

# MANAGEMENT OF GREEN OPEN SPACE GREEN OPEN SPACE MANAGEMENT ON THE MAKASSAR CITY INDEPENDENCE PIONEER ROAD CORRIDOR

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## Abstract

This research aims to develop principles, develop innovations, and develop these in the arrangement of green open spaces. The type of research used is qualitative and descriptive quantitative research. In this study, the condition of the road median and the level of tree/plant damage were measured directly, while the community's aspirations for stakeholder performance were obtained by distributing questionnaires around the research location area. The data analysis used is quadrant analysis or Importance Performance Analysis (IPA). The results showed that quadrant I includes important attributes whose performance is less than satisfactory to the community, such as cleanliness, pedestrian safety, park beauty, ease of access, and efficiency of the road median corridor. This indicates the need to improve performance to achieve community expectations. Quadrant II contains important attributes with adequate performance, such as nighttime lighting and helpful public facilities, indicating that the Spatial Planning Office has successfully met people's expectations in this aspect. Quadrant III includes less important attributes with mediocre performance, such as corridor maintenance and congestion reduction. The Spatial Planning Office needs to improve performance in these areas to increase community satisfaction. Quadrant IV consists of attributes that are less important but perform very well, such as support for sustainable transport.

**Keywords:** Stakeholder Performance, Pedestrian Way, Spatial Planning.

## INTRODUCTION

The implementation of green open space (RTH) arrangements includes regulation, guidance, implementation, and supervision. This arrangement is based on a legal basis for the government and the community. Structuring management involves human and non-human resources to achieve goals effectively and efficiently. According to Law No. 26/2007, RTH is an area used to grow plants, both natural and planted. Each zone must have a minimum of 30% green space, with 20% on state land and 10% on private land. Based on ownership, RTH is divided into public and private RTH. The benefits of RTH include comfort, beauty, cool air, and as a water catchment area and biodiversity preservation. The arrangement of green spaces in road corridors is very important and requires scientific management to encourage social interaction and accommodate the interests of city residents.

Currently, the arrangement of green spaces in Makassar City is not optimal, especially in the Perintis Kemerdekaan road corridor, which results in pollution, noise, and discomfort for pedestrians. Sustainable city management principles include integrating environmental, social, and economic systems for sustainable development policies [1]. Good Environmental Governance involves transparency, participation, access to information, and decentralization for good environmental management. Road corridors with tree planting are considered important urban facilities that must be managed according to facility asset management principles. In Makassar City, some of the problems in road corridors include narrow pedestrian widths, tree obstructions, unsafe conditions, and lack of street furniture [2]. The importance of pedestrian space

infrastructure and facilities includes pedestrian continuity, safety, and comfort. With good planning and community involvement, it is expected that the quality of green spaces and the urban environment can improve, supporting a sustainable green city [3].

This research aims to find effective ways to address and prevent plant damage in the Jalan Perintis Kemerdekaan corridor in Makassar City. The aim is to ensure that this corridor remains green and serves as a convenient open space for the community. Measuring how stakeholders (relevant parties) pay attention to and fulfill the interests of the community and road users. This is important to maintain and improve public satisfaction with the green open space on the sidewalk. City Operational and Administrative Management (POAC) can effectively explain and coordinate the steps taken by relevant stakeholders to address issues that arise in the management of green open space in the corridor.

## RESEARCH METHODS

This research was conducted in Makassar City, specifically in the Jalan Perintis Kemerdekaan corridor, from March to April 2023. This location was chosen because it has a green belt with large trees that are potentially damaged and dangerous for road users. This research uses descriptive qualitative and quantitative methods to understand and interpret existing phenomena. This method includes a comparative study of the policy and management of green open space (RTH) arrangement in accordance with Makassar City Regional Regulation No. 3 of 2014. Sampling was conducted using the Saturated Sampling technique, where all populations were sampled. Informants included department heads and relevant officials to gain insight into the city's spatial management.

The data collected included primary data through observations and interviews, and secondary data from literature and related agencies. Data analysis techniques used the Forest Health Monitoring (FHM) method with ArcGis and AutoCAD software for mapping and design. The tools used in this research include stationery, cellphone camera, flashdisk, rollmeter, laptop with ArcGis 10.6 software and Microsoft Office 2019. Data were analyzed qualitatively and quantitatively using Likert scale and IPA method to measure damage indicators and POAC management.

## RESULT

### Performance and Stakeholder Preferences Related to Public Green Open Space Along the Corridor

Management of green open space (RTH) arrangement on Jalan Perintis Kemerdekaan KM. 11, Tamalanrea Sub-district, Makassar City, it is important to pay attention to the performance and preferences of stakeholders. Stakeholders involved include local government, local communities, environmental organizations, developers, and road users. Stakeholder performance is measured by their effectiveness in managing and maintaining the green space, including planning, development, maintenance, and supervision. Stakeholder preferences include their expectations of the design, function, accessibility, and use of the green space, such as the need for recreational parks or areas for sports and community activities. Local governments and related parties need to involve stakeholders in decision-making through open dialog, participatory meetings, or public consultations. By taking into

account the performance and preferences of stakeholders, the management of green spaces can be more effective and sustainable, meet the needs of the community, and improve the relationship between the government and the community to maintain a healthy environment.

