succeeded to transform scientific terminologies about environment conservation into something easier to be absorbed by non-scientific communities. The traditional communities in Sindangkerta are not scientific people, but the elders have thrived to spread conservation ideas and explain the urgency of environmental preservation for human's life. People are taught to pay respect towards the Mother Nature, not by presenting scientific explanations but by using personal influence and humanistic approach. Some supernatural and superstition could not be avoided in order to bring the issue closer to the traditional understanding. However, everybody eventually understands the consequences of using the natural resource. As the result, Sindangkerta's people have become conservationists in a traditional way.

By using folklore and local myths, the elders have actually been applying what Berkes (1993) calls as traditional ecological knowledge or indigenous knowledge as mentioned by Ellen et al. (2000). Arguably, this is the reason why the traditional communities in Sindangkerta are so obedient in preserving their nature without the necessity to apply legal sanctions and regulations. Myths and traditional rules are clearly more effective and influential rather than modern regulations from the authorities, whereas folklores and traditional values are more understandable rather than scientific explanations.

There are some downsides from using local knowledge instead of scientific methods in preserving natural resource. The involvement of myths

and superstition would potentially hinder the actual meaning of environmental communication. Instead of understanding the crucial consequences behind the conservation effort, people might be trapped in their supernatural discussion that would create unrealistic fears. In the scientific point of view, this situation would be unbeneficial in increasing people's intellectuality. Consequently, the situation would impede the effort to bring people into a modern society.

Moreover, using the non-scientific method of preserving nature is not always the best option. For example, the sea turtles breeding centre that is managed more by traditional values is actually quite controversial in the conservation point of view. This centre has been facilitating too much human's interference that might become too dominant within sea turtles' natural development. Most of the turtles that breed in the centre would be too familiar with human's touch. Consequently, it would be difficult to release them back to nature.

Nevertheless, the current circumstances in Sindangkerta might justify the elders' strategy in communicating conservation message. The traditional values have been proven to be effective in maintaining people's respect towards the Mother Nature. This level of respect has become more important in order to embed the awareness about conservation into people's mind. This has guaranteed the idea of conservation to be applied in Sindangkerta's people daily life. As of the modern knowledge, arguably, the existence of public library might be able to support the effort in increasing intellectuality of this traditional people. This would be a perfect combination between traditional knowledge and modern perspective.

In terms of the sea turtles conservation, one has to admit that it is difficult to maintain their existence in the natural habitat at the moment. The climate change, rapid abrasion as well as the existing human's project that potentially damage the natural site are some of many problematic issues that threatened the nature. This situation makes the human's action like what happens at the sea turtles breeding centre understandable. Arguably, considering the circumstances, local wisdom has given a better solution to save the environment in Sindangkerta.

## CONCLUSION

Sindangkerta Village is one of the unique cases in terms of environmental conservation effort. The people are living in a traditional way and practicing indigenous values or local wisdom as their fundamental guidance. However, without a scientific background in ecology or legal pressure from the authorities, they are able to actively maintain their natural resource. Their effort was merely based on local wisdom that embedded in their daily life as the result of cultural teaching from their elders.

Based on the study, it can be concluded that the traditional ecological knowledge – or so-called local wisdom – has become one of the effective elements in gaining people’s understanding about conservation. It can be argued that using local values such as beliefs and myths are more influential to the people rather than the official policies and regulations or even legal pressure. The elders of Sindangkerta have successfully applied an effective environmental communication strategy, especially with their personal influence in campaigning local values.

Moreover, the study has observed that the level of obedience within Sindangkerta’s people towards their local wisdom is considerably high. This is a potential situation, which has been used by the elders in terms of maintaining their environment. It can be concluded that the use of local wisdom has been building a high engagement with local natural resource conservation in Sindangkerta, as well as preserving their harmony as a traditional Sundanish society.

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