



## **EXPLORING ISLAMIC VISION ON THE ENVIRONMENTAL ARCHITECTURE OF TRADITIONAL JAVANESE LANDSCAPE: STUDY OF THEMATIC TAFSEER PERSPECTIVE**

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### **ABSTRACT**

This article examines and explores Islamic visions of environmental architecture and traditional Javanese houses (joglo) from the Qur'anic perspective. This qualitative research with a descriptive method seeks to analyse the values and Islamic vision of the Joglo house architecture by exploring several data sources, both field data and literature data. The results of this study indicate that the architectural elements of the joglo house contain philosophical ideas that are relevant to the Islamic visions in the Qur'an, such as; *pendapa* (containing the philosophical meaning of the openness principle), *pringgitan* (principle of equality), *dalem* (principle of privacy), *senhong* (principle of respect), *gandok* (principle of food security), and *pawon* (use of firewood) as for the suitability of philosophical ideas with the Islamic vision in the architectural elements of the environment, namely *sawo* (containing the philosophical meaning of the goodness principle), *jambu dersono* (the principle of sharing), *belimbing lingsir* (the principle of remembering God), *papaya* (the principle of self-introspection), and *beringin* (the principle of knowing the origin). In short, the joglo house building reflects a house that can adapt to the environment and nature. Therefore, joglo is a representation of house architecture that can combine natural elements that are outward and inward, thus creating a comprehensive and balanced religious value.

### **KEYWORDS:**

Islamic Values; Joglo Architecture; Javanese Environmental; Quranic Landscape Principles

### **INTRODUCTION**

Comfortable, calm, and sustainable are the main priorities of humans in building houses and choosing the environment. This priority will majorly impact human life, both physically and mentally. Efforts to build and choose a comfortable living environment, of course, require good ideas and concepts. Moreover, this idea or concept must be adapted to the circumstances and the place to live in terms of weather, territory, land, natural conditions, and certain social customs. In Indonesia, for example, the diverse character of the nation [1], consisting of islands, regional conditions, and different tribes, reflects differences in the environment and building architecture. Even so, this diversity produces the architecture of traditional buildings that are different and distinctive in the Indonesian context, such as the *gadang* house (West Sumatra), the *bale* house (West Nusa Tenggara), the *betang* house (Kalimantan), and the *joglo* house (Java).

One of the buildings that represent the architecture of traditional buildings in Indonesia is the traditional Javanese house, known as 'joglo'. This joglo house was built with the dominance of wood as the

main material [2]. This form of the house has artistic value and high aesthetics and is only owned by people who can afford it. In the past, the Javanese people who owned joglo houses were only nobles and respected people because these houses required expensive building materials [3]. Along with the times, joglo has been built by most people (not only the nobility); even joglo is used as an office and government place like a village hall. In addition, joglo architecture in Javanese society is not a single building, but a cool and fresh home environment pattern supports it. Some plants, trees, and animals become an important composition to complement the architecture of the building and the environment. Ideally, the architecture and environment of the joglo house for the Javanese people can provide comfort and blend with nature [4].

A comfortable, safe, calm, and conducive living environment are some of the visions of Islam described in the Qur'an about life. The Qur'an explains in Surah An-Nahl verse 80 that the house is a gift from Allah as a human habitation. The house does not only function as a place to live, but it is a safe, calm, and harmonious place for its residents. In another verse, the Qur'an also

explains that the vision of Islam in building the environment is also reflected by fertile soil, natural atmosphere and livestock, as mentioned in Surah Al-Furqan verses 48-49. That is, humans are not monotonous dwelling in the building of houses and their environment but can take advantage of the potential aspects of the environment created.

The response of the Qur'an, which contains Islamic visions regarding building architecture and the environment, provides knowledge and references for humans to build ideal homes and environments. Some consider the Qur'an a collection of text lines sometimes only understood as rules for human servitude to God (worship). More than that, the Qur'an is rich and accommodates all topics, especially building architecture and the environment. Oleg Grabar said the Qur'an, as a book and authoritative source, inspired the making of art and architecture. However, the Qur'an's consideration of art and architecture does not lead to a coherent whole but a series of separate observations, either directly or indirectly, for creating objects and designing space [5].

The complexity and comprehensiveness of Islamic teachings in the Qur'an span infinite time and space. It is relevant in every condition, situation, and time (*shalih likulli Zaman wa Makan*) [6]. Understanding the Qur'an is a dynamic process along with the process of human life from all its aspects. Overall, there is no doubt that the Qur'an will continue to be studied to answer society's aesthetic, cultural, and social needs. Therefore, it is generally accepted that Quranic citations are important to Islamic art, especially architecture. Experiments will continue using the Qur'an as a holy book and source of citations to improve architecture [5].

Art has a neutral nature; art can arise from several aspects of life, such as culture, society, beliefs, or religion. When art is born, and experiences contact with several aspects, it will give birth to new uniqueness and characteristics. From the 7th to the 15th century, the development of Islamic architecture occurred in several aspects, such as the development of art, the development of structures, the development of decorations, the variety of decorations, and building typologies. These developments cover many regions and countries, including Europe, Africa, and Southeast Asia. Therefore, its development in different areas has been adjusted to the local culture and traditions. Moreover, here there is an assimilation of Islamic art and architectural values with the existing culture [7].

Undeniably, in the philosophy of the architectural environment, the *joglo* house also experiences the assimilation of Islamic and cultural values. Javanese culture is synonymous with daily harmony, balance, and harmony. This makes the Javanese people pay close attention to environmental conditions in achieving this harmony. Javanese culture is a requirement for the application of local wisdom in buildings. This can be seen in the balance of the function of the building with the construction,

climatology, intensity of use, materials, the appearance of the building, the firmness of the ornaments, and the colours used. Architecture in Javanese buildings emphasises more on symbolisation to show the meaning contained in a building [8].

Previous research on *joglo* houses has been carried out by scholars and academics, such as Slamet Subiyantoro [9], Yulianto Prihatmaji [10], Noor Cholis Idham [11], Deni Adi Wijaya [12], and Widayati [13]. Some of these scholars studied the *joglo* house from the structural aspect of the building and its adaptation to natural conditions. In addition, two examine the *joglo* house in terms of aesthetic art interpretation of local wisdom of Javanese culture. In line with this information, research on environmental architecture and *joglo* buildings from Islamic values and visions is still rare or never done.