**Table 1: Attributes of IPA (Importance Performance Analysis) Performance and Preferences of Green Open Space Management Stakeholders**

| No. | Performance Attributes and Preferences of Green Open Space Management Stakeholders                                 | Symbol |
|-----|--|--------|
| 1   | This road median corridor provides a clean and tidy environment.   | P1     |
| 2   | I feel safe when using the pedestrian way (sidewalk) along this road.  | P2     |
| 3   | The arrangement of parks and ornamental plants in the road median corridor adds to the beauty of this city.        | P3     |
| 4   | Public facilities such as benches, trash bins, and other public amenities in the road median corridor are helpful. | P4     |
| 5   | Lighting in the road median corridor and pedestrian way at night is adequate.                                      | P5     |
| 6   | This road median corridor provides convenient and easy access for pedestrians.                                     | P6     |
| 7   | This road median corridor supports sustainable transportation and a better environment                             | P7     |
| 8   | This road median corridor helps reduce traffic congestion and streamline travel.                                   | P8     |
| 9   | The government has made good efforts in caring for and maintaining the road median corridor and pedestrian way.    | P9     |
| 10  | I find the median road corridor efficient and fast in helping me reach my destination                              | P10    |

**Table 2: Frequency Distribution of Gender**

| Gender       | N          | %          |
|--------------|------------|------------|
| Male         | 104        | 52,0       |
| Female       | 96         | 48,0       |
| <b>Total</b> | <b>200</b> | <b>100</b> |

Table 2 shows that based on gender in Tamalanrea Sub-district, Makassar City with a total of 200 respondents, the most men were 104 respondents (52.0%) while women were 96 respondents (48.0%).

**Table 3: Age Frequency Distribution**

| Age          | N          | %          |
|--------------|------------|------------|
| 20-30        | 64         | 32,0       |
| 30-40        | 63         | 31,5       |
| 40-50        | 54         | 27,0       |
| 50-60        | 19         | 9,5        |
| <b>Total</b> | <b>200</b> | <b>100</b> |

Table 3 shows that based on age in Tamalanrea Sub-district, Makassar City with a total of 200 respondents, the most is the age of 20-30 years, namely 64 respondents (32.0%) while the age of 50-60 is the least as many as 19 respondents (9.5%)

**Table 4: Frequency Distribution of Occupation**

| Jobs           | N          | %          |
|----------------|------------|------------|
| Civil Servants | 51         | 25,5       |
| Employees      | 39         | 19,5       |
| Self-employed  | 64         | 32,0       |
| Merchant       | 46         | 23,0       |
| <b>Total</b>   | <b>200</b> | <b>100</b> |

Table 4 shows that based on occupation in Tamalanrea Sub-district, Makassar City with a total of 200 respondents, the most are self-employed, namely 64 respondents (52.0%) while the fewest employees are 39 respondents (19.5%)

**Table 5: Distribution of Respondents' Expected Answers on Level of Importance**

| No | Importance Level (Y) | STP   | TP    | CP    | P     | SP    | Total |
|----|----------------------|-------|-------|-------|-------|-------|-------|
| 1  | P1                   | 13    | 26    | 39    | 73    | 49    | 200   |
|    |                      | 6,5%  | 13,0% | 19,5% | 36,5% | 24,5% | 100%  |
| 2  | P2                   | 13    | 23    | 31    | 80    | 53    | 200   |
|    |                      | 6,5%  | 11,5% | 15,5% | 40,0% | 26,5% | 100%  |
| 3  | P3                   | 13    | 23    | 38    | 77    | 49    | 200   |
|    |                      | 6,5%  | 11,5% | 19,0% | 38,5% | 24,5% | 100%  |
| 4  | P4                   | 12    | 23    | 38    | 75    | 52    | 200   |
|    |                      | 6,0%  | 11,5% | 19,0% | 37,5% | 26,0% | 100%  |
| 5  | P5                   | 13    | 26    | 35    | 76    | 50    | 200   |
|    |                      | 6,5%  | 13,0% | 17,5% | 38,0% | 25,0% | 100%  |
| 6  | P6                   | 20    | 26    | 35    | 77    | 42    | 200   |
|    |                      | 10,0% | 13,0% | 17,5% | 38,5% | 21,0% | 100%  |
| 7  | P7                   | 13    | 23    | 31    | 80    | 53    | 200   |
|    |                      | 6,5%  | 11,5% | 15,5% | 40,0% | 26,5% | 100%  |
| 8  | P8                   | 14    | 23    | 38    | 76    | 49    | 200   |
|    |                      | 7,0%  | 11,5% | 19,0% | 38,0% | 24,5% | 100%  |
| 9  | P9                   | 17    | 23    | 37    | 74    | 49    | 200   |
|    |                      | 8,5%  | 11,5% | 18,5% | 37,0% | 24,5% | 100%  |
| 10 | P10                  | 13    | 26    | 34    | 77    | 50    | 200   |
|    |                      | 6,5%  | 13,0% | 17,0% | 38,5% | 25,0% | 100%  |

