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COMMUNITY ENGAGEMENT ARTICLE

Optimization of Selo Bonang Tourism in Panduman Village Through Identification and Construction of Singing Stone Valley

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Abstract

Selo Bonang is one of the new tours that can be an attraction with various potentials possessed. Selo Bonang itself has a lot of potential, both from the cultural aspect, the topography of the location, then the variety of economic products sold by the local community, and there is a unique thing that has the potential to become iconic because it is still not found in other locations, namely the existence of stone sites that have tones and can be enjoyed in the Argopuro valley, the site is called "Singing Stone Valley". This devotion aims to compose and construct the musical stone arrangement into a harmonious tone. This activity will be useful in attracting tourists so that they can play musical instruments from natural stones with the natural atmosphere of the Argopuro valley.

Keywords

Argopuro; Singing Stone; Selo Bonang; Tourism.

Abstrak

Selo Bonang adalah salah satu wisata baru yang dapat menjadi daya tarik dengan berbagai potensi yang dimiliki. Selo Bonang sendiri memiliki banyak potensi, baik dari aspek budaya, topografi lokasinya, kemudian variasi produk ekonomis yang dijual masyarakat setempat, dan terdapat hal unik yang memiliki potensi menjadi ikonik dikarenakan masih belum ditemukan di lokasi lain, yakni terdapatnya situs batu yang memiliki nada dan dapat dinikmati di lembah Argopuro, situs tersebut dinamakan “Lembah Batu Bernyanyi”. Pengabdian ini bertujuan untuk menyusun dan mengkonstruk susunan batu bernyanyi ke dalam sebuah nada yang harmonis. Kegiatan ini akan bermanfaat dalam menarik wisatawan sehingga dapat memainkan instrumen musik dari batu alam dengan suasana alam lembah Argopuro.

Kata Kunci

Argopuro; Batu Bernyanyi; Selo Bonang; Tourism.

1 | INTRODUCTION

Panduman Village is one of the villages located in Jelbuk sub-district, northern Jember Regency. Its position is bordered by Maesan sub-district, Bondowoso Regency to the north. It is bordered by Sukowono sub-district and Kalisat sub-district to the east. It is bordered by Arjasa District to the south and bordered by Panti District to the west. Located 17 Km from Jember University, this village has the potential to become a tourist village with several cultures and locations that support the realization of Panduman Village as a Tourism Village. On the other side, Selo Bonang is one of the new destinations that can be an attraction with various potentials possessed. Selo Bonang itself has a lot of potential, both from the cultural aspect, the topography of the location, then the variety of economic products sold by the local community, and there is a unique thing that has the potential to become iconic because it is still not found in other locations, namely the existence of stone sites that have tones and can be enjoyed in the Argopuro valley, the site is called "Singing Stone Valley". The stone arrangement has the potential to make Selo Bonang the pioneer of the world's first stone nature studio.

In a preliminary survey conducted by the service team, the team had interviewed one of the managers of Selo Bonang, namely Mr. Hadi Poernomo, he said that based on research from the East Java Provincial Tourism Office, it was found that the culture around Selo Bonang still has ancient cultural patterns. The people are still descendants of their ancestors who occupied the Panduman Village area for the first time. One of the pieces of evidence that supports this is the existence of the oldest mosque in Panduman Village which has been established for quite a long time.

Figure 1. Discovery of the Singing Stone

In addition to its culture, the location of Selo Bonang which is located at an altitude of 700-800 m above sea level, causes Selo Bonang to have another attraction. At that height, the view of Jember city can be seen accompanied by valley views that support the beauty of the scenery at the Selo Bonang location. The stone arrangement contained in Selo Bonang is scattered at several points, starting from the stone arrangement facing the valley so that tourists can play the tune on the Selo Bonang stone while enjoying the natural beauty of the city of Jember. Another potential comes from the culinary aspect in Selo Bonang. This area has a variety of typical foods and drinks from the Selo Bonang region that can be a special attraction for every tourist who visits.

Figure 2. Tourism Potential of Selo Bonang Singung Valley

Despite having promising potential, both Panduman Village and the Selo Bonang area still lack a comprehensive development framework to fully optimize their potential as promising tourist destinations. Especially for Selo Bonang, the absence of written documentation regarding the unique tones produced by its stones hinders precise arrangement to

construct melodic harmony. Overcoming this obstacle could result in an intriguing musical performance, which would attract both local and foreign tourists to experience an extraordinary musical experience with natural rocks in the Argopuro Mountain valley, thus becoming known as the "Singing Rock Valley.".