This kind of research is important because the architecture of traditional Javanese buildings adopts the integration of values between local wisdom and Islamic values. This acculturation into two entities does not negate but enriches each other so that the understanding of Islam is referred to as Javanese cultural contexts [14]. Therefore, this study aims to examine and explore the Islamic visions in the architectural elements of the traditional Javanese house, *joglo*. This research wants to answer the big question about how Islamic values can be adopted in the architecture of traditional Javanese houses (*Joglo*) and their environment. In addition, this paper will present interpretations of *joglo* architectural elements from interior and exterior aspects based on the interpretation of verses of the Qur'an relating to architecture and the environment.

## **METHODS**

This study uses a qualitative-descriptive research method. The hallmark of qualitative methods is their emphasis on the natural environment. 'Natural' means that the context and situation of the research subject are understood and described broadly and clearly so that the reader feels real in and involved in it. This means that political, economic, cultural, religious, and environmental conditions are described clearly and in detail [15]. Likewise, with this research, the environment and architecture of the Javanese traditional building '*joglo*' is the research subject which will be described in detail.

Data was collected through surveys, documentation, and literary exploration of books or references relevant to this research. The data used in this study is secondary data that has existed before in several sources, both in the form of scientific works, Javanese cultural columns, Javanese cultural atlases, or documentation. First, documentation is recorded in the form of *joglo* house architectural data and environmental elements in pictures, magazines, and other information, including interior and exterior aspects of the building. Then, the data collected from architectural elements of the *joglo* house and its environment were analysed from the Qur'anic tafseer

perspective. The analysis of the Qur'anic tafseer perspective is intended to explore the values and Islamic vision that are implied in every architectural element of the *joglo* house and its environment.

In line with this, the interpretations of the Qur'an presented in this study are verses relevant to the theme or topic, both concerning the architectural elements of the *joglo* house and its environmental elements. In the Qur'anic study, this method is called the thematic tafseer method (*maudhu'i*). Thematic interpretation method is a method that directs the view to a certain theme, then seeks the views of the Qur'an on that theme by collecting all the verses that talk about it, analysing it, and understanding it verse by verse. Then collect it in the mind of general verses and associate it with specific ones [16]. So put, this method can be understood by collecting verses that examine a particular topic or theme [17], for example, the theme of architecture and the environment. Then the verses are understood thoroughly to get the appropriate conclusion.

## DISCUSSION

### BRIEF DESCRIPTION OF THE JAVANESE TRADITIONAL HOUSES DEVELOPMENT

Historians have not agreed on the origins of traditional Javanese houses [18]. However, some narrations explain the difficulty of determining the initial form of the Javanese house. Some say it is told orally by word of mouth, from grandfather to grandson, great-grandchildren, etc. Some say that the Javanese house was originally made of stone. Some of these opinions reflect that the agreement regarding the origin of the traditional Javanese house has not been resolved.

As for other narrations, it is said that several experts have proven through the technique of preparing traditional Javanese houses, such as the technique of arranging temple stones. However, it is not the Javanese house that imitates the shape of the temple, but the shape of the temple that imitates the Javanese house. Why is that? Because the temples that are often found today, such as Borobudur, Dieng, Pawon, Mendut, Gedongsongo and others, have only been established in the 8th century. Meanwhile, before Hinduism and Buddhism came to Java, the Javanese ancestors already had a fairly permanent residence as a place to live. Therefore, protect themselves and their families [18].

So, no one knows for sure about it. Ancient evidence can only be seen from the reliefs on the stone temple. The strongest assumption is obtained from an ancient manuscript, which states that Javanese houses were made of wood and dates back to when Prabu Jayabaya ruled in Memenang (the capital city of the kingdom of Kediri in East Java) [18].

Around the 11th century, Adipati Harya Santang and Prabu Jayabaya agreed to build a house out of wood. Wood is a light material that is easy to work with and find, and if damaged, it is easy to replace [19]. At the same time, rainwater and other reasons will easily erode the old Javanese house made of stone.

At the king's palace, the ranks of workers under the leadership of Adipati Harya Santang also received a message to repair the king's palace. Then during the reign of Prabu Wijayaka in Medangkemulan, various changes were made, especially in the housing 'Department', which has since been managed by a housing official with the rank of Regent. They consisted of the Regent of Kalang Blandhong, the Regent of Kalang Obong, the Regent of Kalang Adeg, and the Regent of Kalang Abrek [20].

The four types of Regents of Kalang each have their expertise, especially in buildings. However, in carrying out their duties, each other cooperates; those who are experts in cutting wood or trees (Kalang Blandhong) are in close cooperation with the forest clearing section (Kalang Obong), the building planner (Kalang Adeg), and the department or people in charge. Tear down old buildings [18]. All of these house construction activities were coordinated by the issue of Javanese buildings being easily resolved.

### JOGLO HOUSE CHARACTERISTICS

Joglo is a traditional Javanese house made of wood. This form of the house has a high artistic and aesthetic value. According to the Javanese language, Joglo is an abbreviation of 'Tajug Loro,' meaning two mountains [21]. The joglo house is called the *tikelan* house (*tikel* means fracture) because the roof seems to cut into three parts. That limited part is called *joglo* or *brunjung*. Four poles support *Brunjung*. The *Sokoguru* pillar is the longest and largest pole. *Sokoguru* was founded on a foundation made of stone, known as *ompak*. The number of pillars in the joglo house is four *sokoguru*, 12 responder pillars (*soko penanggap*), and 20 *sokorowo*. There are a total of 36 sticks. Then, the support pillars limit the floor, and the rafters are higher than the surrounding part [22].



Figure 1. Joglo house [23]

The house is in the form of a *joglo* with a square plan. This form has four main pillars in the middle, called *sokoguru*, and is used in layers called *tumpangsari* (intercropping). This intercropping area is stacked up; the higher it gets, the wider it gets. At first, it was only the middle part of the modern *joglo* house. Subsequent developments have given additions to the sides, adding the pole according to need.



Figure 2.4 Sokoguru pillars [24]

The complete structure of a joglo house includes several parts, namely the *pendapa*, *pringgitan*, and *dalem*, as the main part in the middle of the whole house complex. The structure of the main building is added with *gandok*, *gadri*, and *pakiwon* that surround it on the right, left, and rear sides. With the completeness of the building structure, it can be ascertained that a complete joglo house building will require a large enough land area. The most obvious example of the complete joglo house is the palace building, which remains in Yogyakarta and Surakarta [3].

