

Megalithic Landscape in the Site of Gunung Padang, Analysis of Environmental Studies

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Abstract— Archaeological sites in Gunung Padang is located in Cianjur, West Java, Indonesia is one evidence of the man who predicted the researchers comes from the Megalithic period. But certainty why it was built in the hills of Gunung Padang until now has not been revealed, and is still a matter of discussion as to what the actual function of a pile of large rocks that completely structured and how the technique built by humans in the past on the hill high 885 MDL. It was designed and tuned to do with the results of intensive research conducted by a team of experts from four years ago.

Keywords— *People's Behavior, Environment, Gunung Padang.*

I. INTRODUCTION

Megalithic sites Gunung Padang is located in Cianjur regency, West Java is one evidence of the human past. Its history until now has not been revealed exactly, they are designed and tuned relation to the results of research since four years ago.

If successfully revealed the site of Gunung Padang can be strong evidence that human civilization has occurred in the ancient past in Indonesia. The paper was written by tracing the results of research that has been conducted by a team of researchers who conducted by Integrated Research Team Independent since 2011, and our own (writer) tries to focus on aspects of landscaping, site management and on-site observation on 14-15 may 2016 by way of an interview on the local community is expected to strengthen the notion of landscape situation at the historic site. This study used aspects of the analysis which is based on the collection of data on the condition and community activities as well as aspects of site management.

Villagers in the site of Gunung Padang almost entirely from ethnic Sundanese. Community activities in everyday there generally is in agriculture, but the management of the regional order less directional sites are a threat to the existence of the site.

II. AIM

Analyze the environmental factors in aspects of landscaping and site management.

III. PROBLEM OF STUDY

1. Changing people's livelihood, which is initially the work of farming but then became entrepreneurial.

2. Not to the implementation of environmental management at the site of Gunung Padang so that the forest began to denuded
3. There is no clear boundary between the conservation zone megalithic sites with the local communities.

IV. METHODOLOGY

The research method used is descriptive method, which aims to collect actual information in detail by describing the existing symptoms, identifying a problem or check the prevailing conditions.

While the technique used is the technique interview by interviewing the savior maintain, and direct observation towards the environment. In addition, the systematic observation and recording of elements that appear in the object of research. Then the authors describe in a report systematically arranged and follow the rules.

V. STUDY LITERATURE

The change from era to era, as seen at Gunung Padang occurred in the structure and governance environment was in fact caused by:

1. The forces of nature, such as earthquakes, volcanic eruptions, floods and so on.
2. The bodies of living.
3. Humans (*Kaslan A. Thohir, 1985*)

Environment is everything that exists around the individual, both the physical environment, biological, and social. Environmental influence on the influx of knowledge to individuals who are in the neighborhood. This can happen because of their mutual interaction or response to knowledge by every individual (*Kaslan A. Thohir, 1985*).

Kaslan A. Thohir, 1985 p. 256-272, deliver policy measures in the field of natural resources and the environment as follows:

1. Basic policy in the field of natural resources and the environment
 - A. In relation to the discretion of National Development, among others:
 - a. Improve living standards for material
 - b. Improving the quality of life, both physical and spiritual
 - c. Make it possible for everyone to hold pilhan between a wide range of life activities
 - B. Associated with National Development, among others:
 - a. Outlines of State Policy (Guidelines), states that natural and cultural resources is the basis of development.

VI. ANALYSIS

Landscape Analysis of Physical Factors Geographical location

Gunung Padang site is believed by researchers is the site of prehistoric megalithic cultural heritage in West Java. Be precise administratively located at the border Dusun Gunung Padang and Panggulan, Karyamukti Village, District Campaka, Cianjur regency of West Java Province. With the coordinates of $6^{\circ} 59'36.9035''\text{S} - 107^{\circ} 3'22.6264''$ (Wikipedia, 2016), the origin of the so-called Gunung Padang, based on the word "field" comes from a few syllables, namely:

- Pa = Points-
- Da = Large / big / grand / highway
- Hyang = grandparents / ancestors / Biyang / great ancestors

So does the word "Padang" it is the Court of the Patriarchs place or perhaps meaning place of the Patriarchs Court. Gunung Padang megalithic sites have been built in 2000 BC, or about 2,800. In the research report of the Directorate of History and Archaeology in the year 1979 said, the first report on Gunung Padang appear in the annual report of the Department of Antiquities Indies 1914 (*Rapporten Oudheidkundigen van den Dienst in Nederlandsch-Indie*). Then in 1949 were reported by researchers archaeological Dutch period: N.J. Krom. N.J. Krom not made a thorough research it, just mention that this site is anticipated as an ancient graveyard.