2 | METHOD

The musical aspect in the singing stone at the location of Selo Bonang not only has potential as a rhythmic musical instrument but also as a melodic musical instrument. This is because the stones found produce a tone that sounds like a gamelan sound when hit. To analyze the tones and to construct the melodic harmony, there are several steps namely:

1) Collecting Data
   The stones of Selo Bonang are still in randomly position for every spot. This step is to collect all stones. The team must collect stones both above ground and stones that are still buried in the ground.
2) Stones Analysis
   After collecting the stones, the team analyzed the audible tones. This tone analysis is needed in identifying how the arrangement of singing stones into a harmonious unity of tone in Geo Musical Stone musical instruments that adopt the concept of geopark development [1]. Technically, the stone hit until produce a certain octave, and then compared to octave produced by piano. This step conducted by similarity of octave produced by stone and piano.
3) Stones Processing
   In the process of preparing stones into musical instruments, requires re-polishing the stone into musical instruments, the polishing is done by the stage of scraping and cutting stones to find a good tone. This is done considering that some stones are buried in the ground, so that the layer of soil that wraps the stone causes the sound/vibration of the stone to be muffled. With erosion, the hope is that the stone can make a loud sound with minimal vibration resistance.
4) Stones Arrangement
   After the identification and processing of the tones, the stones are then arranged in one spot based on the tonal arrangement from the results of the previous analysis. The complexity of the tone and weight of the stone was a challenge for the team considering that the sound produced came from the vibration of the stone and it was also influenced by the structure and height of the support stone in producing the tone. In addition, the weight of the pitched stone slabs makes the stones tend to be difficult to move, considering the absence of tools at the location. The stones are arranged in a sequential arrangement from low notes to high notes. The arrangement of tones starts from Do Re Mi Fa Sol La Si Do.

Figure 3. Pentatonic Scale Illustration

5) Writing the Document of Singing Stone Valley
   After the stones were arranged according to a certain octave, the team compiled a tone analysis document of the Singing Stone Valley into a harmonious stone musical instrument, and this required music expert involvement (students as community development assistants) in analyzing and collecting data on the characteristics of the stone to identify the tone released by each stone in Selo Bonang.

The instruments used in the process of identifying tones on stones in Selo Bonang to become a harmonious musical instrument include:

1) Punching instrument, which serves to hit geo musical stone musical instruments. This tool is made of small stones, in the Selo Bonang area with a length of 13 cm. The purpose of using stone as a medium of beating

compared to wood or hammer steel is the density of the tool that is felt to be able to deliver maximum kinetic energy to the pitched stone so that the stone produces maximum vibration which has implications for the loud sound of the stone. In contrast to wood where the density of the object tends to be weaker, so it is felt less able to channel kinetic energy from the beating tool on the pitched stone. The reason the team did not use a steel hammer as a hitting medium is because the very dense steel structure increases the potential for the pitched stone to be quickly damaged and destroyed if hit by a solid steel structure. In fact, steel is a stone crushing tool that is also used by artists in performing stone carving art, so the team did not use steel hammers as a beating medium for conservation reasons on these stones.

2) Recording device. This tool is used in capturing sound on stones that need to be analyzed as a determinant of the tone released by Selo Bonang stone. With this recording device, the team can have an archive of recordings of each stone and later can be used as material both in compiling the stones into a unified tone in one octave and in compiling Selo Bonang tone analysis documents.
3) Tuner. Tuner is a very common tool for musicians, considering that this tool has a crucial function in identifying the frequency of the tone of each stone that will be arranged into a musical instrument. From the tool, the team can easily identify the base tone of each stone and the octave location of each stone. With this tool, the process of preparing stones can be easier by paying attention to the tones of Due to Si, then can also easily determine the basic tone both from C to BB, as well as the octave location of the preparation of the stones. When the stone has been arranged and known the basic tone and octave position, then the stone can also be a medium of collaboration both between rhythmic musical instruments, and with other melodic musical instruments.

3 | RESULTS AND DISCUSSION

3.1 Results

In generating sound through stones, the following steps need to be executed systematically [2]. First and foremost, it is necessary to identify stones that have the potential to produce the desired sound. Next, arranging the stone supports precisely to ensure that the produced sound possesses optimal clarity and resonance is essential. Subsequently, identifying the areas where striking points on the stones can produce the best and cleanest sound becomes imperative. Once the appropriate stones have been identified, the next step involves adjusting the sound pitch produced to the notes of a piano musical instrument. This process ensures that the produced sound is in the correct pitch and octave. Upon successfully finding the desired tones, recording, and categorizing the stones based on the octaves of each tone are necessary. After the analysis process is completed, the results from the analysis of the 14 stones reveal that there are some stones with the same tone, and there are stones that encompass 2 to 3 tones within them. The combination of all the tones achievable from the 13 analyzed stones includes E5, F5, F#5, A5, B5, C6, E6, and F6. The results are as follows:

Figure 4. The Result of Stone Analysis

The next step is stone arrangement. This step is intended to move the stones from random position into ordered position in one spot, based octave level, so that it can create a harmonious unity of tone. Hence, the visitor or tourist can play a song by hitting those geo musical stone of Selo Bonang and enjoying the nature view from Singing Stone Valley, shown by both pictures as follows:

Figure 5. Stone Arrangement and Construction Result

The tonal analysis of each stone has been thoroughly documented in the book "Analisis Nada Selo Bonang" as follows:

Figure 6. Selo Bonang Tone Analysis Book

In addition, the team also procured several operational support facilities, namely plaques containing information about Selo Bonang, starting from the history of its formation, analysis of the tone of each spot "singing stone" and other

information related to the potential found in the Selo Bonang area and Panduman Village. In addition, the team also homogenized a tool in the form of a hammer made of teak wood. Teak wood is chosen to be a medium of beating rather than stone, because the wood is more easily formed like a pau, so that the handle feels more ergonomic, the amount of force released is in harmony with the impact on the stone, and the selection of teak wood is considered as wood that has a high density, in the hope that the sound emitted by stone vibrations due to blows from the hammer, can produce a loud sound. Stone hammers are not chosen as a hitting medium considering the molded stone structure, non-ergonomic handles, and can also accelerate damage to the "singing stone" structure due to erosion between stones due to beating. The team also handed over a cabinet safe made of thick *stainless stell plates*, with the hope that inventory such as hammers and other supports are not easily lost and can be stored neatly in the Selo Bonang area, and so that the safe is more durable with *outdoor* conditions where potential damage due to termites and weather can occur when using materials such as wood or ordinary iron.

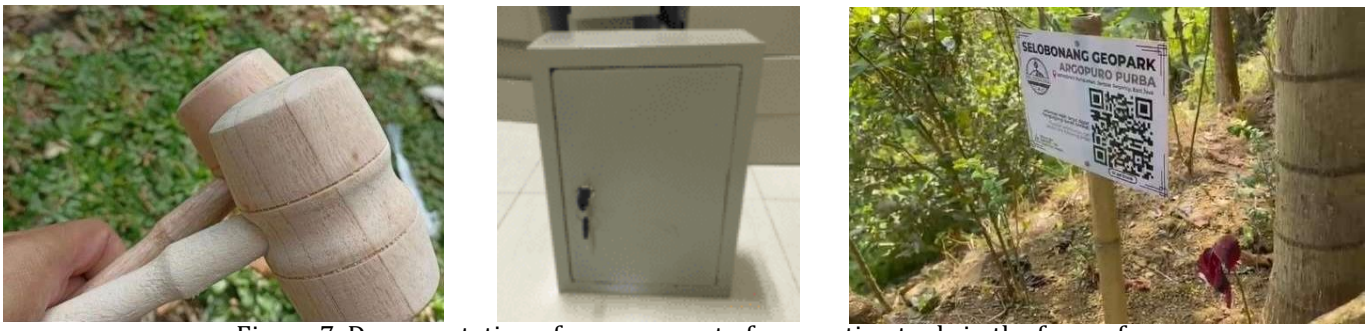

Figure 7. Documentation of procurement of supporting tools in the form of wooden hammers, safes, and information boards

3.2 Discussion

Based on the results of the service activities and discussions that have been presented, it can be concluded that efforts to develop Selo Bonang's tourism potential through the construction project and identification of the Singing Stone Valley have great potential to attract tourist interest. Selo Bonang has a unique attraction, both in terms of culture, topography of the location, local economy, and the existence of the Singing Stone Valley, which is a rare natural phenomenon that has not been found in other locations. However, the importance of integrated development for Panduman Village and Selo Bonang is highlighted, especially considering the lack of documentation regarding the unique tones produced by these stones. The process of identifying and constructing pitched stones involves several meticulous stages, including data collection, pitch analysis, stone processing, stone setting, and writing documentation. The results of the analysis show that these stones can produce several musical notes arranged in such a way as to create harmony. The result of this project is the Singing Stone Valley which can provide visitors with a unique musical experience while enjoying beautiful natural views. Apart from the construction of the stones, this service also involves complete documentation and the provision of operational support facilities such as information plaques and special hitting tools. All of this aims to provide information to visitors and keep the equipment in good condition. Although there are several technical challenges faced in this project, its positive potential in increasing the tourism attractiveness of Panduman Village and Selo Bonang cannot be ignored.

4 | CONCLUSION

Selo Bonang is a unique natural tourist destination with the presence of stones that, when hit, produce musical tones. This service aims to assist in compiling a book of stone tone analysis. From the analysis conducted, those stones produce the tones E5, F5, F#5, A5, B5, C6, E6, and F6. The analyzed tones can be arranged in a single spot so that songs can be played with instruments that utilize natural stones, while enjoying the view of the Argopuro valley called “Singing Stone Valley.”.

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