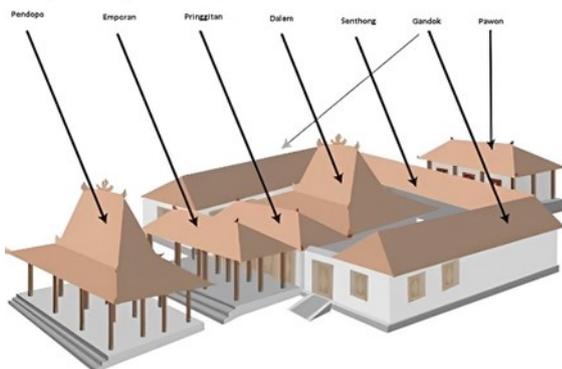


Figure 3. The complete structure of the joglo house [25]

Initially, the joglo building had existed since the pre-arrival of Islam to Java. At that time, Javanese people still adhered to Hindu, Buddhist, or syncretist traditions [26]. Nevertheless, the architecture and elements of the Joglo house are built on the ideas of local wisdom and the Javanese philosophy of life. At the same time, the Javanese philosophy of life is harmony, balance, and circular harmony between living things and living things or living things with the universe. In line with this, the Qur'an, as a source of Islamic teachings and vision, contains complete components of the philosophy of human life and the universe. Therefore, it is undeniable that the true philosophical ideas and meanings in every element of joglo architecture are closely related to Islamic values.

#### ISLAMIC VISION ON THE COMPONENTS OF JOGLO HOUSE

According to Asti Musman, the parts of the joglo house include several components, including; *pendapa*, *pringgitan*, *dalem*, *sentong*, *gandok*, and

*pawon* [7]. The explanation of these components is as follows;

#### 1. Pendapa (front of house)

The *pendapa* is the leading building of the joglo house, which functions as a place to receive guests or hold traditional ceremonies. In general, the *pendapa* is always open with the concept of not being given a covering wall. However, even if the cover is given, the wooden wall easily opened or called *gebyok* is used. Philosophically, this illustrates the principle of openness homeowners adopt [22].



Figure 4. Pendapa [27]

Judging from the principle of openness as the philosophical meaning of the *pendapa* building. This is in line with the Islamic vision in the Qur'an that the Qur'an explains the attitude of openness to the event of the Prophet's migration with the emigrants to Medina. The attitude of openness is represented by the Ansar as hosts, accepting the arrival of the Prophet and the Muhajirun. This is mentioned in Surah Al-Hashr: 9.

*"(They are as well) for those who were settled in the land'and [abided] in faith before them, who love those who migrate toward them, and do not find in their breasts any need for that which is given to them, but prefer [the Immigrants] to themselves, though poverty be their own lot. And those who are saved from their own greed—it is they who are the felicitous."*

In connection with this verse, Ibn Kathir explains by quoting the hadith narrated by Imam Al-Bukhari that Umar once made a will to the Caliph after him to pay attention to the Muhajirin and the Ansar to accept (openly) anyone who does good from them and forgive those who do it wrong [28].

In addition, the *pendapa joglo* house is always at the front. All problem-solving, reunification or conflict reconciliation and other activities are carried out at the *pendapa*. Specifically, the *pendapa* is a large *tarup* (roof) in front of the joglo house of the nobility, which shows the principles of order, harmony, balance, and even cosmic stability. If it is related to the philosophy of power in Javanese culture, the *priyayi* (people who belong to a layer of society whose position is considered respectable) have succeeded in gathering

and bringing together the *abdi dalem* (palace employees) and their subordinates who devote themselves to attending important events. For example, on the day of Eid, performing *sungkeman* (shake hands by bowing to the more respected) as an apology to an older person or elder [3].

The *pendapa* is also a symbol of the protection given by the glorified *pepundhen* (ruler) to the *abdi dalem* (subordinates), who are loyal to protect and shelter under his protection. *Pendapa* is a manifestation of smooth communication between those who lead and those who are led.

The *pendapa*, which has a broad and elegant shape, is usually surrounded by trees planted to provide shade. Plants planted symbolise the life that usually emits a fragrant colour and smell. How to plant it is also arranged to look harmonious with the shape of the *pendapa*.

The concept of the *pendapa* environment above is likened to Heaven on earth for the life of the Javanese with the composition of plants and herbs to balance a harmonious and cosmic life. In line with this concept, it turns out that the Qur'an also explains that a natural living environment with the scope of plants is a good environment for its owner. The concept is identical to the environmental conditions in Heaven as mentioned in Surah Az-Zariyat: 15 (*Indeed, the Godway will be amid gardens and springs*). According to Ash-Syaukani, the inhabitants of Paradise referred to in verse are in a refreshing environment full of gardens, plants, and shady vegetation, and also, some springs flow clearly [29].

## 2. Pringgitan (centre of the house)

In ancient times, *pringgitan* was usually used as a place for shadow puppet (*wayang kulit*) shows. The word *wayang* is usually called *ringgit*. For example, a person's *wayang* is often referred to as *ringgit tiyang*. From the word *ringgit*, the name *pringgitan* emerged.



Figure 5. Pringgitan [30]

*Pringgitan* is located between the *pendapa* and the *dalem*. This room is usually used as a guest room and an official meeting. For people with high social status, sometimes *pringgitan* is made behind the *hantika wahana* or *rata wahana*, which are places for vehicles. So, *pringgitan* serves as a liaison between *pendapa* and *dalem*. Therefore, the floor is flat and the same height, so it does not seem separated. *Pringgitan* with *pendapa* is usually limited by *seketsel* (a room divider made of wood), while *pringgitan* with *dalem* is limited

by *gebyok* (a partition or wooden wall) [22].

One important thing from the *pringgitan* philosophy is that a flat and the same height floor form means equality. The equality in question is that humans have the same degree. This principle is adhered to by the owner of the house, even though he is the host, but an equal attitude is a principle adopted. That way, he can be open and glorify the guests who come.

The principle of equality aligns with the Islamic vision described in the Qur'an, that humans have the same degree, neither low nor high. What distinguishes the degree of man is only his piety to Allah. This is mentioned in Surah Al-Hujurat: 13.

*"O mankind! Indeed We created you from a male and a female, and made you nations and tribes that you may identify yourselves with one another. Indeed the noblest of you in the sight of Allah is the most Godway among you. Indeed Allah is all-knowing, all-aware."*

According to Ath-Tabari, the above verse explains that human beings whose degrees are high or noble are determined by the quality of piety to God. Not determined by the size of the house or the number of families [31].

## 3. Dalem (main room)

The *dalem*, or main building, is the inner space for the family. This core building has three rooms: middle *senhong*, *senhong kiwo*, and *senhong tengen*. Sometimes these three *senhongs* (rooms) are located at the back of the main house and are limited by a bulkhead made of woven bamboo *wulung* or measuring the wood, known as *patangaring*. *Patangaring* is made of carved wood with a *lung-lungan* pattern [3].



