The existence of joglo houses owned by Javanese farmers: A case of Pondokrejo village, Rembang

Baju Arie Wibawa
Universitas Persatuan Guru Republik Indonesia Semarang, Semarang, Indonesia

Corresponding e-mail: bajuaw@upgris.ac.id

Abstract. The joglo building has symbolic meanings and a high cost to build, so it is only applied to several public buildings (pandopo, office, museum, etc.) owned by the rich people, that its existence as a house is difficult to survive. The number of joglo houses in various places does not increase (even decrease), but it does not occur in the Kampung Joglo, Pondokrejo, Rembang. There is an anomaly where the number of joglo houses can survive and even increase from year to year. With this potential, this study examined the existing joglo houses owned by Javanese farmers. The research methodology was carried out in a qualitative descriptive manner through the measurement of field data, which was then analysed and described. The results showed that the shapes of roofs were Joglo, Wedhok/Bekak Lulang (Kampung), Paris (Limasan) and Sinom. In this case, Joglo houses owned by farm families were about 199 homes or 47%. The joglo roof is the essential shape that has always been preserved by the residents. They aspire to build the joglo if they are financially capable. The results of this study also revealed that the joglo house did not only belong to the royal families or officers who lived in urban areas (negarigung) and coastal trader regions (pesisir) but actually, there were many farmers in rural areas (mancanegari) who owned joglo houses too. This study acknowledged the importance of the joglo houses in Pondokrejo that could be preserved eventually.

Keywords: joglo, vernacular, Javanese, traditional, Pondokrejo

1. Introduction
The Javanese architecture mostly applied to many buildings in Indonesia is related to the daily life of the Javanese people. There are many types of construction that depend on the functions of building. Joglo becomes the most popular Javanese architecture.

Joglo buildings have been acknowledged and accepted as a representation of traditional Javanese architecture. Joglo is a style of Javanese traditional house building with the shape of a roof resembling gunungan with a very short mala, accompanied by a symbol of intercropping [1]. Joglo house in Javanese understanding is a reflection of attitude, insight and economic-socio-cultural level of the community. Houses are thus not different from one's lifestyle [2] [3].

In its existence, joglo is often constrained by many things, such as limited precious materials, delicate teak materials, confined space, a limited span of structure, and so on. These constraints have made the joglo form (houses) to be unable to compete with the modern home with all their advantages. This reality has raised the awareness that Joglo architecture as a product of Javanese culture is limited and unable to keep up with the times [4].
The joglo house with all the costs and symbolic meaning leads to many obstacles in its preservation in various places. Usually the joglo buildings are only applied to several public buildings (halls, offices, landmarks, etc.), and joglo as houses are complicated and difficult to survive. The number of joglo houses in various places does not increase (even decrease), but it does not occur in Kampung Joglo, Pondokrejo, Rembang. There is an anomaly where the number of joglo houses in this village can survive and even increase from year to year. As a comparison, joglo buildings in all of Kudus City (1983) were 263 houses, but in 1984 there were 165 houses. In the old Kudus City, at least between 1984 and 1995, eight homes were sold [5]. Based on the 2009 Pondokrejo Village data, the old and new joglo houses were around 200 houses while in 2017 they were 229 joglo houses.

The strata of Javanese society can be divided into royal society, traders and common people. Each class has a place to live with its characteristics. Joglo houses require high highly-priced materials/construction, compared to other traditional house forms. In ancient times, Javanese people assumed that common people could not afford to build their own joglo houses, but the houses were owned by respected people by their community [6]. In contrast, in this study, the Joglo houses are mostly owned by farmers who are regarded as the third class in the Javanese strata. This study shows and proves the existence of joglo house ownership by farmer communities in the rural area.

2. Methods

This study employed a qualitative research methodology to identify and analyse the shape of joglo houses owned by farmers in the rural area. The methodology was carried out in a qualitative descriptive manner through the measurement of field data, which was then analysed and described. The steps of research were: 1. measurement survey for data collection and measurement of existing buildings, 2. compilation of data and arrangement of the data according to the needs of the research analysis, and 3. analysis of type, function and ownership of joglo houses.

3. Discussion

*Kampung Joglo* is a traditional settlement that still preserves Joglo houses in Pondokrejo Village, Bulu District, Rembang Regency, Central Java, Indonesia. The site is located in a rural area where the distance of the settlement location from the capital of Rembang Regency is as far as ±21 km. The area of this village is about 294.092 hectares.

