

THE EVALUATION OF ASSETS QUALITY IN ALUN-ALUN KAWALI CIAMIS DISTRICT

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How to cite: N. Fadjarwati and H. A. Senjaya, "The evaluation of assets quality in Alun-Alun Kawali Ciamis District" *Kurvatek*, vol. 8, no. 1, pp. 7 - 16, 2023. doi: 10.33579/krvtk.v8i1.4007 [Online].

Abstract — Alun-Alun Kawali is an asset belonging to the Ciamis Regency which is managed by Dinas Perumahan Rakyat Kawasan Permukiman dan Lingkungan Hidup which is located in the Kawali sub-district. Based on the results of a preliminary survey conducted in the field, indications of problems related to asset quality are found, including lighting, seating areas and parking lots. Therefore an asset quality evaluation is carried out using five dimensions, namely Architectural, Aesthetic, Social, Environmental, and Functional. The research method used is descriptive research. Data collection techniques used are observation and interviews. The results of the assessment in general show that there are several problems with 10 indicators out of a total of 16 indicators regarding the availability and condition of Alun-Alun Kawali assets which are still not in accordance with the standards.

Keywords: Architectural, Aesthtetic, Social, Environmental, Functional

I. INTRODUCTION

Public open space is a place for social interaction between individuals [1]. Based on each character and variety of functions, public open space can affect the welfare of local residents by encouraging the emergence of community willingness to be part of environmental development through social activities [2]. One example of public open space in an area is the public square. Public square is a public space that should ideally be safe and comfortable because apart from its role as a space for social activities, it also has a role as a landmark of an area [3]. Generally, public square have a high intensity of visits, increasing activity in a square over time can have a negative impact if it can not be managed properly, such as a decrease in asset quality which can cause a bad outlook for the area due to the function of the square as a place identity [3]. In general, every region in Indonesia has a square as a center of activity in related areas, one of which is Alun-Alun Kawali which is a center for social and economic activities in Kawali District, Ciamis Regency.

Based on the results of the preliminary survey, it was found that there were indications of problems especially regarding the quality of physical assets at Alun-Alun Kawali. Indications of these problems include there are many vehicles parked on the shoulder of the road due to unavailability of parking space, disorganized sitting of the visitors, no toilet facilities found, and there are several points with poor lighting at night. Indications of these problems are related to the quality of physical assets in Alun-Alun Kawali which can generally be classified into architectural, aesthetic, social, environmental, and functional dimensions. [4]. Therefore, further research is needed based on these dimensions to get a clearer definition of the problem so that appropriate recommendations can be determined for each problem found..

Table 1. Indicator Criteria

Indicator	Criteria
	Architectural Dimension
A1 Seating areas	A1.1 Be in a shady area [5] A1.2 Minimum height of 0.4 m [5]
A2 Recreational areas	A2.1 Pedestrian paths are available [6] A2.2 There are areas to sit and relax [6]
A3 Shade producing trees	A3.1 Shade producing trees are available [7] A3.2 Tree height ranges from 3 – 12 meters [8] A3.3 There are trees with shady leaves [8]
A4 Roofs and Canopies	A4.1 There are roofs and/or canopies at several points in the square [7] A4.2 The canopy provides a shady area without obstructing the view [9]
A5 Playground	A5.1 Playground is available [10] A5.2 The location of the playground is easy for children to reach [10]