Figure 6. Dalem [32]

*Dalem* is the inner room or core of the *joglo* house. Of course, the *dalem* can only be accessed by the house owner and his family. Because the *dalem* concerns the homeowner's privacy, others may not access it without the owner's permission. In this regard, the Qur'an also teaches modesty and that one way to maintain the Islamic vision is not to enter someone else's house without the owner's permission. This explanation is mentioned in Surah An-Nur: 27.

*"O believers! Do not enter any house other*

than your own until you have asked for permission and greeted its occupants. This is best for you, so perhaps you will be mindful."

Buya Hamka interprets the verse above that believers are prohibited from entering other people's yards if the owner does not give permission. Home is a place to keep household secrets. Because everyone has two faces in life, social life and personal life. Household affairs separate the household, which others should not know. Therefore, according to the Islamic religious regulations described in this verse, it is not permissible for a person who feels himself to believe in God and obeys the Apostle to enter arbitrarily into someone's house, whoever it is, if not with the permission of the owner of the house. It did not matter whether the house was the presidential palace, complete with bodyguards, or a bad hut with thatched roofs in a narrow alley full of mud. However, the sovereignty of the house's occupants over his house remains the same [33].

#### 4. Senthong (room)

Senthong or rooms are divided into three, namely; 1) *senthong tengen* (right) is used as a room for men. 6) *senthong kiwo* (left) is a room for women. 7) Middle *senthong* is also called *petanen*, *pasren*, *pedaringan* or *krobongan*. This *senthong* is used for meditation [66].



Figure 7. Senthong [30]

The separation of the right and left rooms or *senthong* implies respect for women and men for those who do not have a legal relationship (husband and wife). Islam teaches that it is forbidden for men and women to mix in one room without a binding or legal relationship. The Qur'an explains this in Surah An-Nur: 30-31.

"O Prophet! Tell the believing men to lower their gaze and guard their chastity. That is purer for them. Surely Allah is All-Aware of what they do. And tell the believing women to lower their gaze and guard their chastity, and not to reveal their adornments except what normally appears. Let them draw their veils over their chests, and not reveal their 'hidden' adornments except to their husbands, their

fathers, their fathers-in-law, their sons, their stepsons, their brothers, their brothers, sons or sisters' sons, their fellow women, those 'bondwomen' in their possession, male attendants with no desire, or children who are still unaware of women's nakedness. Let them not stomp their feet, drawing attention to their hidden adornments. Turn to Allah in repentance all together, O believers, so that you may be successful."

Maintaining honour between men and women starts with keeping the view. According to Wahbah Zuhaili, what is meant by holding one's gaze here is not closing one's eyes but making one bow down and awake because of shame, not swarming. The reason behind the command to hold one's gaze is to close the gaps that could be the entrance to damage and negative things and prevent the occurrence of sin and disobedience. Verily, sight is a messenger and a gateway to adultery. Some generations of *Salaf* say views are poisoned arrows that are shot into the heart. Therefore, in this verse, Allah combines the command to guard the genitals with the command to guard the eyesight, which is the triggering factor for the main forbidden thing, adultery [34]. The presence of *senthong* in the *joglo* house also prevents these worries.

#### 5. Gandok

Gandok is located on the right or left of the main building. Usually attached to the back. The longitudinal direction of the *gandok* is transverse to the rear house. *Gandok* serves as a storage room, dining room, and sometimes a pavilion where guests stay [3].



Figure 8. Gandok [35]

The *gandok* in the *joglo* building functions as a storage warehouse for furniture and food supplies. Storing food as a supply for the long term is very useful in living and surviving. The reason derived from human food can consume energy. In short, *gandok* is important in maintaining resilience in Javanese society. Food security is also an art of survival, the Islamic vision for believers. The Qur'an explains and teaches food security, as mentioned in Surah Yusuf: 47-49.

Joseph replied, "You will plant 'grain' for seven consecutive years, leaving in the ear whatever you will harvest, except for the little you will eat. Then after that will come seven years of great hardship which will consume

*whatever you have saved, except the little you will store 'for seed'. Then after that will come a year in which people will receive abundant rain and they will press 'oil and wine!'"*

According to Ibn Kathir in his commentary, the meaning of the verse above is that regardless of the plant yield for seven fertile years, the grains must be stored to be more durable and not easily damaged. Except for what is needed to eat, and eating it must be sparingly (just a little, not too much) so that it can be used to meet the needs for the seven years of famine that will come after the seven years of the fertile season because famine years will consume all the crops collected in the fertile season years. Joseph told us that in the years of drought, the earth did not grow crops; even if humans planted, it would not produce anything. Therefore, he said to save food supplies for years [28].

#### 6. Pawon

*Pawon* is a building at the back used to cook and process everything related to food or food needs. So *Pawon* is the name of the kitchen for the Javanese. *Pawon* comes from the word *@a'*, which stands for board or place, while *'won~* means *awon/awu*, which means ashes. So *Pawon* means a place to produce ash. Why is that? Because this refers to a traditional Javanese kitchen that uses wood as fuel for cooking [3].



Figure 9. Pawon

Wood is the main fuel for Javanese cooking. Firewood, as a renewable energy source, has an important role for rural communities in supporting the continuity of meeting their daily needs. Firewood is used for cooking food, water, and heating. Firewood for people in rural areas will not be completely replaced by energy such as kerosene and gas because of their low purchasing power and difficulty in obtaining alternative jobs outside of farming [36].

The Qur'an in Surath Yasin: 80 mentions using wood as fuel: "He is the One<sup>7</sup> Who gives you fire from green trees." According to Wahbah Zuhaili, Allah started the creation of trees from water until they turned into green, fresh and fruitful trees. Then, Allah returns it to dry wood which is useful for starting a fire. He has the power to do that, of course, and also the power to do whatever He wants; nothing is beyond His

power. The change and metamorphosis from wet elements to dry elements show that it is possible to return wet elements to dry elements [34].

Concrete evidence shows that the green *Santh* tree (acacia, mimosa) can be used to start a fire. However, some say the meaning here refers to the *Markh* and *Afaar* trees that grow in the Hejaz. If someone wants to light a fire but does not have a lighter, he takes two sticks of wood that are still green from the two trees, then rubs them together, and then fire appears between the two sticks, just like a match. This is similar to the friction of overcast clouds that produce lightning [34].