This village has hundreds of joglo houses that are still in good conditions and some are under constructions. However, they are not too affected by the global impact. The tradition of building Joglo is inherited through generations. In the past, *joglo* was made with wood from forests, but now the forests do not provide the same amount of wood as in the past. Now, the locals own their teak trees planted around their fields.

The population of Pondokrejo Village (2017) consists of 1,322 people with 484 families. The livelihoods of the largest community are farmers and farm workers (see table 1 and figure 1), with the total percentage of 84.3% or 885 people. It shows that the main livelihoods are dominated by agricultural activities. It is obvious from the natural conditions where most of the land is the rice fields in lowland areas. Maybe such conditions what cause people to respect nature and carry out ancestral traditions. Their daily activities are going to the rice fields in the morning and going home in the evening (pure life).
Table 1. The number of buildings according to the shape of the roof.

| No  | Livelihood             | Total | Prosentage |
|-----|------------------------|-------|------------|
| 1   | Farmers                | 825   | 78.6%      |
| 2   | Farm workers           | 60    | 5.7%       |
| 3   | Entrepreneurs / Traders| 100   | 9.5%       |
| 4   | Craftsmen              | 1     | 0.1%       |
| 5   | Retired                | 1     | 0.1%       |
| 6   | Fisherman              | 3     | 0.3%       |
| 7   | Breeder                | 0     | 0.0%       |
| 8   | Services               | 1     | 0.1%       |
| 9   | Others                 | 3     | 2.9%       |
| 10  | Artist                 | 0     | 0.0%       |
| 11  | Unemployment           | 0     | 0.0%       |
|     | **Jumlah**             | 1,049 | 100.0%     |

Source: Field data collection in 2017

3.1. Identification of roof shape

| No | Roof Shape             | Function | No | Roof Shape             | Function |
|----|------------------------|----------|----|------------------------|----------|
| 1  | JOGLO                   | Joglo building forms are found mostly for the main buildings in most homes. The building always has a teacher's pillar. Often there are extended roofs on the sides. Who are able or have enough funds to build it. Usually owned by people who have enough funds to make it. | 5 | RONGPYAK                | "Rongpyak" is simple of "kampung" shape. The shape of this house is usually the main house for residents who have not been able to make another type of house or traditionally used as a home for service functions (pantry or warehouse) on the back. |
| 2  | BEKUK LULANG/WEDHOK     | The shape of "Bekuk Lulang" found in the main house or second house. This shape is the development of "kampung" that always has air openings on the long side. The name is often called "wedhok" house because it is usually woken up by the wife's family if it is not able to make joglo. | 6 | PANGGANG-PE            | In this village, it's a type of house is not found as a stand-alone house, but only a roof or an additional building attached to the main house. |
| 3  | SINOM                   | "Sinom" was found in front of the joglo house. They shaped like "limasan", but height between joglo and limasan. This shape can have "soklo guru" in the middle, but it has not raised. | 8 | TAJUG                   | This shape only found in the function of worship buildings for the mosque or small mosque. |
| 4  | PARIS                   | This form of "Paris" is a form of "limasan" house that is widely used by the middle class if it has not been able to make joglo. |                     |          |
In the traditional Javanese culture, every kind of building has different functions according to the symbols and meanings. *Tajug* buildings in Javanese culture function as places of worship, tombs or monuments. The conditions in Pondokrejo only use *tajug* for the construction of mosques. The *joglo*, *limasan* (*sinom*), *limasan* (*Paris*), *kampung* (*bekuk lulang/wedhok*) are buildings commonly used for houses in Javanese culture and Pondokrejo (see figure 4). The *panggang-pe* which is used as a warehouse, stall or cage in Javanese culture, but in Pondokrejo it is usually only for cage or bathrooms (expansion of the main building).

### Table 2. The number of buildings according to the shapes of the roof.

| No | RT | Type of Houses | Total |
|----|----|----------------|-------|
|    |    | Joglo          | Wedhok/Bekuk Lulang | Sinom | Paris | Rongpyak |       |
| 1  | 1  | 25             | 8                 | 4     | 9     | 26       | 72    |
| 2  | 2  | 35             | 12                | 18    | 9     | 49       | 123   |
| 3  | 3  | 10             | 4                 | 3     | 4     | 18       | 39    |
| 4  | 4  | 36             | 21                | 24    | 10    | 73       | 164   |
| 5  | 5  | 35             | 21                | 12    | 7     | 52       | 127   |
| 6  | 6  | 29             | 13                | 4     | 8     | 32       | 86    |
| 7  | 7  | 16             | 9                 | 4     | 8     | 19       | 56    |
| 8  | 8  | 7              | 6                 | 6     | 5     | 15       | 39    |
| 9  | 9  | 14             | 4                 | 5     | 2     | 23       | 48    |
| 10 | 10 | 22             | 3                 | 3     | 5     | 27       | 60    |
| Total | 229 | 101 | 83 | 67 | 334 | 814 |

