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## **Local Wisdom as Environmental Education on Kasepuhan Ciptagelar**

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**Abstract**---The purpose of this study is to overview the local wisdom from local knowledge and local value, which build as an environmental educational approach to Kasepuhan Ciptagelar society. This research used a qualitative approach through in-depth interviews, observation, and document evaluation from June until November 2019 on the Kasepuhan Ciptagelar society. The data analysis of this study was completed through a process of reduction, verification, and conclusions. Local wisdom at Kasepuhan Ciptagelar contains environmental education values; physical, social, and cultural-environmental educations. It shows from their attachment to nature where the laws and natural cycles become their benchmark in the agricultural system used. Activities related to the society farming system are still implemented collectively to strengthen ties between residents through cooperation, which is a characteristic of their social-environmental education and seen from cultural-environmental education. It is closely related to a series of customary rituals that must be carried out by the Kasepuhan Ciptagelar agricultural activity.

**Keywords**---customs society, education values, environmental education, Kasepuhan Ciptagelar, local wisdom.

## Introduction

Local wisdom characterizes an indigenous community regarding the importance of preserving their ancestral heritage for a guideline and a way of life, which they continue to do up to now as a relationship between humans and nature, to live in harmony. Local wisdom also presence or refinement and support of human life and nature and manifested as tradition (Setijanti & Soemarno, 2015). Almost every activity related to environmental management, both socially and culturally, cannot be separated from their local wisdom. In line with what Permana (2010), stated, local people, do this as a life strategy to answer various problems in meeting their needs. Sedyawati (2006), argues that broadly local wisdom includes all elements of ideas, values, and elaborating multiple patterns of action and cultural outcomes of a society. Local culture is also known as a product of a culture that appeared in the holistic ecological-systemic paradigm (Pesurnay, 2018). If traced back, this can be a source in the transformation of environmental education in communities, as happened to Kasepuhan Ciptagelar, the indigenous society of West Java. Environmental education not only constrain sustainable development, but it interfaces between nature and culture (Sauvé, 2005). Environmental education implemented through an understanding of knowledge, attitude, and environmental's behavior (Ikhsan et al., 2019), that reflect on daily activities and embedded in ethical values, political rule of social life (Sorrentino et al., 2005).

A traditional community emphasizes farming. They generally produce only a little more than what they need for each household, and when there is a surplus, they trade it or use it for religious purposes. The people live in balance with nature, not as masters of nature. People respect and value each other according to the principle that each person has value as a human being (Mungmachon, 2012). This link between local wisdom and environmental education is intertwined in almost every line of life of the Kasepuhan Ciptagelar indigenous people, especially in rice farming management. Both in words of real, local wisdom and intangible local wisdom. For example, there is a particular time for hunting animals in the forest, or the use of traditional techniques in every rice farming management activity (Khomsan et al., 2013; Scorviana et al., 2019). Likewise, determining the time to start working on the land for the benefit of rice farming and the traditional rituals that accompany it are inseparable from the local knowledge and values that are still practiced by the Kasepuhan Ciptagelar indigenous society, as Sedyawati said above.

In determining the various series of customary processions, the role of traditional leaders and the *Baris Kolot* (traditional elder) line is the central point for determining the timing of implementing the conventional ritual activities of the Sundanese agricultural community, which are near related to human relations and the natural and socio-cultural environment (Widodo, 2012; Pornpimon et al., 2014; Gelgel, 2017). The traditional equipment and requirements are unseparated from the relationship between them and nature where they live, shows from the way they treat spirit that so upholds the values of respect and subsistence. In the end, they must pass on this behavior to the next generation to keep the Karuhun heritage preservation is not interrupted. Even though in several aspects of life, Kasepuhan Ciptagelar society slowly applies modern lifestyle and technology.

Such as local radio and television broadcast networks and independent internet networks that make it easier for them to share information with communities outside Kasepuhan, and since 1965 these indigenous people have had a source of power. Itself by making turbines that can support their activities in everyday life (Werdistira & Purnama, 2020; Suacana & Suaib, 2016).