#### ISLAMIC VALUES IN THE ELEMENTS OF THE JOGLO HOUSE ENVIRONMENT

In the construction of houses, the Javanese do not only pay attention to the shape of the house. However, creating a comfortable environment as a place to live is also considered. To add to the beautiful living environment, plants and pets are placed in such a way in the residential environment. Plants and animals are not just pets; these two elements play an important role for the Javanese and have a philosophy of life [22].

The home garden is an important component in the residential environment, complementing the elements of life that can complete the household. It can happen jokes, recreation, play, sit back, and so on. The home garden is also important in creating a healthy environment for its residents and the surrounding community. One home garden can be coupled with another, forming a unified residential environment. A series of plants that are beautifully arranged can display the beauty of the residential environment.

At least two benefits will be obtained from plants, namely for physical and spiritual needs. Fulfilment of physical needs can be seen from its use as a source of food and nutrition. The yard can fulfil spiritual needs because the yard can be made into a garden with a unique atmosphere [37]. The house and the beautiful plant arrangement are the ideal concepts of Islam in the environment, as mentioned in the Qur'an in the surah Yunus: 24.

*"The life of this world is just like rain We send down from the sky, producing a mixture of plants which humans and animals consume. Then just as the earth looks its best, perfectly beautified, and its people think they have full control over it.."*

The meaning of the verse, according to Wahbah Zuhaili, "When the plants grow perfectly and get bigger, that is with their ephemeral beauty and adornment and wear their ornaments with such luxurious and majestic jewellery, namely that the earth is decorated and beautifies itself with what comes out of the plants, in the form of beautiful flowers, of various shapes and colours, as well as seeds and fruits. This is because the owners who grow the plants believe they can pick and reap the fruit and benefit from it [34].

Plants generally contain several functions: visual control, physical barriers, microclimate control, erosion control, wildlife habitat, and aesthetic values [38]. In addition, the arrangement of plants can also withstand the dust scattered around the house so that the house is free of pollution. In this regard, Bambang Sulistyantara, as quoted by Asti Musman, divides plants into several functions, including; ground cover, hedges, shade plants, framing plants, guide plants, veils, and vines [22].

For the Javanese, planting plants is not just planting but choosing plants that are considered to have philosophical values as instructions or prayers for life. Planting sapodilla (*sawo*) is interpreted as *sawo becik*, or everything is expected to be good, for example, cheap sustenance and smooth in business.

The existence of plants, whether in the form of trees or ornamental plants, symbolises a process. Trees that grow start from seeds that are planted, watered, and given fertiliser to be fertile and cared for. Although this process takes effort and time, no tree grows instantly. However, if successful, the tree will bear fruit and can be enjoyed by the planter or others. As the motto says, whoever sows will reap. This aligns with the Islamic vision in the Qur'an surah Al-Isra: 7.

*"If you act rightly, it is for your own good, but if you do wrong, it is to your own loss."*

That is, whoever does good and useful things, then the goodness and benefits will return to him. However, on the other hand, whoever does evil, damage, and evil, then the evil will return to him [39]. It is the same with plants; whoever sows them will reap the results.

Some types of plants, like the Javanese, are considered to have philosophical values of life, including;

a) *Sawo (Manilkara Achras)*

The height of the *sawo/sapodilla* tree usually reaches 5 to 15 meters, and it is a fairly large tree. The leaves are clustered at the ends of the twigs, the leaf blades are elongated, and the leaf bones are straight. Sapodilla flowers mostly stand alone in the axils of the leaves, hanging and having multiple sexes. The fruit is also hanging, round, brown and juicy.

In general, sapodilla trees are planted in the front yard of the house, next to the *seketheng* (doors on the right and left sides of the *dalem*) in traditional houses. The sapodilla tree serves as a shade for house residents and guests. That is why under the sapodilla tree is often placed a seat in the form of a bamboo chair (*lincak*). Although the leaves are dense, the sapodilla tree does not block the sun's rays. Instead, it reflects light from the underside of the white leaves. The sapodilla plant has the meaning of *sawo becik* or always in goodness [22].

In any case, the sapodilla fruit indicates good for the Javanese people and is a reminder that humans are prohibited from doing evil. Javanese people believe that good deeds will be rewarded with kindness and vice versa. This belief can be seen from the Javanese sage quote, "*Manungsa mung ngunduh wuhing*

*pakarti*" (man's good and bad life results from man's actions). Of course, this aligns with the vision of Islam as taught by the Qur'an in Surah Ar-Rahman: 60.

*"Is there any reward for goodness except goodness?"*

That is, there is no reward for a person who fears when he appears before his Lord, and then he does good deeds in this world and obeys his Lord, except that his Lord will do him good in the hereafter by repaying him for his good in this world [31].

b) *Jambu Dersono (Sysygium Malaccensis)*

*Jambu dersono* is also called *jambul bol*, *jambu telapak arum*. The *jambu dersono* tree reaches about 0 to 15 meters. The leaves are oval long, and thick, while the flowers are only on leafy twigs, short stems, and few flowers. The fruit is round, pink when the fruit is young and dark red when the fruit is ripe. This *jambu* is usually planted on the side or front of the house.

This fruit is called *jambu dersono*, because the word '*dersono*' is an acronym for *deres danane* which means heavy sustenance. This hope is manifested in social actions and *eling sedulur* (remember brothers), *eling anak putu* (remember children and grandchildren). In Javanese tradition, when the Javanese have a fruit tree, the fruit will be distributed to close relatives at harvest time. It reflects in the Javanese term, *-weruh marang marange nak sanak sapiturunane*, which means remembering blood relatives or descendants [22].

Remembering and sharing with relatives is an effort to strengthen brotherly relations. More than that, such an attitude is even worth worship. Islam teaches humans two aspects of worship: *hablun minallah* (human relations with God) and *hablun minannas* (human social relations). Of course, the philosophy of the *jambu* fruit for the Javanese is closely related to the Islamic vision. The Qur'an describes good deeds to relatives and neighbours in Surah An-Nisa: 36.

*"Worship Allah 'alone' and associate none with Him. And be kind to parents, relatives, orphans, the poor, near and distant neighbours, close friends, 'needy' travellers, and those 'bondspeople' in your possession. Surely Allah does not like whoever is arrogant, boastful."*

Do good with close relatives. They are close families such as brothers, sisters, and uncles from the father and mother and their children. The trick is to love and get along with them well, as explained at the beginning of Surah An-Nisa: 1.