The site is then reported back its presence in 1979 by local people to the culture of the local government overseers. At that time, this megalith site known by locals as "*Goenoeng Manik Lampengan*". Since then, the site has been researched deeply enough in archeology though still leaving plenty of controversy. Archaeologists agree that the site is not a cemetery as stated by Krom (1914), but it is a place of worship.

The Division of Space

Gunung Padang site is located at the top of a hill, to achieve it can use the stairs from the bottom of the hill. There are two types of selection steps, the first visitors can climb steep stairs as high - + 95 meters made of andesite by nearly 400 rungs, with steps away from one rung to rungs more almost 40 cm distance. The second ladder is the ladder that is quite flat, but more of the steps already made of cement castings.

At the peak of Gunung Padang site consists of five terraces / levels (*Laporan Penelitian Direktorat Sejarah dan Purbakala pada 1979*) as follows:

1. The first terrace (1st terrace) is located at an altitude of 983 m above sea level, a terrace overlooking the azimuth 335° UT,
2. The second terrace (2nd terrace) is located at an altitude of 985 m above sea level, a terrace overlooking the azimuth 337° UT,
3. The third terrace (3rd terrace) is located at an altitude of 986 m above sea level, a terrace overlooking the azimuth 335° UT,

4. Terrace fourth (4th terrace) is located at an altitude of 987.5 m above sea level, a terrace overlooking the azimuth 330° UT,
5. Terrace fifth (5th terrace) is located at an altitude of 989 m above sea level, a terrace overlooking the azimuth 345° UT.

High of punden site of Gunung Padang is 95 meters to the main direction terrace heading north northwest at an average azimuth 336.40° UT. The whole site of Gunung Padang terrace leads to Gunung Gede (2950 m asl/ about sea level). Site of Gunung Padang is punden are not symmetrical when viewed from the top. With a punden seemed not symmetrical, suggesting that punden development has the goal of orientation and meaning. While based research team of Geology, the stone at the top consists of a large rock andesite, andesite basaltic and basalt shaped pillars with long dominant about one meter in diameter dominant 20 cm, and has a side-by-side to form polygons with dominant forms of shaping stone pillar four sides (tetragon) or five-sided (pentagon).

Landscape Analysis of Non Physical Factors

Community activities in the vicinity of Gunung Padang

Villagers at the site of Gunung Padang almost entirely of ethnic Sundanese, according to the Savior Maintain estimated Ethnic Sunda already settled in the site more than 100 years, visible in the field activities of everyday society generally in agriculture, farming / gardening, and lately they open a kiosk or stall in front of the house.

But the more famous sites of Gunung Padang can be a threat to the existence of the site. Now the site of Gunung Padang is not only known by people around the site, but is worldwide. Based on the interview (14-15 May 2016) interpreters maintain, or Interpreter Lock Gunung Padang Mr Nana says:

"Gunung Padang have meaning, namely Bukit Cahaya, or Bukit Penerang, it means that the source of light or illumination to the surrounding community. In addition, as the central core of life. That is because the so-called center of life is in the middle of the mountains and hills, such as Mount Gede - Pangrango, Baluh Sand Mountain, Stone Mountain, Mount Gede-Pangrango and Hill Ciwangun. So Gunung Padang has the meaning of "Niti Taraje Nincak Hambalang" inherited from the ancestors, has the meaning "this life can not be instant, must walk gradually there is the process when asked for directions, such as praying and endeavors, then what is wanted can be obtained by heart and pray to the Almighty God, not worshiping stone or amountain".

The main meaning of the result of exposure to the interview above, is the news that many people do not know and understand, their social aspects as well as the culture of Indonesia, which can be used as a guide in managing and organizing the preservation of the concept of cultural landscape in accordance with the conditions and the ongoing functions for generations to come

Factors that may affect the landscape at the site of Gunung Padang (observations and interviews with local people on 14-15 May 2016) among others:

A. Internal factors:

1. The behavior of the people who live around Gunung Padang much to renovate their homes, building kiosks / stalls irregular, thus damaging the visual beauty of the views to the site or site environment.
2. The desire of the people who live around the site of Gunung Padang to sell the home to a variety of investors.
3. The existence of logging is not concerned about the function, structure and shape as well as strata of tree.

B. External Factors:

1. Along the arrival of many visitors to the site with a number of interests, there are meditating and then spend the night at the top of the hill and traveled, ultimately causing a lot of waste bins. Based on observations there, visitors who bring food and dispose of their garbage on the rocks sites, found on the terrace to five, and there were littering in the first terrace and a second terrace.
2. Lack of concern related apparatus to preserve sites, such as the lack of guard and custodian of the site environmental cleanliness.