The development and adaptation of modern technology in the lives of the indigenous people of Kasepuhan Ciptagelar are one of the ways to fulfill their needs in their lives and categorized as local wisdom that they have, judging by the definition of Permana (2010). Besides, the preservation of ancestral customs and traditions based on the division of functions and tasks must be carried out under the orders of the elderly. In its implementation, the process of transformation and socialization of customs to the next generation continues with the fulfillment of the rights of their children's education, both formal and non-formal, and other aspects of life. The existence of independent power sources in the community since 1965 with the manufacture of turbines independently fulfills the energy needs of all community activities as well as the fulfillment of caring for nature, so that everything goes hand in hand towards balance. This value is their philosophy that must be able to ignore the times.

Thus, the problem in the research that needs to explore is why do the Kasepuhan Ciptagelar indigenous people still uphold the local wisdom in the ongoing modernization that has entered their lives? And how is the form of environmental education in the Kasepuhan Ciptagelar indigenous people seen from the dimension of local wisdom? Therefore, the purpose of this research is to explore the Kasepuhan Ciptagelar indigenous people's environmental education model based on the measurements of the existing local culture.

## **Methods**

This research was conducted from June to September 2018 and in November 2019 in the Kasepuhan Ciptagelar indigenous people at the downhill of Mount Halimun, Sukabumi Regency, using a qualitative approach. The techniques used in data collection are observation and interviews. The observation technique was completed by observing the daily lives of the Kasepuhan Ciptagelar indigenous people, especially during the implementation of several traditional ceremonies. The everyday life of indigenous peoples that becomes a point of attention is the activities of indigenous peoples in managing the environment, both the natural environment and the social environment based on local wisdom (Sarkar et al., 2007; Türkkahraman, 2014; Lefebure, 2019).

While the interview technique was completed interviews with several informants who fit the research criteria. The key informants in this study were the Head of Customs and *Baris Kolot*, as well as several community leaders in Kasepuhan Ciptagelar, using in-depth interview techniques through a structured and unstructured list of questions. The data analysis was carried out using three activity streams, namely; data reduction, data presentation, and drawing conclusions or verification.

## Result and Discussion

Administratively, Kasepuhan Ciptagelar is included in the area of Sukamulya Hamlet, Sirnaresmi Village, Cisolok District, Sukabumi Regency, West Java Province. The people live in the Halimun Mountains National Park (TNGH), so the air is cool, cold with temperatures between 17 °C to 24 °C. Geographically, Kasepuhan Ciptagelar is located at 106° 29' 42" - 106° 29' 55" East Longitude and 6° 48' 14" - 6° 48' 01" South Latitude.

The daily life of the Kasepuhan Ciptagelar indigenous people is farming lowland rice and field rice (Huma), gardening, and other activities that cannot be separated from the relationship between humans and nature. In the agricultural system, they still use traditional technology inherited from their ancestors, along with a series of traditional rituals that always color their lives. In its implementation, there are 32 rice cultural rituals in one cycle of planting, from starting to welcome, *nyacar*, spread, *ngaseuk*, *mipit*, *ngunjal*, and a series of other rituals to *serentaun* (field notes June 2018). This is done as a manifestation of respect for *Dewi Sri*, not only that the agricultural system for the Kasepuhan Ciptagelar indigenous people is worship as stated by one of the informants (Aki Koyod):

*"Tata cara pamakayaan lir ibarat isteri sareng pameget, di dinya nincakna sawarga kahirupan"* (The agricultural system is like a married woman and man, which is a paradise of life.).

The existence of a series of traditional rituals is one form of local wisdom that lives in the Kasepuhan Ciptagelar indigenous people.

### Local wisdom of the Kasepuhan Ciptagelar indigenous people

#### Local knowledge

The Kasepuhan Ciptagelar indigenous people still preserve several pearls of wisdom in terms of local knowledge, one of which is related to determining the time in the rice farming process in Kasepuhan Ciptagelar. Until now, they still use the knowledge of their ancestral heritage in determining planting time, as stated by *Kang Yoyo*:

*"Dimana surup kerti jeung kidang, turun kungkang"* (When *Kartika* and *wuluku* (the name of one of the constellations) come down, the *kungkang* descends). *Kungkang* in general Indonesian is known as *walangsangit*, which is an insect that becomes the main pest in cultivated crops, especially rice.