Source: Primary Data, 2024

Table 5 shows that the expected statement for the level of importance of item P1 mostly answered important, namely 73 respondents (36.5%) and a small proportion answered very unimportant, namely 13 respondents (6.5%). Item P2 mostly answered important, namely 80 respondents (40.0%) and a small proportion answered very unimportant, namely 13 respondents (6.5%). Item P3 mostly answered important, namely 77 respondents (38.5%) and a small proportion answered very unimportant, namely 13 respondents (6.5%). Item P4 mostly answered important 75 respondents (37.5%) and a small proportion answered very unimportant, namely 12 respondents (6.0%). Item P5 mostly answered important 76 respondents (38.0%) and a small proportion answered very unimportant 13 respondents (6.5%). Item P6 mostly answered important 77 respondents (38.5%) and a small proportion answered very unimportant, namely 20 respondents (10.0%). Item P7 mostly answered important 80 respondents (40.0%) and a small proportion answered very unimportant 13 respondents (6.5%). Item P8 most of the respondents answered important 76 respondents (38.0%) and a small proportion answered very unimportant, namely 14 respondents (7.0%). Item P9 mostly answered important 74 respondents (37.0%) and a small proportion answered very unimportant 17 respondents (8.5%). Item P10 mostly answered important 77 respondents (38.5%) and a small proportion answered very unimportant, namely 13 respondents (6.5%).

**Table 6: Distribution of Respondents' Perceived Answers on Performance Levels**

| No | Performance Level (X) | STP   | TP    | CP    | P    | SP    | Total |
|----|-----------------------|-------|-------|-------|------|-------|-------|
| 1  | P1                    | 87    | 48    | 36    | 10   | 19    | 200   |
|    |                       | 43,5% | 24,0% | 18,0% | 5,0% | 9,5%  | 100%  |
| 2  | P2                    | 75    | 50    | 37    | 16   | 22    | 200   |
|    |                       | 37,5% | 25,0% | 18,5% | 8,0% | 11,0% | 100%  |
| 3  | P3                    | 64    | 50    | 43    | 11   | 32    | 200   |
|    |                       | 32,0% | 25,0% | 21,5% | 5,5% | 16,0% | 100%  |
| 4  | P4                    | 57    | 48    | 50    | 15   | 30    | 200   |
|    |                       | 28,5% | 24,0% | 25,0% | 7,5% | 15,0% | 100%  |
| 5  | P5                    | 57    | 64    | 34    | 15   | 30    | 200   |
|    |                       | 28,5% | 32,0% | 17,0% | 7,5% | 15,0% | 100%  |
| 6  | P6                    | 63    | 50    | 40    | 15   | 32    | 200   |
|    |                       | 31,5% | 25,0% | 20,0% | 7,5% | 16,0% | 100%  |
| 7  | P7                    | 62    | 48    | 40    | 15   | 35    | 200   |
|    |                       | 31,0% | 24,0% | 20,0% | 7,5% | 17,5% | 100%  |
| 8  | P8                    | 57    | 50    | 38    | 17   | 38    | 200   |
|    |                       | 28,5% | 25,0% | 19,0% | 8,5% | 19,0% | 100%  |
| 9  | P9                    | 57    | 48    | 44    | 11   | 40    | 200   |
|    |                       | 28,5% | 24,0% | 22,0% | 5,5% | 20,0% | 100%  |
| 10 | P10                   | 57    | 48    | 50    | 15   | 30    | 200   |
|    |                       | 28,5% | 24,0% | 25,0% | 7,5% | 15,0% | 100%  |

Source: Primary Data, 2024

Table 6 shows that the perceived statement for the performance level of item P1 mostly answered very dissatisfied, namely 87 respondents (43.5%) and a small proportion answered satisfied, namely 10 respondents (5.0%). Item P2 mostly answered very dissatisfied, namely 75 respondents (37.5%) and a small proportion answered satisfied, namely 16 respondents (8.0%). Item P3 mostly answered very dissatisfied, namely 64 respondents (32.0%) and a small proportion answered satisfied, namely 11 respondents (5.5%).

Item P4 mostly answered very dissatisfied 57 respondents (28.5%) and a small proportion answered satisfied, namely 15 respondents (7.5%). Item P5 mostly answered dissatisfied 64 respondents (32.0%) and a small proportion answered satisfied 15 respondents (7.5%). Item P6 mostly answered very dissatisfied 63 respondents (31.5%) and a small proportion answered satisfied, namely 15 respondents (7.5%). Item P7 mostly answered very dissatisfied 62 respondents (31.0%) and a small proportion answered satisfied 15 respondents (7.5%).

Item P8 mostly answered very dissatisfied 57 respondents (28.5%) and a small proportion answered satisfied, namely 17 respondents (8.5%). Item P9 mostly answered important 57 respondents (28.5%) and a small proportion answered satisfied 11 respondents (5.5%). Item P10 most answered very dissatisfied 57 respondents (28.5%) and a small proportion answered satisfied, namely 15 respondents (7.5%).