Indicator	Criteria
	A5.3 Game layouts are classified by activity type [10] A5.4 Playground equipment is safe to use [10]
Aesthetic Dimension	
B1 <i>Availability of Public Information Signs</i>	B1.1 There are various types of signages in the square area [11] B1.2 Public information signs are in an open place without being obstructed by vegetation [12] B1.3 Large public information signs are not obscure the views [12]
B2 <i>General Cleanliness</i>	B2.1 The square is clean from scattered and/or piled up garbage [13] B2.2 Trash cans are easily accessible [13] B2.3 Toilets and hand washing facilities are available [14] B2.4 Separated toilets for men and women [14] B2.5 Colorless and odorless water for toilet and hand washing facilities [14] B2.6 Non-slippery floor [14] B2.7 Clear toilet marker [14] B2.8 Ventilation of at least 20% of the floor area [14]
B3 <i>Paved Surface</i>	B3.1 Pavement surfaces are available [15] B3.2 Pavement surfaces are safe to pass [15] B3.3 Pavement surfaces are not slippery [15]
Social Dimension	
C1 <i>Lighting</i>	C1.1 Lights are available evenly throughout the area [16] C1.2 Various type of lights are available [17] C1.3 All lighting facilities are functional [16]
C2 <i>Surveillance</i>	C2.1 There are CCTVs at several points in the square [18]
Environmental Dimension	
D1 <i>Greenery</i>	D1.1 There are various types of vegetation [12] D1.2 The trees are safe from poison and thorns [12] D1.3 Trees vary in type and height [12] D1.4 There are water absorption surfaces available [19]
D2 <i>Noise level</i>	D2.1 Noise-blockers/noise-reducers are available [20]
Functional Dimension	
E1 <i>Width of sidewalks</i>	E1.1 Minimum width of 1.8 m [21]
E2 <i>Disability access</i>	E2.1 Ramp is available [22] E2.2 Braille blocks are available [22]
E3 <i>Pedestrian traffic</i>	E3.1 Pedestrian ways are available [23] E3.2 There is a minimum light range of 10 meters [23] E3.3 Covered drainage is available [23] [24]
E4 <i>Vehicle Parks</i>	E4.1 Parking area for the visitors is available [25] E4.2 Parking signs and directions are available [25]

II. METHODS

The research method used is descriptive research, namely research conducted to describe phenomena related to populations in certain areas in a precise and systematic manner [26]. The research begins with a preliminary survey stage to look for indications of problems, followed by a theoretical review, then data collection and analysis is carried out and the final stage is interpreting and presenting in the form of a description of the research results. Data collection techniques are carried out by means of field observations and interviews with representatives from the management of Alun-Alun Kawali and traders around Alun-Alun Kawali.

In general, the data obtained includes data regarding the quality (availability and condition) of the physical assets of Alun-Alun Kawali in accordance with the indicators that have been adjusted for this research. The data that has been collected is then quantified to facilitate the evaluation process, namely by calculating a comparison between the existing condition of the asset and the ideal criteria based on predetermined standards. The calculation of the data is presented in table 2 [27]. The results of these calculations are interpreted in three ranges, namely good (100%), good enough (50-99%), and not good (0-49%) [27].

Table 2. Research Data Calculation

Asset Quality (%)	Calculation
Per Indicator	Number of criteria met/total criteria x 100%
Per Dimension	Total quality per indicator/number of indicators x 100%
Total	Total quality per indicator/number of dimensions x 100%

III. RESULTS AND DISCUSSION

In general, based on the results of observations, Alun-Alun Kawali is quite in accordance with the function of the square as a space for social activities, namely passive and active recreational activities. Types of passive recreational activities that are usually carried out in Alun-Alun Kawali include sitting, chatting and relaxing while active recreational activities that are carried out are usually in the form of walking and sports. Furthermore, the results of the evaluation will be explained based on the dimensions of asset quality.

A. Architectural

There are 9 seats provided in a circular position in the middle of the square. The seat is 0.42 meters high and 0.5 meters wide. Seating for visitors is in an open area without shade. These conditions do not comply with the criteria for comfortable seating in public open spaces, which need to be in a shady area [5].



Figure 1. Seating area in Alun-Alun Kawali

As a public open space that is open to all age ranges, Alun-Alun Kawali needs to provide adequate assets including for children [10]. Based on the conditions in the field, a number of service providers were found for children's entertainment such as children's painting equipment rental, toy fishing and children's toy car rental. However, based on information from the Head of the Community Empowerment Section and Village Kawali, the service provider does not have an official permit because in the original plan, street vendors including providers of children's entertainment services were not allowed in the square area.

In addition, passive recreational activities include walking, relaxing and chatting, and based on observations, the physical condition of Alun-Alun Kawali is suitable for those activities. There is a special pedestrian path that leads from the four entrances to Alun-Alun Kawali, namely the northwest, northeast, southeast and southwest directions. Trees are provided on each path so that it adds a cool impression to those who cross the path. Other facilities that support visitors to the square are the reflection stone paths and ready-to-drink water taps. Reflection stone paths are provided in several parts of the square including in the tree circle to the east and encircling the center of the square, while 4 ready-to-drink water taps are provided and placed near the southwest pedestrian path.