If nature has entered this period, the Kasepuhan Ciptagelar indigenous people should not carry out agricultural activities because the time for humans is over. Now it is the turn of other God's creatures (animals) to carry out activities, such as mice breeding at this time, as well as stink insects and other animals. So that the agricultural concept that exists in the Kasepuhan Ciptagelar indigenous community follows the laws and natural cycles, this is closely related to abundant yields and far from crop failure.

With the application of this local knowledge, even though their agricultural cycle in one year is only done once planting and once harvest, the results they get can meet their food needs for three years. Unlike the case with modern agricultural systems, which can be carried out between three to four cycles in one year. As stated by *Kang Yoyo*, this has something to do with the concept of "no killing," so that this agricultural process does not use pesticides or other chemicals because this will kill any existing organisms, so that the planted rice is protected from animal disturbance. Therefore, *kolecer* or *karinding* is made to drive out these nuisance animals. Thus, life between humans and the environment becomes harmonious. Other local knowledge, namely in the layout of the settlements and building materials used where there are certain areas where the function and designation for the Kasepuhan Ciptagelar customary community are exact. For example, there are *leuweung* cover and *leuweung* deposits. The layout of the *leuweung* cannot be between people's houses, as well as the building materials that have been determined (Frantz & Mayer, 2014; Lumempouw et al., 2021).

### **Local value**

Until now, the indigenous people of Kasepuhan Ciptagelar still uphold the local values that hold their life. One of these values is by even applying all behavior based on the existing adage, such as the concept of "*Kudu bisa ngigelan jaman, tapi entong kabawa ku jaman*" (must have prepared customs, so that it is not disturbed by modernization). Judging from the local values that are still held by the tradition community of Kasepuhan Ciptagelar, this is closely related to the philosophical meaning of rice or Dewi Sri. For them, rice is the life of life as a source of energy for all Kasepuhan residents. This philosophy corresponds to the statement of one of the following:

*"Pare the dianggap nyawa, kahirupan. Lamun teungaemam eta, teu aya tanagi"* (Rice is life, which gives life. If you don't eat rice/rice, there will be no energy).

Thus, considering the figure of rice that is so great for the Kasepuhan Ciptagelar indigenous people, this is also related to their food security that is one of the sources of the existing local wisdom. Maintenance and treatment of this plant must be carried out, guided by noble values, which must be carried out by every citizen. Starting from the process of determining the planting preparation time, land clearing, planting rice, the process of maintaining rice, at harvest time, to the process of moving rice from *lantayan* to *leuit* (rice barn), all of these activities are preceded by a series of traditional rituals. That is also related to the local value of "*nete taraje, nimbalhambalan*" (asking permission in advance if you are going to do something) as a practice in treating that one, in this case, rice, as expressed by *Kang Yoyo*.

If one of the processions is missed or not carried out, something will happen. As stated by *Aki Koyod*, this has something to do with the local value of "*nete taraje, nimbali hambalan*" (all actions must obey the rules, there will be consequences). So, it is essential for the Kasepuhan Ciptagelar indigenous community that in maintaining rice, they must follow all existing typical rules, as well as in their cultivation, they must continue to use traditional technology inherited from the

*karuhun* (ancestral). Starting from the production process, consumption, to storing rice, it contains local values that cannot be violated. Since if the local values are being violated, it will relate to the concept of *kabendon* (a law that applies to someone who does not carry out the prevailing customs in Kasepuhan Ciptagelar).

### **Forms of environmental education in the Ciptagelar Kasepuhan tradition community**

Tracing two dimensions of local wisdom that exist in the Kasepuhan Ciptagelar indigenous community, in which there are types of environmental education, including environmental education, social education, and cultural-environmental education (Ledden et al., 2007; Lumantarna et al., 2017).