**Table 7: Results of the Final Questionnaire Assessment of Level of Importance**

| No | Importance Level (Y) | STP | TP | CP | P  | SP | ΣY  |
|----|----------------------|-----|----|----|----|----|-----|
| 1  | P1                   | 13  | 26 | 39 | 73 | 49 | 719 |
| 2  | P2                   | 13  | 23 | 31 | 80 | 53 | 737 |
| 3  | P3                   | 13  | 23 | 38 | 77 | 49 | 726 |
| 4  | P4                   | 12  | 23 | 38 | 75 | 52 | 732 |
| 5  | P5                   | 13  | 26 | 35 | 76 | 50 | 724 |
| 6  | P6                   | 20  | 26 | 35 | 77 | 42 | 695 |
| 7  | P7                   | 13  | 23 | 31 | 80 | 53 | 737 |
| 8  | P8                   | 14  | 23 | 38 | 76 | 49 | 723 |
| 9  | P9                   | 17  | 23 | 37 | 74 | 49 | 715 |
| 10 | P10                  | 13  | 26 | 34 | 77 | 50 | 725 |

Description: (SP) = Very Important, (P) = Important, (CP) = Quite Important, (TP) = Not important, (STP) = Very unimportant

$$\Sigma Y = (SP \times 5) + (P \times 4) + (CP \times 3) + (TP \times 2) + (STP \times 1)$$

Table 7 shows that the results of  $\Sigma Y$  are obtained from the final questionnaire assessment of the level of importance with 200 respondents on Jl. Perintis Kemerdekaan KM. 11 Tamalanrea District Makassar City where each criterion is multiplied by the score and everything is added so as to obtain the sum of the level of importance of each stakeholder performance attribute. From table 13, the yellow table shows the stakeholder performance attributes that are considered the most important by the people of Jl. Perintis Kemerdekaan KM. 11 Tamalanrea District Makassar City is the attribute I feel safe when using the pedestrian way (sidewalk) along this road, with the highest score of 737. Meanwhile, the stakeholder performance attribute that has the lowest value marked in red in table 13 is the attribute This road median corridor provides comfortable and easy access for pedestrians, with a value of 695. This shows that the security provided by the Spatial Planning Department stakeholders is highly expected by the community to provide a sense of security to the community when using the pedestrian way (sidewalk) along the road.

**Table 8: Results of the Final Questionnaire Assessment of Performance Level**

| No | Performance Level (X) | STP | TP | CP | P  | SP | ΣX  |
|----|-----------------------|-----|----|----|----|----|-----|
| 1  | P1                    | 87  | 48 | 36 | 10 | 19 | 426 |
| 2  | P2                    | 75  | 50 | 37 | 16 | 22 | 460 |
| 3  | P3                    | 64  | 50 | 43 | 11 | 32 | 497 |
| 4  | P4                    | 57  | 48 | 50 | 15 | 30 | 513 |
| 5  | P5                    | 57  | 64 | 34 | 15 | 30 | 497 |
| 6  | P6                    | 63  | 50 | 40 | 15 | 32 | 503 |
| 7  | P7                    | 62  | 48 | 40 | 15 | 35 | 513 |
| 8  | P8                    | 57  | 50 | 38 | 17 | 38 | 529 |
| 9  | P9                    | 57  | 48 | 44 | 11 | 40 | 529 |
| 10 | P10                   | 57  | 48 | 50 | 15 | 30 | 513 |

Description: (SP) = Very Good, (P) = Good, (CP) = Fairly Good, (TP) = Less Good, (STP) = Not Good

$$\Sigma X = (SP \times 5) + (P \times 4) + (CP \times 3) + (TP \times 2) + (STP \times 1)$$

Table 8 shows that the results of  $\sum X$  obtained from the final questionnaire assessment of the performance level with 200 respondents of the community Jl. Perintis Kemerdekaan KM. 11 Tamalanrea District Makassar City where each criterion is multiplied by the score and everything is added so as to obtain the sum of the performance levels of each stakeholder performance attribute. From table 14, the yellow table shows the stakeholder performance attributes that are considered the most important by the people of Jl. Perintis Kemerdekaan KM. 11 Tamalanrea District Makassar City is the attribute The government has made good efforts in caring for and maintaining the road median corridor and pedestrian way, with the highest score of 529. Meanwhile, the stakeholder performance attribute that has the lowest value marked in red in table 14 is the attribute of this road median corridor that provides a clean and tidy environment, with a score of 426. This shows that the good efforts given by the Spatial Planning Office stakeholders are expected by the community in caring for and maintaining the road median corridor and pedestrian way.

**Table 9: Calculation Results of Respondents' Satisfaction Level**

| No                  | Attributes | $\sum X$ | $\sum Y$ | Satisfaction Level | %         |
|---------------------|------------|----------|----------|--------------------|-----------|
| 1                   | P1         | 426      | 719      | 0.59               | 59        |
| 2                   | P2         | 460      | 737      | 0.62               | 62        |
| 3                   | P3         | 497      | 726      | 0.68               | 68        |
| 4                   | P4         | 513      | 732      | 0.70               | 70        |
| 5                   | P5         | 497      | 724      | 0.69               | 69        |
| 6                   | P6         | 503      | 695      | 0.72               | 72        |
| 7                   | P7         | 513      | 737      | 0.70               | 70        |
| 8                   | P8         | 529      | 723      | 0.73               | 73        |
| 9                   | P9         | 529      | 715      | 0.74               | 74        |
| 10                  | P10        | 513      | 725      | 0.71               | 71        |
| <b>Mean X and Y</b> |            |          |          | 0.65               | <b>65</b> |

Source: Primary Data, 2024

Table 9 shows that the results of the calculation of the greatest level of satisfaction are in P9, namely the Government has made good efforts in caring for and maintaining the road median corridor and pedestrian way of 0.74 and the smallest is in P1 regarding the road median corridor provides a clean and tidy environment, namely 0.59. When viewed in table 9 the level of satisfaction has a mean value of 0.65.

