

## Quality of public space safety at Kumbasari Tukad Badung Park, Denpasar

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### ABSTRACT

Public space / public space is a container that accommodates certain activities of the community both individually and in groups. Public space is stated to be ideal and must have several important aspects, namely convivial, namely comfortable, safe, then becomes a forum for the community to interact between fellow users or other individuals. One of the public spaces owned by the city of Denpasar is Taman Kumbasari Tukad Badung, Taman Kumbasari Tukad Badung is located on the edge along the Badung river which has a length of approximately 548 meters, is in the middle of Badung Market and Kumbasari market and is located on the banks of the Badung River. This location poses a risk to the safety of its users, especially during the rainy season. The purpose of this study is to determine the level of security at the Kumbasari Tukad Badung Park facilities considering the position of this public space is on the edge of the Tukad Badung River. References. The research method uses quantitative statistical methods, namely by giving values based on existing standards. The results showed that the percentage of the quality of public space security in Taman Kumbasari Tukad Badung is in the range of 50%, where the facilities in Kumbasari Park can be said to have standard public space security.

**Keywords:** security; public spaces; convivial; Tukad Badung Park; percentage.

### INTRODUCTION

Public space as one of the important urban elements can be a guide and reflect the special character of a society. In general, public space can be defined as a container that can accommodate certain activities of the community, both individually and in groups. The form of public space is very dependent on the pattern and composition of the building period (Hakim, 2013). The development of an urban area is marked by the increase in the completeness and quality of the facilities and infrastructure owned. One of the means that supports the development of a city in the social aspect is public space. According to Carr (1992) public space is a space that can be accessed by the public and a place where people carry out activities individually or in groups. Public space is declared ideal, it must have several important aspects, namely convivial, namely comfortable, safe, then become a place for people to interact between fellow users or other individuals (Shaftoe, 2008). Various factors that influence people's satisfaction with public space, one of which is the security factor (Nasution et al. 2011). Security (security) is a state of being free from danger or conditions that are protected physically, socially, spiritually, financially, politically, emotionally, occupationally, psychologically or due to various consequences of a failure, damage, accident, or various unwanted circumstances (Richards, 2010). 1980). According to Craven (2000) in Widodi and Indarto (2010), safety not only prevents pain and injury but also makes individuals feel safe in their activities and can reduce stress and improve general health.

One of the public spaces owned by the city of Denpasar is Taman Kumbasari Tukad Badung, Taman Kumbasari Tukad Badung is a public space initiated by the Mayor of Denpasar, namely 'Ida Bagus Rai Mantra' with the concept of a river in South Korea. The public space of Taman Kumbasari Tukad Badung has various facilities in the form of seating, connecting bridges, gardens with various cooling plants. The physical appearance of Kumbasari Park is in the form of road pavement using a brush stone finish with a wavy shape coupled with colorful lighting that adorns at night, Kumbasari Tukad Badung Park is located on the outskirts along the Badung river which has a length of approximately 548 meters, located at in the middle of the big markets in Denpasar, namely Badung

Market and Kumbasari Market. At the northern boundary, namely the border with the Kumbakarna road bridge to the south, namely the Hasanudin road bridge at the central center, namely the bridge connecting the Badung market with the Kumbasari market, it is included in the Heritage area of Jalan Gajah Mada. Seeing the condition of Kumbasari Park which is on the outskirts of Singi Badung where when it rains it often overflows with water and garbage, of course, the safety aspect of visitors becomes the main priority, the safety factor really needs to be taken into account to reduce unwanted accidents. Kumbasari Tukad Badung Park.

### Security aspect analysis

Security according to Tarwoto and Wartonah (2010) is a safe and peaceful state that not only prevents pain or injury but can also make individuals feel safe in their activities, reduce stress and improve general health.

### Safety characteristics

1. Pervasiveness (incidence) Security is broad affecting all things. This means that clients need security in all their activities such as eating, breathing, sleeping, working, and playing.
2. Perception A person's perception of security and danger affects the application of security in their daily activities. Safety precautions can be effective if the individual understands and accepts the hazard accurately.
3. Management (settings). When the individual recognizes a hazard in the environment the client will take precautions so that the hazard does not occur and that is safety practice. Prevention is the main characteristic of security (Fatmawati, 2009).

### Safety Classification

1. Physical security Maintaining physical security involves reducing or preventing threats to body or life. The threat may be disease, accident, danger, to the environment.
2. Psychological security To be safe and psychologically safe, a human being must understand what is expected of others, including family members and health care professionals.