#### **Environmental education**

In the knowledge and local values possessed by the Kasepuhan Ciptagelar indigenous people, there are several related to environmental education, including the centralized settlement pattern between residents in Kasepuhan Ciptagelar. As stated by the head of *Adat*:

“Because we live in a highland area, the housing pattern here is not far from the house of *Abah* and *Imah Gede*, so the distance between the houses is close to one another.”

The existence of local knowledge about the environment is applied to settlement patterns that follow the contours of the land. Moreover, their settlement pattern has specific spaces and functions, such as the existence of a particular area for residential areas, locations for *leuit* (rice barn). It is also related to the prohibited forest, *huma*, rice fields, and other regions that are determined according to their function (Nyandra et al., 2018; Carleton-Hug & Hug, 2010).

Then, the agricultural time determination used by the indigenous people of Kasepuhan Ciptagelar is based on laws and natural cycles. That is also closely related to local wisdom and values about the environment in which they live and how they depend on their livelihoods from the surrounding environment. Likewise, with living things that grow in it, such as *pare* / rice. Rice for the Kasepuhan Ciptagelar indigenous community is the life of life, so those who are married are obliged to cultivate rice by following all the existing rules. As stated by *Rorokan Pamakayan* below:

“*Mun teu digarap, bakal muuk, ngabadi, ngageringan*” (In this case, if a married citizen does not cultivate rice, it will hurt the person back, the form could be in an illness that occurred in the person’s body).

Thus, it can be seen how environmental education is transformed for every citizen of Kasepuhan Ciptagelar through traditional institutions and existing social systems related to the rice farming system, which must be carried out by every generation by following the rules set by custom.

### **Social environmental education**

From the transformation of environmental education that they have received from generation to generation, there has indirectly been a transformation in their social-environmental education. When interacting in protecting their environment, they also learn to instill a sense of compassion. We can see this behavior in almost every activity they do, both in activities related to managing nature and traditional ritual activities. In managing crop yields, for example, as in post-harvest activities, there is something called *mocong pare anyar*, *ngunjal*, *ngadiukeun*, *nutu nganyaran* until the peak is on *nyangu nganyaran*. This series of regular activities combine social activities related to nature and local customs. All these everyday activities are carried out in cooperation with a reciprocal system. It means that if someone helps in activities, *nutu nganyaran* one of the residents. In exchange, that person will get paid for labor *nutu nganyaran* when does the same thing (*nutu nganyaran*).

### **Cultural environmental education**

Judging from the agricultural system that is still being lived by the Kasepuhan Ciptagelar indigenous people until now, it cannot be separated from the existence of local daily and cultural rules that require each community to cultivate rice using traditional agricultural systems inherited from their ancestors. Starting from the use of local seeds for planting, planting procedures, tools, and cultivation must be carried out as their ancestors used to cultivate rice, as well as a series of traditional rituals related to the rice culture that cannot be left behind, such as rituals at the time *turun nyambut*, *nyacar*, *tebar*, *ngaseuk*, *tandur*, *mipit*, *mocong*, *ngunjal*, *ngadiukeun*, *nutu*, *ngabukti*, *hingga seren taun*. Thus, they must protect the cultural heritage related to rice and transform it into the next generations so that the educational process based on the rice culture can continue until their children and grandchildren (Blackwell & Colmenar, 1999; Kartikawangi, 2017).

### **Conclusion**

The local wisdom of the Kasepuhan Ciptagelar indigenous people contained various values of environmental education, including environmental education, social-environmental education, and cultural-environmental education. In environmental education, it shows from their attachment to nature where the laws and natural cycles become their benchmark in the agricultural system used.

### **Recommendations**

Cultural-environmental education is closely related to a series of traditional rituals that must be carried out, as well as in the use of conventional tools in cultivating land and procedures for producing rice, which is still by the karuhun heritage of the Kasepuhan Ciptagelar indigenous people.



## Limitations

The activities carried out related to the farming system are still carried out collectively to strengthen ties between residents through cooperation, which characterizes typical of social-environmental education and can be seen from cultural-environmental education.

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