*"And be mindful of Allah—in Whose Name you appeal to one another—and 'honor' family ties. Surely Allah is ever Watchful over you."*

God created family ties that were formed based on ties of friendship and kinship that encouraged them to love and help each other. Kinship ties are nothing but an attitude of helping each other, strengthening each other, loving each other, sympathising, and loving

each other, all of which can make people feel happy and give them meaningful strength in society. He will feel happy with his family's happiness and sad with his family's sadness [34]. In this way, family ties will be firmly established, creating harmonious relations in one society and affecting the country's life.

c) *Belimbing Lingsir (Averrecjoa carambola)*

Starfruit (*Belimbing*) tree height reaches between 5-12 meters. The leaflets are round and elongated, the corolla in the middle is also long, and the flower panicles are tightly clustered in red. Some flowers with short stamens, and some flowers with long stamens. The star fruit tree is widely planted on the side and front of the house in both rural and urban areas.

Star fruit is sweet and fresh, usually eaten after eating rice. In addition, star fruit has properties for high blood pressure medicine, repellent reinforcements, and an antidote to black magic. For the Javanese, the star fruit (*belimbing lingsir*) symbolises always remembering God. This is as stated in the song *Lir-ilir* composed by Sunan Kalijaga to preach to spread Islam on the island of Java.

*Lir-ilir* Song:

*Lir-ilir, lir-ilir, tandure wus sumilir  
Tak ijo royo-royo, tak sengguh temanten anyar  
Bocah angon, bocah angon, penekno blimbing kuwi  
Lunyu-lunyu penekno kanggo mbasuh dodotiro*

Implicitly the song above contains a deep meaning. *Lir-ilir* means to wake up and be aware of oneself as a creature and servant of God. Conscious of strengthening the faith, described by *tandure wus sumilir* or plants begin to bloom, and the trees start to turn green like *tak ijo royo-royo*. Trying to grow the plant big will get happiness like the happiness of the newlyweds or not new friends. God gave Humans a heart to be cared for and shepherded like *cah angon, cah angon*. Shepherds the heart from lust, and humans are asked to explore starfruit or climb a starfruit tree identified with the symbol of the five pillars of Islam, like a star fruit with five teeth.

The star fruit tree is slippery (*lunyu-lunyu penekno*), and although it is difficult to climb, humans must try their best to carry out the five pillars of Islam. Then what is the point of all this? That is useful for washing clothes (*kanggo mbasuh dodotiro*), meaning piety clothes always to be cleaned [22].

*Belimbing Lingsir* has the philosophical meaning of 'remembering God', reflecting that the Javanese always present God in their hearts in every activity. The reason is, remembering God is an effort to achieve the piety of the Javanese, as stated in the song *Lir-ilir*. In line with this, the Islamic vision of remembering God is one of piety and peace of mind. The Qur'an explains this in Surah Ar-ra'd: 28.

*"Those who believe and whose hearts find comfort in the remembrance of Allah. Surely in the remembrance of Allah do hearts find comfort."*

The heart becomes good by remembering Allah (worship), relying on Him, and being sincere and willing to Allah as a protector and helper. That is what it deserves to remember Allah [28].

d) *Pepaya (Carica Papaya)*

In Javanese, papaya is called *kates*. Usually, Javanese people plant papaya trees on the side or back of the house. Papaya has many benefits because it contains vitamin A, which is good for eye health. Papaya also facilitates digestion for people with constipation. Papaya leaves are also medicinal, and the juice is used in traditional medicine to increase appetite, prevent cancer, and for eye health.

The papaya tree has a philosophical meaning that humans will not continue to mourn the past. The papaya tree grows tall by leaving the branches that begin to dry or wither. It finally leaves a round mark from a withered tree branch. The higher it is, the more it will leave marks on the tree trunks starting to wither. The former tree trunk is like a scratch of joy and sorrow that has been passed. If the past is bad, then humans must use it as a reference to be better in life. However, if the past is full of goodness, it can be used as a motivation to meet the future [22].

Papaya becomes a philosophical symbol that means self-introspection for the Javanese. Introspection is an effort of self-evaluation, correcting things that have passed for a better future life. This principle is relevant to the vision of Islam in teaching self-improvement and optimism in the future, as mentioned in the letter Al-Hashr: 18.

*"O believers! Be mindful of Allah and let every soul look to what 'deeds' it has sent forth for tomorrow. And fear Allah, 'for' certainly Allah is All-Aware of what you do."*

A papaya tree's dry and withered branches are likened to the past. The past is an aspect that humans evaluate; if the past is bad, then it must be evaluated. However, if the past is good, then it must be improved. In line with the verse above, the principle of introspection is related to the vision of Islam. Every human should reevaluate what he has done for the Day of Judgment; good deeds that will save him and evil that will destroy him [31].

e) *Beringin (Banyan)*

The banyan tree has a large trunk and shady leaves. That is why under this tree, it is convenient to use it as a shelter in the rain and shelter in the hot sun. So, banyan leaves have a meaning so that the bride and groom will find a place to shelter and protect their family.

The banyan tree has a philosophical meaning of strong, strong and nurturing. Even the banyan tree always clears the springs around it. The banyan does not grow upwards but grows sideways, expands, and sometimes its roots hang down. This means that humans must know their origins or where they come from [3].

Banyan roots hanging down symbolise the origin of the tree. For example, growing into a large banyan tree comes from roots in the ground. This reminds humans always to be aware of their nature and origins. By knowing their origin, humans can play a role and their function and purpose for being created. For example, the Qur'an explains the origin of man in Surah Ar-Rum: 20.

"One of His signs is that He created you from dust, then—behold!—you are human beings spreading over 'the earth'."

Among the signs and verses of Allah that are evidence of the guidance of His majesty and the perfection and totality of His power and ability to create, manifest, and annihilate is starting the creation of man from the beginning. Allah SWT created your first ancestor, Adam, from the soil and made your source of food and nutrition in the form of animal and vegetable food sources as well as from soil.

After Allah created you, you also prospered on the earth, occupied it, and spread life in all corners of the earth for various purposes, such as building cities and settlements, cultivating agricultural land, and carrying out commercial activities by travelling to various countries to produce sustenance, making a living and accumulating wealth, with a variety of potentials, skills, talents, abilities, reason, and thoughts, rich and poor, luck and misfortune, happiness and misery [34].