Conditions in the field indicate that there are no assets that function as non-natural shade, especially those in the form of roofs or canopies in the Alun-Alun Kawali area. The nearest shelter area that can be freely accessed by visitors is the Great Mosque of Kawali, bus stops (north and south) and stalls, all of which are generally located outside the Alun-Alun Kawali area. The unavailability of a roof or canopy at Alun-Alun Kawali is an unfavorable condition for public open spaces because public open spaces should provide several points of shelter for visitors. [7].



Figure 2. An example of The Condition of The Shade Trees in Alun-Alun Kawali

Based on the results of observations, there are 62 trees of different types in the Alun-Alun Kawali area. In general, areas where shade trees grow include pedestrian paths, sidewalks to the west of Alun-Alun Kawali, as well as several roundabouts dividing trees that can be used as seats for visitors. The shade trees in Alun-Alun Kawali have an average height of 3-10 meters. Trees that function as shade generally have shady leaves and have many branches. The shaded area produced varies from a radius of ± 110 centimeters to 480 centimeters. This condition is in accordance with the standard, namely the availability of trees that provide shady areas with the criteria of 3-12 meters high with shady leaves [8].

Table 3. Calculation of Asset Quality on the Architectural Dimension

Code	Existing Condition	Status	Calculation per Indicator
A1.1	The seats are in the middle of the square without any shade	Not suitable	$1/2 \times 100\%$ = 50%
A1.2	The seat height is 0.4 meter	Suitable	
A2.1	There are sidewalks and four pedestrian paths	Suitable	$2/2 \times 100\%$ = 100%
A2.2	There is a seating area in the form of benches and a tree divider	Suitable	
A3.1	There are trees on each pedestrian way and several shade trees with tree dividers	Suitable	
A3.2	The average shade tree has a minimum height of 4 meters and not more than 12 meters	Suitable	$3/3 \times 100\%$ = 100%
A3.3	The average tree that has grown large has produced a shady area underneath	Suitable	
A4.1			
-	There are no roofs and canopies in the square area	Not suitable	0%
A4.2			
A5.1			
-	There is no official children's playground provided by the administrator	Not suitable	0%
A5.4			

B. Aesthetic

Based on the results of observations, there are 17 different types of public information signs located in the square area, to be precise, around the sidewalks around the square. The location of the signs are in an open location and not covered by vegetation in the Alun-Alun Kawali area. Based on those explanation, the public information signs at Alun-Alun Kawali are already meet the criteria, namely that there are various types of signs, that they are located in an open area and are not obstructed by shady vegetation and that large name sign do not block views.

According to the interview result, there are 5 janitors who routinely clean the square from 06.00 – 09.00 every day. Based on this information, it can be seen that maintenance on the cleanliness of Alun-

Alun Kawali has been carried out every day in the morning. This condition is in accordance with the results of observations on different days and at different times that the amount of scattered waste tends to be more in the afternoon and evening compared to morning and afternoon. Available trash bins are easily accessible but still in minimal quantities.

Based on the results of observations, there are two types of pavement materials used in Alun-Alun Kawali, namely paving blocks and reflection paths. Paving block materials are used on the sidewalks as well as on the pedestrian paths on the inside of the square. In general, the condition of the pavement surface is in good condition. No damage was found such as perforated surfaces or surfaces that have the potential to be slippery when it is wet due to rain. So it can be concluded that the criteria for a non-slippery surface material meet the conditions it should be [15].



Figure 3. An Example of Pavement Condition in Alun-Alun Kawali

Another criteria in this indicator is sanitation facilities in the form of washbasins and toilets. Based on the conditions in the field, there are no toilets and there is a hand washing area which was rarely used. The nearest toilet is located at the Great Mosque of Kawali with a distance of ± 90 m from the center of Alun-Alun Kawali. Based on the results of observations and interviews conducted regarding the cleanliness of the park, it can be concluded that there are conditions that are not in accordance with what they should be, namely the discovery of scattered trash in the Alun-Alun Kawali area [13]. The unavailability of adequate sanitation facilities is also not in accordance with the ideal conditions of a public open space [18].