The results of the satisfaction level of the 10 stakeholder performance attributes are obtained from the results of the final questionnaire assessment of the performance level ( $\sum X$ ) divided by the results of the final questionnaire assessment of the importance level ( $\sum Y$ ) and the results are multiplied by 100%.

From table 15, it can be seen that the lowest stakeholder performance attribute of 59% is the clean and tidy road median corridor environment. This shows that the attribute is still considered unsatisfactory to the community due to the lack of resources or funds to keep the road median corridor clean and tidy, and this could be a reason for some people not to support these efforts.

As for the performance attributes of the Spatial Planning Office stakeholders who received the highest satisfaction level value of 74% and these attributes exceeded the expectations of the community, the government has made good efforts in caring for and maintaining the road median corridor and pedestrian way.

This shows that the Stakeholders of the Spatial Planning Office always care and maintain from the spatial officers to support performance in satisfying every community that uses the corridor Jl. Perintis Kemerdekaan KM. 11 so that people feel very satisfied with the services provided by the workshop. While the average of the results of the calculation of the respondent's satisfaction level is 65%, the average result of this satisfaction level is obtained from the number of all attributes then the results are divided by these 10 attributes.

It can be said that the performance of each stakeholder performance attribute can meet the expectations of the community, meaning that the community is satisfied with the 10 stakeholder performance attributes, but the performance needs to be improved. This is supported by the opinion of Indriwinangsih and Sudaryanto in Lodhita (2014), if the percentage is 80-100% then the suitability can meet the expectations of consumers but still needs to be improved again. Percentage >100% can be said that the performance of these attributes has exceeded consumer expectations or is very satisfying.

Before making a Cartesian diagram, first calculate the average value of the importance level and performance level. The average value is used to determine the position of the attributes in the Cartesian diagram. The results of the calculation of the average value of the level of importance and performance level can be seen in table 10 below:

**Table 10: Average Assessment of Importance Level and Satisfaction Level**

| No                  | Attributes | $\sum X$ | $\sum Y$ | Average X   | Average Y   |
|---------------------|------------|----------|----------|-------------|-------------|
| 1                   | P1         | 426      | 719      | 4,26        | 7,19        |
| 2                   | P2         | 460      | 737      | 4,60        | 7,37        |
| 3                   | P3         | 497      | 726      | 4,97        | 7,26        |
| 4                   | P4         | 513      | 732      | 5,13        | 7,32        |
| 5                   | P5         | 497      | 724      | 4,97        | 7,24        |
| 6                   | P6         | 503      | 695      | 5,03        | 6,95        |
| 7                   | P7         | 513      | 737      | 5,13        | 7,37        |
| 8                   | P8         | 529      | 723      | 5,29        | 7,23        |
| 9                   | P9         | 529      | 715      | 5,29        | 7,15        |
| 10                  | P10        | 513      | 725      | 5,13        | 7,25        |
| <b>Mean X and Y</b> |            |          |          | <b>4.70</b> | <b>7.22</b> |

Source: Primary Data, 2024

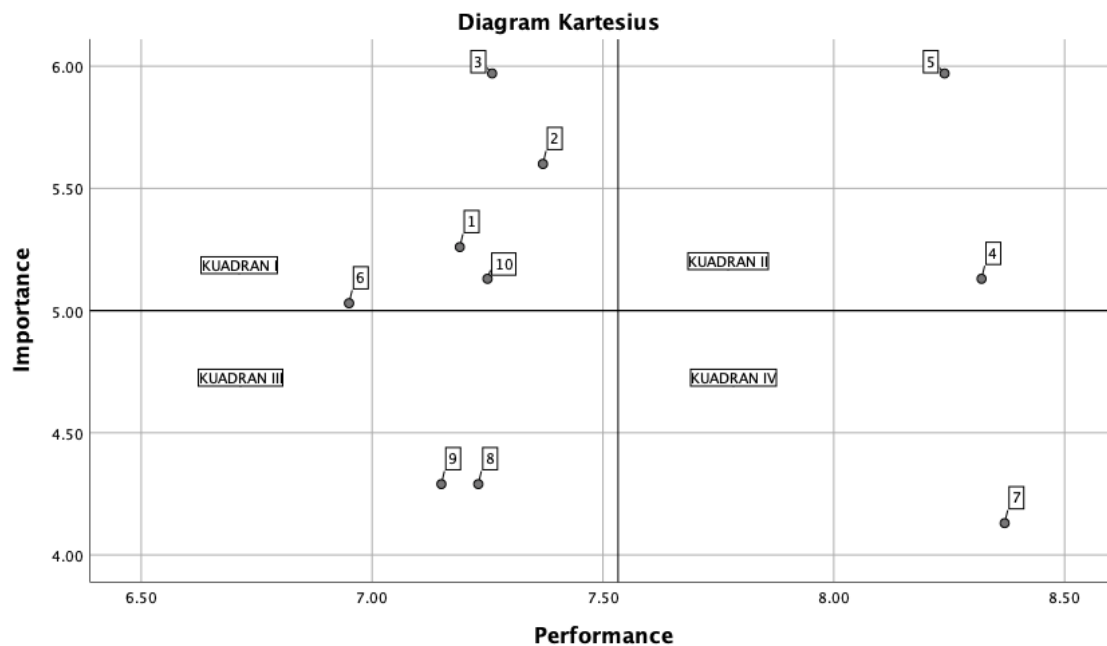
Nilai X dan Y merupakan nilai rata-rata dari 200 orang responden yakni masyarakat Jl. Perintis Kemerdekaan KM. 11 Kecamatan Tamalanrea Kota Makassar dari hasil penilaian terhadap atribut tingkat kinerja (X) dan atribut tingkat kepentingan (Y).