## RESEARCH METHODS

This research is a quantitative research with a descriptive statistical approach. The research was conducted through a scoring analysis technique where the conditions in the field will be scored based on predetermined indicators (Mulyana, 2005). The results are described in the description to show the level of security in accordance with the indicators and criteria that have been set based on the criteria for public space security. The research location is on Jalan Gajah Mada, precisely in Kumbasari Tukad Badung Park which has an area of approximately 285 meters. The data is in the form of field observations regarding the security level of the Kumbasari Tukad Badung Park. Data collection was carried out by observing directly the field conditions, namely the physical security of the Kumbasari Tukad Badung Park. The research variable focused on the physical safety of the park which consisted of child-friendly, construction, lighting, markers, guardrails, security posts and cctv), the following is the description in the table.

**Table 1.** Physical security indicators

| Variable | Component      | Criteria  |
|----------|----------------|---|
| Security | Child friendly | <ul style="list-style-type: none"> <li>• Placement of the location of the park in an area that is as minimal as possible for children to avoid disturbances/conflicts when traveling to the location. (Baskara 2010)</li> </ul>                   |
|          | Construction   | <ul style="list-style-type: none"> <li>• Access to children's play areas is limited in number to protect children from physical disturbances from outside the area so that crime can be minimized and well controlled. (Baskara, 2010)</li> </ul> |

|                |   |
|----------------|---|
| Lighting       | <ul style="list-style-type: none"> <li>Placement (trees, poles, etc.) does not hinder the visibility of parents when supervising their children (Amelia, 2016)</li> </ul>                                     |
| Guardrail      | <ul style="list-style-type: none"> <li>Safety fences made of shrubs, iron, walls or bushes (Amelia, 2016) Minimize the use of materials that have the potential to cause accidents (slip, tripped)</li> </ul> |
| Bookmark       | <ul style="list-style-type: none"> <li>Surfaces on pedestrian paths must be stable, strong, weather resistant, smooth textured but not slippery. (Permen PU Number : 30/PRT/M/2006)</li> </ul>                |
| Security posts | <ul style="list-style-type: none"> <li>Pedestrian lights with a height of 4-6 meters (Rubensteun in Azzaki (2013))</li> </ul>   |

The assessment is carried out using a zero one assessment, namely giving a value of 1 for components and criteria that meet and a value of 0 for components and criteria that do not meet. The results of the observational analysis using a rating scale, namely:

**Table 2.** Rating Scale

| No | Score | Criteria          |
|----|-------|-------------------|
| 1  | 0     | Does not meet the |
| 2  | 1     | Fulfill           |

Physical quality assessment is carried out after the value of each component and indicator is known. Classification is done by converting the value of conformity into the form of a percentage (Sugiyono, 1999).

$$\text{Percentage of conformity} = \frac{\text{Suitability value}}{\text{Maximum value}} \times 100\%$$

The assessment interval is based on the percentage of the physical security quality of the Taman Kumbasari Tukad Badung Public Space facility

1. Index 0% – 19.99% : Very not meet
2. Index 20% – 39.99% : Does not meet
3. Index 40% – 59.99% : Standard
4. Index 60% – 79.99% : Meets
5. Index 80% – 100% : Very fulfilling

## DISCUSSION AND RESULTS

### Research location

The public space of Taman Kumbasari Tukad Badung is located on Jalan Gajah Mada Denpasar which is a heritage area in the city of Denpasar. The Tukad Badung public space is also next to Kumbasari Market and Badung Market so it is in a strategic and central area of Denpasar City.

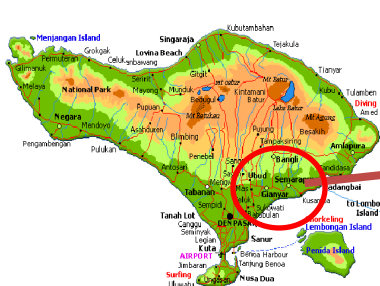


Figure 1. Map of the island of Bali

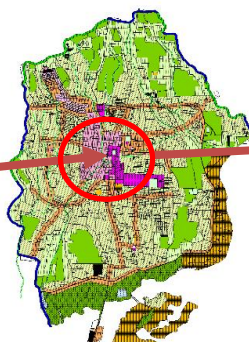


Figure 2. Denpasar city map

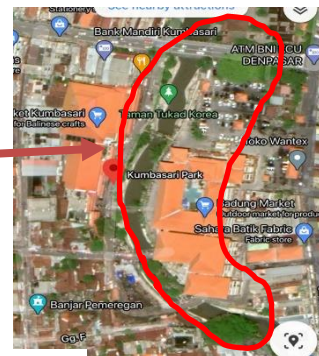


Figure 3. Map of Kumbasari Tukad Badung Park

**Facility**

The facilities in the Kumbasari Tukad Badung Park Public Space to support community activities are:

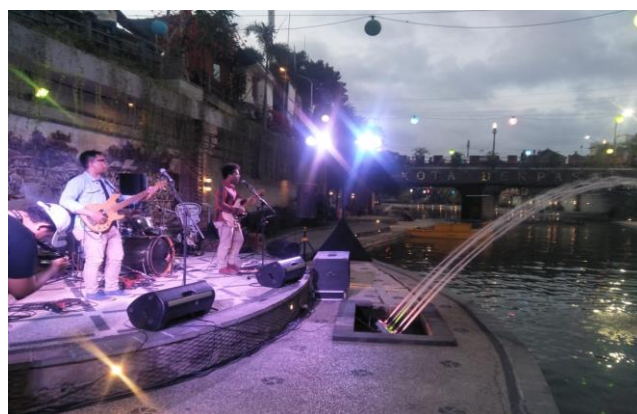
**Seating Area**



Figure 4. Seating Park Kumbasari Tukad Badung

There are many seating areas in the public space of Tukad Badung. This seating area serves as a seat for the community while enjoying the atmosphere of the garden area, resting and interacting. This seating area is in the form of seats and tables made of concrete, wood, iron and is permanent with the use of various colors and this area has a higher floor level than road pavement, there is no shade such as trees, the pavement material uses a brush like a garden that is found in gardens in Bali.

**Show Area**



Saturday and Sunday.

The performance area serves as an area for performances when there are certain events. This facility also functions for cultural performances for visitors where the performance is at a higher level than the pavement functions as a stage barrier by using brush stone material and there are spotlights. The stage has no shade such as trees or pergolas. The days of the event take time off, namely

Figure 5. Kumbasari Tukad Badung Park performance facilities



**Figure 4.** Access to Kumbasari Tukad Badung Park

*a.* Access

Access that makes it easier for the community who want to visit. There are many accesses such as main access and directly connected access from Badung market and Kumbasari market. The main access is in the form of stairs and access to the market is in the form of a bridge. Inside this access ladder it has railings as holders for visitors as well as stair steps using materials that have coarse fibers, namely brush stone and black stone canti,

**Toilet**

Toilet facilities for the community who want to defecate or just clean their bodies after visiting Located in the Badung market parking area, Kumbasari Park users must climb the stairs to exit the Park area to be able to access the toilet and if the user is on the west side of the park they must cross the bridge to the Park area east to access the toilet.

**Results of Analysis of Security Facilities at Kumbasari Tukad Badung Park**

**Table 3.** Facility assessment

| No                   | Component      | Indicator  | Facility assessment/<br>Good = 1<br>Bad = 0 |
|----------------------|----------------|--|---|
| 1                    | Child friendly | -Access to the park without a hitch                              | 1   |
|                      |                | - Access for children is restricted                              | 0   |
|                      |                | -Unobstructed view of parents                                    | 1   |
| 2                    | Construction   | - Non-sharp material has a surface that bends at an angle.       | 1   |
|                      |                | -Material is not slippery  | 1   |
| 3                    | Lighting       | - Pedestrian lights with a height of 4-6 meters                  | 1   |
|                      |                | -The distance of placement of pedestrian lights is 10-15 meters. | 1   |
| 4                    | Bookmark       | -Ram must be illuminated with sufficient lighting                | 0   |
|                      |                | -Escape route sign   | 1   |
|                      |                | -Extinguishing sign  | 0   |
|                      |                | -Big water warning   | 0   |
| 5                    | Guardrail      | -Warning for child users   | 0   |
|                      |                | -The barrier between the river and the playground area           | 0   |
| 6                    | security posts | -Delimiter the garden area with the outside garden area          | 1   |
|                      |                | -Security post   | 0   |
|                      |                | -CCTV  | 0   |
| <b>Score</b>         |                |  | <b>8</b>                                    |
| <b>Average value</b> |                |  | <b>50%</b>                                  |
| <b>Results</b>       |                |  | <b>Standard</b>                             |



From the results obtained based on the percentage of security surveys contained in Kumbasari Tukad Badung Park is "standard" by obtaining a value of 50% so it can be concluded that the security level at Kumbasari Tukad Badung Park is standard, where the facilities contained in Kumbasari Park can be said to have public space security standard one.

## CONCLUSION

Based on the results of the study, it can be concluded that the level of security in the Kumbasari Tukad Badung public space has a "standard" quality where the facilities contained in the Kumbasari park do not meet the average standard because the percentage is below 50%. has been determined as a consideration for the safety of better public space users in the future, especially in similar public spaces that have similarities in accident-prone areas such as the Kumbasari Tukad Badung public space.

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