Table 4. Calculation of Assets Quality on the Aesthetic Dimension

Code	Existing Condition	Status	Calculation per Indicator
B1.1	There are place name signs and directional signs around the square	Suitable	
B1.2	Each sign is out in the open space and easy to see and reach	Suitable	$3/3 \times 100\% = 100\%$
B1.3	The name sign "Taman Surawisesa Kawali" does not block the view	Suitable	
B2.1	Scattered trash is still found, especially in the afternoon towards the evening	Not Suitable	
B2.2	Easy access to trash cans	Suitable	
B2.3	There is one handwashing facility (not working) but no toilets	Not Suitable	$1/8 \times 100\% = 12,5\%$
B2.4	–		
B2.8	No toilets available	Not Suitable	
B3.1	There is pavement in the form of paving blocks	Suitable	
B3.2	No potholes found	Suitable	$3/3 \times 100\% = 100\%$
B3.3	No part of the road is mossy	Suitable	

C. Social

Observations regarding the identification of the types of lights in the Alun-Alun Kawali area show that in general the square already has functional, ambient, and decorative architectural lighting. Functional lighting is provided in the form of lamps for pedestrian paths, ambient lighting is provided in the form of spotlights pointing towards the square, then decorative architectural lighting is provided in the form of colorful lights circling the center of the square. Based on the results of observations regarding the availability of lights, it is known that in general, lights have been provided in each section, namely in each pedestrian path, in the center of the square, and spotlights on the sidewalks. However, lighting is not evenly distributed throughout the room for reasons of lamp selection and lamp conditions.

The condition of the lights at night is not entirely functional, for example for the northwestern pedestrian path there is only one lamp that functions out of the three lights in total. Based on the explanation above, it can be concluded regarding the criteria for the type of lamp, in general in Alun-Alun Kawali there are already available types of lamps according to their designation [17]. Based on the lighting conditions, some lights are not functioning and the lighting is uneven in all parts, so it can be concluded that these conditions are not in accordance with the conditions it should be, namely lighting must be evenly distributed in every part of the public open space. [16].



Figure 4. An Example of Lighting Condition in Alun-Alun Kawali

Based on the results of interviews with the Head of the Community and Village Empowerment Section, there has never been any crime reported in the town square. This is also in accordance with the results of an interview with one of the food vendors near the square area, that for approximately four years of trading in that place, it is rare to even hear of criminal activity, but indeed there are often disturbing activities that tend to be carried out by several couples who visit the square at night. Apart from lighting, another factor that could be the cause of this is the lack of supervision in the square area. Prevention and surveillance facilities such as CCTV are not found in the square area.

Table 5. Calculation of Assets Quality on Social Dimension

Code	Existing Condition	Status	Calculation per Indicator
C1.1	There are several points with dim lighting	Not Suitable	
C1.2	There are lighting types of functional, ambient, and decorating architecture	Suitable	$\frac{1}{3} \times 100\% = 33,33\%$
C1.3	There are some lights that don't work	Not Suitable	
C2.1	No CCTVs available	Not Suitable	0%

D. Environmental

Based on the results of observations, Alun-Alun Kawali already has trees at several points in the square. Besides that, the water absorption layer is also easy to find in the area of the square, namely in the form of a layer of soil overgrown with grass. Based on the explanation above, the criteria for the availability of vegetation in the form of trees and grassy layers have been fulfilled in Alun-Alun Kawali [19]. Apart from that, it can also be concluded that based on the criteria for tree species that are safe (not thorny and

poisonous) and have variations in types and heights, Alun-Alun Kawali can be categorized as suitable to the conditions it should be [12].

Based on the results of observations, no noise blocking or masking buildings are found in the square area, either in the form of living fences or other forms such as walls or fiber walls. There is not even any barrier found, so the condition of the square tended to be open. This causes the intensity of noise from vehicles that pass every day to directly enter the square area.

Table 6. Calculation of Assets Quality on Environmental Dimension

Code	Existing Condition	Status	Calculation per Indicator
D1.1	There are various types of trees in the square area	Suitable	
D1.2	No dangerous trees found	Suitable	
D1.3	Variations in the types and heights of trees can be seen in Alun-Alun Kawali	Suitable	$4/4 \times 100\% = 100\%$
D1.4	Layers of water absorption in the form of soil planted with grass are found in many areas of the square	Suitable	
D2.1	Alun-Alun Kawali tends to be open without any barriers or noise reduction	Not Suitable	0%

E. Functional

Based on direct measurements in the field, Alun-Alun Kawali provides sidewalks with a width of 1.86 meters, this condition already meets the minimum standard for sidewalk width of 1.8 meters [21]. Sidewalks are provided to encircle parts of the square with different areas but all meet the criteria of having a minimum width of 1.8 m.