Nilai X didapat dari hasil penilaian tingkat kinerja (X) dibagi dengan 200 responden, begitu juga dengan Nilai Y didapat dari hasil penilaian tingkat kepentingan (Y) dibagi dengan 200 responden Berdasarkan perhitungan tabel 16 didapat nilai rata-rata X dan Y yakni sebesar 4,70 dan 7,22. Nilai rata-rata didapat dari jumlah nilai rata-rata X dan Y dibagi 10 atribut pelayanan. Nilai tersebut digunakan sebagai pembatas antara nilai rata-rata X dan Y yang berpotongan sehingga membentuk empat bagian.

If the data is poured into a Cartesian diagram, it will produce the following image:



## Community Satisfaction



**Figure 1: Cartesian Diagram of Stakeholder Performance**

Description:

- **Quadrant I (Top Priority)**

The attributes in quadrant I are attributes that are considered important by respondents. However, the performance received in its implementation is considered insufficient by the community. These attributes are:

1. This road median corridor provides a clean and tidy environment (attribute P1)
2. I feel safe when using the pedestrian way (sidewalk) along this road (attribute P2)
3. The arrangement of parks and ornamental plants in the road median corridor adds to the beauty of this city (attribute P3)
4. 6) This road median corridor provides comfortable and easy access for pedestrians (attribute P6)
5. 10) I feel this road median corridor is efficient and fast in helping me reach my destination (attribute P10)

This shows that the Spatial Planning Office must improve the performance of the attributes in this quadrant. Because the expectations of the community have not been maximally achieved so that the desired community satisfaction is achieved.

- **Quadrant II (Maintain Achievement):**

The attributes in this quadrant are attributes that are considered important by respondents and the performance received in their implementation is considered in accordance with consumer expectations. These attributes are:

- 5) Lighting in the road median corridor and pedestrian way at night is adequate (attribute P5)

4) Public facilities such as benches, trash bins, and other public facilities in the road median corridor are very helpful (attribute P4)

This shows that the Spatial Planning Office has implemented these attributes well so that customer satisfaction is achieved.

- Quadrant III (Low Priority):

The attributes in this quadrant are attributes that are considered less important by respondents and the performance received in their implementation is also ordinary. These attributes are:

9) The government has made good efforts in caring for and maintaining the road median corridor and pedestrian way (attribute P9)

8) This road median corridor helps to reduce traffic congestion and facilitate travel (attribute P8)

This shows that the Spatial Planning Office must improve the performance of these attributes in order to achieve community satisfaction.

- Quadrant IV (Excessive):

The attributes in this quadrant are attributes that are considered less important by respondents but the performance received in their implementation is very good. These attributes are:

7) This road median corridor supports sustainable transportation and a better environment (attribute P7). This shows that the Spatial Planning Office must maintain the performance of these attributes but not be too excessive in their implementation.

The position of each attribute in the four quadrants is used as a strategy to increase community satisfaction in Tamalanrea District, Makassar City because each of these attributes affects customer satisfaction with workshop services. The location of quadrant I is at the top left, the location of quadrant II is at the top right, while the location of III and IV is at the bottom left and bottom right.

Based on the quadrant analysis presented, there are four categories of attributes assessed by the community in the context of road median corridors and pedestrian ways. The performance evaluation of the road median corridor attributes shows areas that need to be improved and maintained by the Spatial Planning Office based on the level of importance and community satisfaction. From the conclusions that can be drawn:

Quadrant I includes important attributes whose performance is less than satisfactory to the community, such as cleanliness, pedestrian safety, park beauty, ease of access, and efficiency of the road median corridor. This indicates the need to improve performance to achieve community expectations.

Quadrant II contains important attributes with adequate performance, such as nighttime lighting and helpful public facilities, indicating that the Spatial Planning Office has successfully met community expectations in this aspect.

Quadrant III includes less important attributes with mediocre performance, such as corridor maintenance and congestion reduction. The Spatial Planning Office needs to improve performance in these areas to increase community satisfaction.

Quadrant IV consists of attributes that are less important but perform very well, such as support for sustainable transportation. Although performance is good, the Spatial Planning Agency should avoid excessive efforts in this aspect.