Source: Field data collection in 2017

![Figure 3. Comparation of roof type in Kampung Joglo with the Javanese Houses.](image)

3.2. Header and footer

![Figure 4. Composition of population livelihoods](image)
3.3. The number of buildings according to the shapes of the roofs
The total number of houses in Pondokrejo is 814 owned by 422 families. The highest number is Rongpyak (334 homes or 41%). The joglo is ranked second about 229 units or 28% (see table 2 and figure 5).

Figure 5. Coparisson of the function and shape building.

3.4. The function and number of houses with Joglo form

Joglo is one of the traditional buildings that has been acknowledged as a representation of traditional Javanese architecture. Joglo is known as the image, icon, and perception of the Javanese architecture beside other types (tajuk, limasan, kampung and panggang-pe). Based on the field data, the number and composition of buildings in Pondokrejo using the Joglo form can be seen in table 3 and figure 6. It seems
that almost half (47%) of families in Pondokrejo live in joglo houses. The Joglo buildings are still in the form of the original Javanese traditional houses that are able to survive and adapt to the challenges and demands of global impact. This condition is unique and specific. It can be seen that the joglo houses are very desirable for a lot of families, so the existence of the joglo houses will always be preserved. From interviews, the Joglo houses in Pondokrejo function not only to protect families from the heat and rain, but also to become a symbol of pride and social status of the owner. The bigger and the higher the joglo houses are build, the higher the social rank and position of the owners will be [7].

3.5. The ownership of Joglo building
The strata of Javanese society can be divided into royals, officers, traders and common people. In each class, people build houses with their characteristics as a place to live. The royal families and traders mostly select joglo as their residences and most people choose regular types of house (see figure 7). This selection is based on the joglo requirements, which are more numerous and diverse, with more expensive volume and quality of materials [8].

Figure 7. Landscapes with hundreds of joglo houses belonging to Javanese farmers.

The joglo houses are mostly owned by high-ranked people because the buildings requires more materials so that the prices will be higher. In ancient times, Javanese people assumed that common people should not own joglo houses, but well-respected people in their community were the ones who owned joglo houses [6].

Families from the middle classes (officers and traders) and upper classes (royal families) live in their houses that are united with the environment (nature, social and space), even in abstract (mystical and spiritual) ways that have been preserved since ancient times. The Javanese cultural life and joglo houses, in particular, have strong environmental roots and cannot be easily manipulated. The Joglo buildings from their strength and comfort values are far better than other types, such as panggang-pe, kampung and limasan [8].

In the case of Pondokrejo, the ownership of the Joglo does not belong to the royal family and traders. Joglo buildings are mostly owned by farmers, who are part of common people in the Javanese strata. A significant number of the farmers in Pondokrejo who own the joglo shows a deviation from the theory regarding the ownership of joglo houses in Javanese. However, because of the high cost of constructing Joglo buildings, it is indeed the farmers who are quite wealthy who can afford to have joglo houses.
4. Conclusion
The traditional settlement of Joglo Village in Pondokrejo still preserves Joglo as their houses. In this village, farmers become the main occupation as it is obvious from the natural conditions, where most of the lands are rice fields in lowland areas.

There are several types of Javanese building used as residential houses: Joglo, Wedhok (Bekuk Lulang), Paris (Limasan) and Sinom. The tajug is only used for the mosque, while panggang-pe is only for additional spaces from the main building.

The number of families who own joglo houses in Pondokrejo is 199 houses or 47% of the total families. The number is significant and dominant as many of the joglo houses belong to the farmers. This condition is very different from the usual Joglo ownership, where only royal families, officers, and traders own joglo houses. In Pondokrejo, joglo houses are indeed dominated and owned by farmers. The joglo has become an essential type of building that has always been admired and desired by the people around the village.

The results of this study show that joglo buildings do not only belong to royal families and officers who live in urban areas (negarigung) and the traders in coastal regions (pesisir), but actually there are many farmers in rural (mancanegari) who own joglo houses too.

The case of joglo ownership for Javanese farmers in the village still becomes an under studied phenomenon. Further research should investigate and compare joglo buildings owned by rural farmers (mancanegari) with the “negarigung” and “pesisir” areas.

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