Based on the results of observations, there are no facilities that support accessibility for visitors with disabilities, especially for visitors who use wheelchairs or walker sticks. This is because the surface of the square has a different height from the main road and each entrance is only a staircase, which of course is difficult for wheelchair users to pass. In addition, there are no tactile paving (braille blocks) which could make it easier for blind pedestrians who need the help of a walker stick. This condition is not in accordance with the conditions it should be, namely as a public open space, Alun-Alun Kawali needs to provide facilities including for persons with disabilities, namely guideways and ramps. [22].



Figure 5. The Entrance to Alun-Alun Kawali

Based on the results of observations, Alun-Alun Kawali has provided special pedestrian paths, namely in the form of sidewalks and pedestrian paths on the inside of the Alun-Alun area. In addition, there are also drainage channels and shade trees in each pedestrian path. There are also three lighting lamps for each pedestrian path so that there are a total of 12 pedestrian lights with a range of 11.9 – 14.3 meters. Based on information from several vendors around the square, accidents, especially children who fall into open

drainage at Alun-Alun Kawali, often occur. Of course, this channel is risky not only for children but also for adults, especially for those who visit Alun-Alun Kawali for the first time or visit when it is dark.



Figure 6. Uncovered drainage in Alun-Alun Kawali

Based on the explanation above, some of the criteria for pedestrian paths meet the conditions they should be, namely the presence of lighting with a minimum span of 10 meters and the presence of shade, but there are conditions that are not suitable, namely the available drainage does not have a cover [23] [24].

Based on the results of observations, it was often found that there were visitors parking on the shoulder of the Alun-Alun Kawali road, both motorbikes and cars. Indiscriminate parking of motorbikes is often found on every side of the square except for the north side of the sidewalk and on that side there is indeed a no parking sign. Car parking can often be found on the side facing the Great Mosque of Kawali. The car belongs to a trader who uses a pick-up truck to sell his goods. Examples of traders that are commonly found are furniture traders and fruit traders. The conditions previously described indicate that there are asset problems regarding parking at Alun-Alun Kawali, namely the unavailability of special parking lots for visitors to Alun-Alun Kawali, including supporting facilities for parking circulation [25].

Table 7. Calculation of Assets Quality on Functional Dimension

Code	Existing Condition	Status	Calculation per Indicator
E1.1	The sidewalk width is 1.86 meters	Suitable	$1/1 \times 100\%$ =100%
E2.1	No ramps available	Not Suitable	0%
E2.2	No braille blocks available	Not Suitable	
E3.1	Pedestrian ways are available	Suitable	$1/3 \times 100\%$ = 33,33%
E3.2	Not all lighting works	Not Suitable	
E3.3	The drainage is uncovered	Not Suitable	
E4.1	-	Not Suitable	0%
E4.2	No parking area available		

IV. CONCLUSION

Based on the assessment of each indicator, it can be seen that the accumulation of evaluation results from the total of all value dimensions obtained for overall asset quality is 44.16% or it can be interpreted in general that the asset quality of Alun-Alun Kawali is not good because there are still many assets who do not meet the standards in every dimension. Based on the calculation results, then each problem can be clearly defined as presented in Table 8.

Table 8. Assets Quality Problem Defined of Alun-Alun Kawali

Dimensi	Indikator	Hasil Pendefinisian Masalah
Social	Lighting	a. There are several areas that are dimly lit at night b. There are some lights that don't work
	Surveillance	No CCTVs available
	Disability access	No ramps and braille blocks are available
Functional	Pedestrian traffic	a. Lightings on pedestrian ways not fully functional b. The drainage is uncovered
	Vehicle Parks	No visitors parking area available
	Seating areas	The seating area is in an area that is not shaded
Architectural	Roofs and Canopies	No roofs and/or canopies available
	Playground	No playground available
Environmental	Noise level	No noise reducer available
Aesthetic	General Cleanliness	a. Lots of trash found scattered around, especially in the late afternoon
		b. No toilets available

The definition of the problem that has been presented in table 8 can be a reference for recommendations for solving problems regarding physical assets in Alun-Alun Kawali, namely that in general it is necessary to procure assets that are still not available as well as repairs and adjustments for assets that are still not in accordance with the criteria ideal.

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