## CONCLUSION

*Joglo*, as a traditional Javanese house, was built with planning, architecture, and interior and exterior structures that have meaningful values in life. These considerations are the main elements in creating a good home and environment. The reason is that the form and building of the *joglo* house show the principles of order, harmony, balance, and even cosmic stability. The philosophy of balance in the architecture of the *joglo* house does not only refer to physical/outward comfort. However, more than that, inner comfort is also an important consideration in it. The *joglo* house building represents a house that can adapt to the environment and nature. This can be seen in the composition of the structure of the building, which uses a lot of wood materials. That way, the characteristics of the *joglo* house have high artistic and aesthetic values and are natural.

Although the *joglo* has existed since the pre-arrival of Islam in Java, the architecture and elements of the *Joglo* are built on the concept of the Javanese philosophy of life about harmony with the universe. Likewise, the Qur'an contains all life teachings as a reference for life. Therefore, since the beginning of the *joglo* construction, the ideas and concepts contained in each element of the *joglo* architecture do not contradict Islamic values. On the contrary, it means the philosophical idea of the *joglo* building has coherence with Islamic values.

The elements of the *joglo* house, which include *pendapa*, *pringgitan*, *dalem*, *senthong*, *gandok*, and

*pawon*, contain Islamic values and visions in the Qur'an. Likewise, the elements of the *joglo* house environment include several plants such as *sapodilla* (*sawo*), *jambu dersono*, *belimbing lingsir*, *papaya*, and *banyan* (*beringin*). These elements follow Islam's ideal concept of creating a living environment. This suitability can be seen in the philosophical ideas in every architectural element of the *joglo* house, namely; 1) *Pendapa* contains a philosophical meaning about the principle of openness, in line with the Islamic vision of surah Al-Hashr: 9. 2) *Pringgitan* contains a philosophical meaning about the principle of equality, in line with the Islamic vision of surah Al-Hujurat: 13. 3) *Dalem* contains a philosophical meaning about privacy, in line with the Islamic vision in surah An-Nur: 27. 4) *Senthong* contains a philosophical meaning of respect for women and men for those who do not have a legal relationship (husband and wife), in line with the Islamic vision of surah An-Nur: 30 -31. 5) *Gandok* contains a philosophical meaning about food security, in line with the Islamic vision of Surah Yusuf: 47-49. 6) *Pawon* contains a philosophical meaning about wood fuel, in line with the Islamic vision of Yasin: 80.

As for the suitability of philosophical ideas with the Islamic vision in the elements of the *joglo* house environment, such as; 1) *Sawo* contains a philosophical meaning about goodness, in line with the Islamic vision of the surah Ar-Rahman: 60. 2) *Jambu Dersono* contains a philosophical meaning about sharing with relatives, in line with the Islamic vision of surah An-Nisa: 36. 3) *Belimbing Lingsir* contains a philosophical meaning about remembering God, in line with the Islamic vision of the surah Ar-ra'd: 28. 4) *Papaya* contains a philosophical meaning of self-introspection, in line with the Islamic vision of surah Al-Hashr: 18. 5) *Banyan* contains a philosophical meaning about knowing origins, in line with the Islamic vision of Surah Ar-Rum: 20. In short, the philosophical ideas in the elements of *joglo* architecture and its environment contain Islamic values and have a vision of harmony with the universe.

This article is still limited to discussing the *joglo* architecture from the Quranic perspective and Islamic values. Further research is important to study *joglo* architecture from various aspects, such as the resilience of *joglo* architecture in responding to extreme weather changes. Remember that *joglo* is a traditional Javanese house that always experiences extreme weather changes such as storms, earthquakes, floods, etc. These studies will complement this paper regarding the architecture of the *joglo* house and its environmental elements.

## REFERENCES

- [1] Nurhayati, R. Setiyowati, and Y. Nurmalisa, "Bhinneka Tunggal Ika As A National Consensus And A Universal Tool Of The Indonesian Nation," *JED (Jurnal Etika Demokrasi)*, vol. 6, no. 2, pp. 254-263, Jun. 2021, doi: 10.26618/JED.V6I2.5317.