From this analysis, it can be concluded that the Spatial Planning Office needs to continue to pay attention to the needs and expectations of the community regarding the road median corridor and pedestrian way. Improving service quality in quadrant I, maintaining good service standards in quadrant II, improving performance in quadrant III, and optimal maintenance in quadrant IV are things that need attention to ensure community satisfaction continues to be achieved.

### **Management or Management of Public Green Open Space Arrangement along the Corridor**

Management or management of public green open space arrangements along the KM independence pioneer road corridor. 11 in Makassar City is an effort to maintain and improve the quality of the environment around the area. It involves various activities such as park maintenance, tree maintenance, waste management, and arrangement of supporting infrastructure such as roads and sidewalks [4]. The goal is to create a comfortable, beautiful, and sustainable environment for the local community and improve the overall quality of life [5].

Four indicators of environmental management principles namely POAC consist of Planning, Organizing, Actuating, and Controlling [6]. This analysis is to determine the management or management of existing conditions of green open space arrangements along corridors that are in accordance with the characteristics of RTH arrangements in the Jl. Perintis Kemerdekaan area in Makassar City. In a management of RTH arrangement, a management is also needed which must be carried out according to the indicators below: (interview)

Planning is a planning activity organized in the context of integrated environmental management of an area. In planning the management of green open space (RTH) along the Jalan Perintis Kemerdekaan corridor, we followed a series of structured and comprehensive stages. First, we conducted a thorough survey to collect data on environmental conditions, including vegetation, topography and other relevant aspects [7]. This helped us understand the characteristics of the area and identify potentials and challenges that might be faced [8].

The next step is an in-depth analysis of the collected data. We evaluate the needs of local communities, involve them in the decision-making process, and take into account ecological and social aspects in planning [9]. Open discussions and public participation became the cornerstone for an inclusive and sustainable plan. After thoroughly understanding the conditions and needs, we developed a green space management plan that included maintenance strategies, infrastructure development, and supporting programs [10]. This plan is designed to achieve the main goal of creating a healthy, green and sustainable environment for the local community [11].

The planning process also involves collaboration between various parties, including local governments, environmental organizations, and local communities. This synergy is important to ensure the plan's compliance with applicable regulations and to gain support and active participation from all stakeholders [12].

During the planning stage, we also take into account the evaluation of potential environmental and social impacts that may arise from the implementation of the plan.

By doing so, we can identify potential risks and adjust the RTH management strategy as needed to maintain environmental sustainability and overall community welfare [13].

Organizing is the existence of a clear organizational form that directly manages the arrangement of this green space, so that each party involved can carry out their duties properly and responsibly [14]. Organizing the management of green open space (RTH) in the region, the responsibility is usually carried out by local government agencies or institutions that have authority related to the environment or city parks. They work together with various related agencies such as the Environmental Agency, Spatial Planning Agency, and Public Works Agency in organizing and managing RTH.

The organizational structure used usually includes working units responsible for different aspects of RTH management, such as park maintenance, tree planting, waste management, and infrastructure development. There is also a project coordinator or manager who coordinates these activities and ensures alignment in their implementation [15].

Coordination between the various parties involved in managing this green space is a given. This is important to ensure efficiency and sustainability in the management of the RTH. Coordination is done through regular meetings, discussion forums, and project collaboration between local government, environmental organizations, local communities, as well as private parties involved in the management of green spaces [16].

Actuating (Implementation) is a program designed to be implemented by the role of stakeholders and community institutions. At the implementation stage of the green open space (RTH) management plan, concrete steps are taken to realize the vision that has been set. This involves prioritizing actions, allocating resources, and coordinating among various stakeholders. This process includes activities such as tree planting, park maintenance, waste management, and infrastructure development in accordance with the plan [17].

Tangible activities that have been carried out in the maintenance and improvement of green spaces in this area include various practical activities such as pruning, weeding, and watering plants, collecting and managing waste, repairing public facilities such as benches and walkways, and adding new facilities according to community needs such as recreation areas or playgrounds [18].

The application of relevant policies and regulations in the management of green spaces is an important foundation to ensure that all activities undertaken are in accordance with established standards and objectives. This includes compliance with zoning regulations, city spatial plans, environmental regulations, and applicable nature conservation policies. By ensuring compliance with these policies and regulations, it can be guaranteed that the management of green spaces is conducted in a manner that is appropriate and sustainable for the environment and surrounding communities.

Controlling (Supervision) is the implementation of supervision so that the implementation of RTH arrangement management can run to the maximum extent possible in achieving environmental management objectives. Controlling the management of green open space (RTH), evaluation and monitoring are important processes to ensure that the activities carried out are in accordance with the established plan and achieve the desired goals. Evaluation is conducted through

various methods such as field surveys, data analysis, and regular visual monitoring. This enables the identification of potential problems or shortcomings that may arise, so that timely corrective actions can be taken.

In order to measure the success of RTH management, certain performance indicators or metrics are usually used. These indicators can include things such as the area of green areas maintained, the density of vegetation, air and water quality, the level of community satisfaction with the facilities provided, as well as the level of community participation in RTH management activities. By using these indicators, it is possible to evaluate the extent to which the objectives set out in the RTH management plan have been achieved.