When observed ecological landscape site of Gunung Padang, consisting of Kemenyan tree (*Styrax benzoin*), plants of various types of bananas (*Musa balbisiana*), Rasamala tree (*Altingia excelsa Noronha*), Puspa tree (*Schima wallichii*), Saninten tree (*Castanopsis argentea*). It has been suggested strongly that the environment of Gunung Padang has long been a site of human activity. The existence of ancient relics showing without a doubt that that man had cultivated a natural environment that is expected to perform worship of the Almighty or ancestors.

Consequently of logging large trees and the introduction of new types of trees has changed the landscape hillside neighborhood of Gunung Padang, which originally was the primary forest has now become secondary forest, interspersed by agricultural lands is narrow. Types of vegetation remaining primary forests in the west side slope is quite steep, with a slope angle reaches 45 degrees or more. Since established as the site, the slopes of Gunung Padang no longer used for agriculture. However, with the rising price of wood encouraged people to go back trying to take advantage of old trees and old are already sized to be cut down and traded. Worse yet the process of primary and secondary forest depletion continue until now on lands belonging to residents around Gunung Padang.

Clearly, most of the threats facing the site of Gunung Padang is derived from human behavior (the interviews to people around who are more concerned with survival, by making use of whatever is in the neighborhood. This reinforces the statement delivered by scientists from the site of Gunung Padang earlier, the biggest problem in Gunung Padang is the human factor). The threat was directly related to the building structure punden, punden compiler rocks, space utilization, of logging trees, or recreational activities that leave trash. Within certain limits, the noise pollution generated by visitors influence the quietness and comfort of the environment.

So that the policy needs to be issued by the local government such as:

1. How Maintaining the stability of the hill ?
2. How Reforestation of Gunung Padang began bald?
3. How to Relocate houses and gardens of the population excluded from the hillside neighborhood of Gunung Padang ?

According to the legend of folklore, which associated with the history of the ancestors, as well as relations results of the study and research scientist, a typical tree in Mount Gede-Pangrango and Gunung Padang site, appear to be ecologically formed long ago. Distribution of trees typical of those in the hills and mountains in the buffer zone of the site of Gunung Padang, is a kind of tree: Rasamala (*Altingia excelsa Noronha*), Puspa (*Schima wallichii*), Saninten (*Castanopsis argentea*). Manglid and Aren (*Research Report of the Directorate of History and Archaeology in 1979*). The Puspa tree (*Schima wallichii*) trusted people around Mount Gede-Pangrango as a tree "karuhun". While Rasamala tree (*Altingia excelsa Noronha*), a skyscraper tree species that can grow large towering dozens of meters high with a circumference large enough. Rasamala tree (*Altingia excelsa Noronha*), be a typical tree species West Java has the title of "king of trees the Wild West Java".

VII. CONCLUSION

Based on various research results reflect the tradition of Gunung Padang megalithic site (mega means great and lithos means stone) in the form punden built with volcanic rock massive rectangular dating back some 13,000 years BC and the largest in Southeast Asia. Ancient building area of approximately 900 m² with a total area of approximately 25 hectares site with a height of 110 m. Punden building site of Gunung Padang is composed of five terraces.

1. Blocks of stone that very much sums it spread to almost cover the peak of Gunung Padang
2. The building consists of five terraces with different sizes. Each terrace has a stone building patterns that vary devoted to various functions.

Plants that are appropriate in the Gunung Padang is meaningful spirituality and according to the legend of the Sundanese people. Linkage presence of Gunung Padang, which has led to the orientation of the surrounding mountains. Some places in the mountains of Padang are damaged caused by natural phenomena, and mostly by the behavior of humans who live on the border of protected forest.

VIII. SUGGESTIONS

1. It should be continued study of integrated / coordinated to examine more deeply about all the privileges that are within sites of Gunung Padang.
2. Before restoration (excavation) once there is certainty more detailed research results from various fields of science
3. Keep governance ecosystem / ecological to replant crops in accordance with the site's existence and Ethnic Sundanese culture.

4. Should be styled landscapes suitable, because there is a huge tree living on or adjacent to the rocks that will happen weathering.
5. The management should be more clearly coordinated sites
6. It should be relocating home residents out of the area of the site.
7. Keep the full support of the government. As well as in its implementation must respect the local wisdom that has been developed by the community in the management of natural resources and the environment in a sustainable manner.

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