- [2] Y. P. Prihatmaji, A. Kitamori, and K. Komatsu, "Traditional Javanese Wooden Houses (Joglo) Damaged By May 2006 Yogyakarta Earthquake, Indonesia," vol. 8, no. 2, pp. 247–268, Mar. 2013, doi: 10.1080/15583058.2012.692847.
- [3] A. Musman, *Membangun Rumah Ala Orang Jawa: Mengungkap Makna Rumah Orang Jawa*. Pustaka Jawi, 2019.
- [4] J. Budiwiyanto, "Rumah Tradisional Jawa Dalam Sudut Pandang Religi," *Ornamen*, vol. 10, no. 1, 2013, doi: 10.33153/ORNAMEN.V10I1.1047.
- [5] O. Grabar, "Art And Architecture In The Qur'an," *Encyclopedia of the Qur'an*. Leiden: Brill, pp. 161–174, 2001.
- [6] A. Mustaqim, *Epistemologi Tafsir Kontemporer*. Yogyakarta: LkiS, 2012.
- [7] A. Fikriarini, "Arsitektur Islam: Seni Ruang dalam Peradaban Islam," *El-Harakah*, vol. 12, no. 3, pp. 194–206, Oct. 2011, doi: 10.18860/el.voio.452.
- [8] N. I. Hambali, Hisyam, D. S. Pratama, and M. S. Pratama, "Simbolisasi Budaya Jawa dan Substansi Nilai Islam pada Masjid At-Tin Jakarta," *Sinektika J. Arsit.*, vol. 19, no. 2, pp. 173–183, 2022, doi: 10.23917/sinektika.v19i2.18394.
- [9] S. Subiyantoro, "The Interpretation of Joglo Building House Art in the Javanese Cultural Tradition," *MUDRA J. Art Cult.*, vol. 26, no. 3, pp. 221–231, 2011.
- [10] Y. P. Prihatmaji, A. Kitamori, and K. Komatsu, "Seismic Vulnerability on Structural Proportion of Traditional Javanese Wooden Houses (Joglo)," in *Procedia Environmental Sciences*, vol. 28, pp. 804–808, Jan 2015 doi: 10.1016/J.PROENV.2015.07.095.
- [11] N. C. Idham, "Javanese Vernacular Architecture and Environmental Synchronization Based on the Regional Diversity of Joglo and Limasan," *Front. Archit. Res.*, vol. 7, no. 3, pp. 317–333, Sep. 2018, doi: 10.1016/J.FOAR.2018.06.006.
- [12] D. A. Wijaya, D. Djono, and S. Ediyono, "Local Knowledge in Joglo Majapahit: Analysis of Local Wisdom Models Gemah Ripah Loh Jinawi in Rural Java," *Int. J. Multicult. Multireligious Underst.*, vol. 5, no. 3, pp. 113–122, Jun. 2018, doi: 10.18415/IJMMU.V5I3.235.
- [13] E. N. Widayati, N. E. Rakhmawati, and D. Pratama, "The Architectural Structure of Joglo House as the Manifestation of Javanese Local Wisdom," in *Proceedings of 1st Workshop on Environmental Science, Society, and Technology*, Jun. 2019, pp. 1–7, doi: 10.4108/EAI.8-12-2018.2283855.
- [14] M. Abdullah, "Pribumisasi Islam dalam Konteks Budaya Jawa dan Integrasi Bangsa," *Indo-Islamika*, vol. 4, no. 1, pp. 67–90, 2014.
- [15] J. R. Raco, *Metode Penelitian Kualitatif: Jenis, Karakteristik dan Keunggulannya*. Jakarta: Gramedia Widiasarana Indonesia, 2010.
- [16] M. Q. Shihab, *Kaidah Tafsir: Syarat, Ketentuan, dan Aturan yang Patut Anda Ketahui dalam Memahami Ayat-Ayat Al-Qur'an*. Tangerang: Lentera Hati, 2013.
- [17] Manna Al-Qaththan, *Pengantar Studi Ilmu Al-Qur'an*. Jakarta: Pustaka Al-Kautsar, 2014.
- [18] R. Ismunandar K., *Joglo Arsitektur Rumah Tradisional Jawa*. Semarang: Dahara Prize, 1990.
- [19] I. Fitriya, "Bentuk Rumah Joglo Sebagai Ide Penciptaan Loker," Institut Seni Indonesia Surakarta, 2018.
- [20] B. Tjahjono K, "Arsitektur Tradisional Jawa Banyumasan Pada Pendapa Duplikat Si Panji Di Kota Lama Banyumas," Universitas Diponegoro, 2015.
- [21] T. Roesmanto, "A Study of Traditional House of Northern Central Java - A Case Study of Demak and Jepara -," *J. Asian Archit. Build. Eng.*, vol. 1, no. 2, pp. 219–226, 2018, doi: 10.3130/JAABE.1.2\_219.
- [22] A. Musman, *Filosofi Rumah Jawa: Mengungkap Makna Rumah Orang Jawa*. Yogyakarta: Pustaka Jawi, 2017.
- [23] S. Wardiningsih, "ARSITEKTUR NUSANTARA MEMPENGARUHI BENTUK BANGUNAN YANG BERKEMBANG DI INDONESIA", *Scale*, vol. 6, no.2, pp. 274-283, 2015
- [24] Y. P. Prihatmaji, "Perilaku Rumah Tradisional Jawa Joglo Terhadap Gempa", *Dimensi Journal of Architecture and Built Environment*, vol. 79, no.1, pp. 1-12, 2007, DOI: <https://doi.org/10.9744/dimensi.35.1.1-12>
- [25] B. Prihnawan, "Traditional Vintage Javanese Indonesian House, Denah Joglo Scheme - Vector," *Shutterstock.com*. <https://www.shutterstock.com/id/image-vector/traditional-vintage-javanese-indonesian-house-denah-1506597149> (accessed Sep. 22, 2022).
- [26] R. Ph, "Transformasi Arsitektur Permukiman Tradisional di Jawa dari Masa Hindu-Budha ke Masa Islam," *Res. Rep. - Eng. Sci.*, vol. 2, 2008.
- [27] B. Halim, "9 Bagian Dalam Rumah Joglo yang Kaya Makna," *Finansialku.com*, 2021, <https://www.finansialku.com/bagian-bagian-dalam-rumah-joglo/> (accessed Sep. 22, 2022).

- [28] I. Katsir, *Tafsir Ibnu Katsir*, I. Bogor: Pustaka Imam Asy-Syafi'i, 2004.
- [29] I. Asy-Syaukani, *Tafsir Fathul Qadir*. Jakarta: Pustaka Azzam.
- [30] H.Y. Pratama, A.B. Sardjono, "KAJIAN BUDAYA PADA ARSITEKTUR RUMAH TRADISIONAL JOGLO BUCU DI KABUPATEN PONOROGO", *Nature*, vol. 54, no. 5, pp. 5-14, 2022. DOI: <https://doi.org/10.24252/nature.v10i1a1>
- [31] I. J. Ath-Thabari, *Tafsir Ath-Thabari*. Bogor: Pustaka Azzam, 2007.
- [32] J. Budiwiyanto, "PERPADUAN JAWA-EROPA KEARTISTIKAN INTERIOR DALEM WURYANINGRATAN", *Acintya*, Vol. 1, No. 1, pp. 1-20, 2009, DOI: <https://doi.org/10.33153/acy.v1i1.31>
- [33] Hamka, *Tafsir Al-Azhar*. Jakarta: Pustaka Panjimas, 1984.
- [34] W. Zuhaili, *Tafsir Al-Munir: Aqidah, Syariah, Manhaj*. Jakarta: Gema Insani, 2013.
- [35] "Membedah Bagian Dalam Rumah Joglo Masyarakat Jawa," *Okezone Economy*, 2016. <https://economy.okezone.com/read/2016/06/30/470/1429314/membedah-bagian-dalam-rumah-joglo-masyarakat-jawa> (accessed Sep. 22, 2022).
- [36] H. Dwiprabowo, "Kajian Kebijakan Kayu Bakar Sebagai Sumber Energi di Pedesaan Pulau Jawa," *J. Anal. Kebijak. Kehutan.*, vol. 1, no. 5, pp. 1-11, Apr. 2010, doi: 10.20886/JAKK.2010.7.1.1-11.
- [37] L. A. Rosdiana, L. Sugiarti, and U. W. Mukti, "Pemanfaat Pekarangan Rumah Dengan Penanaman Tanaman Hias," in *Seminar Nasional Pengabdian Kepada Masyarakat (PKM)*, vol. 1, no. 1, pp. 606-610, Dec. 2018, Accessed: Sep. 30, 2022. [Online]. Available: <https://proceedings.conference.unpas.ac.id/index.php/pkm/article/view/382>.
- [38] H. A. Febriarta, E. Sulistyaningsih, and S. N. R. Irwan, "Identifikasi Karakteristik dan Fungsi Tanaman Hias untuk Taman Rumah di Dataran Medium dan Dataran Rendah," *Vegetalika*, vol. 1, no. 1, pp. 11-22, Dec. 2012, doi: 10.22146/VEG.1380.
- [39] I. Al-Qurthubi, *Tafsir Al-Qurthubi*. Jakarta: Pustaka Azzam.