Managing possible risks or changes in RTH management involves identifying potential risks or changes, quantifying their impacts, and designing appropriate mitigation strategies. This involves mapping potential risks such as natural damage, climate change, or increased pollution, as well as developing emergency response plans to address possible changes or other unexpected events. As such, risk management can help minimize losses and ensure the continuity of effective RTH management.

## **DISCUSSION**

### **Condition of Public Green Spaces along the Corridor, in terms of Candy or Guidelines (Arrangement of Street Public Green Spaces)**

The condition of public green open spaces (RTH) along road corridors plays an important role in maintaining the beauty of the urban environment and the welfare of the community. However, currently, there are several issues that need to be considered regarding the condition of these green spaces.

Damaged trees along the road corridor can be a potential hazard to public safety. Damaged trees can fall and cause accidents, especially if they are located close to the first intersection or elementary school. This condition is a serious concern that must be addressed immediately to prevent this potential danger.

The presence of damaged trees also has an unpleasant aesthetic impact on the surrounding environment. Unmaintained trees can reduce visual beauty and comfort for road users and local residents. It can also give the impression of a lack of attention to the cleanliness and tidiness of the city to residents and visitors.

The presence of damaged trees also reflects a lack of care and maintenance of the environment. This indicates the need for improvement in the supervision and maintenance of public green spaces, in accordance with established regulations and guidelines.

Cooperation between relevant parties, such as the local government, related agencies, and the community, is needed to ensure the condition of public green spaces is well maintained.

Thus, the condition of public green spaces along the road corridor, which includes damaged trees, requires further attention and action. It is important for relevant parties to immediately carry out repairs and maintenance in order to improve the safety, beauty and overall welfare of the community.

## **Stakeholder Performance and Preferences Related to Public Green Spaces along the Corridor**

The analysis of stakeholder performance and preferences related to public green spaces along the corridor provides an important overview for urban environmental management. In the analysis, several aspects emerged that need to be considered by the Spatial Planning Office to improve community satisfaction.

First, there are attributes that are considered important by the community but their performance is considered unsatisfactory. Examples are feeling safe when using pedestrian ways, arrangement of parks and ornamental plants in the road median corridor, and lighting in the road median corridor and pedestrian way at night. This indicates the need to improve performance in these aspects to meet community expectations.

Second, there are attributes that are considered important by the community and their performance is in line with consumer expectations. For example, public facilities such as benches, trash bins, and other public facilities in the road median corridor, support for sustainable transportation and a better environment, and contribution in reducing traffic congestion and facilitating travel. In this case, the Spatial Planning Office has succeeded in meeting people's expectations.

Third, there are attributes that are considered less important by the community and their performance is also mediocre. One of them is a clean and tidy environment in the road median corridor. Although not considered a top priority, performance improvements in these aspects still need to be made to improve overall community satisfaction.

Fourth, there are attributes that are considered less important by the community but their performance is considered very good. For example, comfortable and easy access for pedestrians, as well as government efforts in caring for and maintaining the road median corridor. In this case, the Spatial Planning Office needs to maintain good performance but still pay attention to aspects that are considered more important by the community.

Overall, this analysis of performance and stakeholder preferences provides important direction for the Spatial Planning Office in managing public green open spaces along road corridors. Efforts are needed to improve performance on aspects that are considered important by the community and maintain good performance on aspects that are considered in accordance with community expectations.

## **Management or Management of Public Green Open Space Arrangement along the Corridor**

The arrangement of public green open space along the road corridor on Jl. Perintis Kemerdekaan km 11, Tamalanrea District, Makassar City, has not reached a satisfactory level. In the context of management or management, several aspects may be the cause of not achieving community satisfaction:

Lack of comprehensive and sustainable planning. The arrangement of public green spaces requires careful planning that is integrated with the needs of the community and the vision of urban development. If planning is inadequate, implementation and management will be hampered. Lack of coordination between related agencies. Public green space management involves various parties such as the local government,

related agencies, and the community. Lack of coordination between agencies can lead to overlap in management and lack of effectiveness in maintenance and development.

Limited resources, both in terms of funds, labor, and other supporting infrastructure. Public green space management requires considerable investment, both for initial development and ongoing maintenance. If resources are limited, then the likelihood of achieving the expected standards will be low.

Lack of community participation and involvement in the management process. Community participation in the planning, implementation, and evaluation of public green open space management is essential to ensure the sustainability and relevance of the programs implemented.

By identifying these problems, remedial measures can be taken to improve the management or management of public green open space arrangements on Jl. Perintis Kemerdekaan km 11, Tamalanrea Sub-district, Makassar City. This involves a joint effort between the government, relevant agencies, and the community to improve planning, coordination, resource allocation, and participation in the management of these public green spaces.

## CONCLUSIONS

Based on the results and discussion, it can be concluded that there are still some challenges that need to be overcome to achieve the level of satisfaction desired by the community. These challenges include the maintenance of damaged trees, unsatisfactory performance in aspects considered important by the community, and suboptimal management. There needs to be a joint effort between the government, related institutions, and the community to improve planning, coordination, resource allocation, and participation in the management of public green spaces. To improve the condition of public green spaces, stakeholder performance, and management of public green spaces along the corridor, it is recommended to take steps such as Periodic Maintenance, Improvement of Facilities and Services, Improved Planning and Coordination, Adequate Resource Allocation, and Active Community Participation.

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