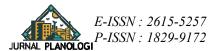
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# EVALUATION OF THE QUALITY OF PHYSICAL ASSETS BATU MAHPAR GEOPARK RECREATION PARK IN TASIKMALAYA DISTRICT

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#### **ABSTRACT**

Batu Mahpar Geopark Recreational Park has tourist attractions. There are a number of indications of problems related to the quality of physical assets, including the difficulty of finding public transportation, car parks, information centers, visitor needs and souvenir kiosks, there are ten photo spots that are damaged, rubbish bins are not separated based on the type of rubbish, ablution places between men and women are not separated, there are footpaths covered with wild plants, and the cell phone signal is less stable. Based on these indications, it is necessary to conduct a study that aims to evaluate the quality of Batu Mahpar's physical assets including the availability and condition of assets which consist of four dimensions: tourist attractions, accessibility, supporting facilities, and infrastructure. This study uses descriptive methods with rational quantitative approaches. Data collection techniques used are observation, interview, and questionnaire. The results show that the dimensions of tourist attractions, supporting facilities and infrastructure are of good quality, while the accessibility dimension is of sufficient quality. The average value of the physical assets quality resulting from the four dimensions is 64.66%. This means that the physical assets of Batu Mahpar are of sufficient quality. The sugestion of this research is establis the strategies for improving physical assets of Batu Mahpar qualities.

Keywords: Quality, Physical Asset, Batu Mahpar, Geopark Recreation Park

#### **ABSTRAK**

Taman Rekreasi Geopark Batu Mahpar memiliki sejumlah atraksi wisata. Terdapat beberapa indikasi permasalahan terkait kualitas aset fisik, antara lain sulitnya mencari angkutan umum, tempat parkir, pusat informasi, kebutuhan pengunjung dan kios cinderamata, terdapat sepuluh spot foto yang mengalami kerusakan, tempat sampah yang tidak dipisah berdasarkan jenis sampahnya, tempat wudhu antara laki-laki dan perempuan tidak dipisah, terdapat jalan setapak yang ditumbuhi tanaman liar, dan sinyal telepon seluler yang kurang stabil. Berdasarkan indikasi tersebut, maka perlu dilakukan penelitian yang bertujuan untuk mengevaluasi kualitas aset fisik Batu Mahpar yang meliputi ketersediaan dan kondisi aset yang terdiri dari empat dimensi yaitu atraksi wisata, aksesibilitas, fasilitas pendukung, dan infrastruktur. Penelitian ini menggunakan metode deskriptif dengan pendekatan kuantitatif rasional. Teknik pengumpulan data yang digunakan adalah observasi, wawancara, dan kuesioner. Hasil penelitian menunjukkan bahwa dimensi atraksi wisata, sarana dan prasarana pendukung memiliki kualitas yang baik, sedangkan dimensi aksesibilitas memiliki kualitas yang cukup. Nilai rata-rata kualitas aset fisik yang dihasilkan dari keempat dimensi tersebut 64,66%. Hal ini berarti aset fisik Batu Mahpar memiliki kualitas yang cukup. Saran penelitian sebaiknya mencari tahu strategi meningkatkan kualitas aset fisik Batu Mahpar.

Kata kunci: Kualitas, Aset Fisik, Batu Mahpar, Taman Rekreasi Geopark

#### 1. INTRODUCTION

Physical assets have an important function to serve business or organizational functions. Asset management in an organization can create a balance between performance, risk and asset-related costs to achieve optimal solutions (Hastings, 2010). This statement is reinforced by the opinion that there are two types of physical assets that must be managed effectively and efficiently and are related to the tourism sector, namely facilities and infrastructure (Campbell et al., 2011; Marzuki et al., 2017).

The tourism sector is very important for Indonesia because it can stimulate economic activity and create jobs (Siregar et al., 2019). Indonesia is very likely to become one of the attractive tourist destinations to be visited by local and foreign tourists because it has various potentials, wealth and diversity of types of tourism (Putri & Andriana, 2021). The completeness and quality of the facilities as well as the neat arrangement of the place in a tourist attraction can reflect that the management has been running optimally (Siregar et al., 2019). Tourism objects that are well managed will be a source of income for the region, both from taxes and fees (Firdaus, 2019). One area that has a lot of potential natural resources to be developed as a tourist attraction is Tasikmalaya Regency (Saputra et al., 2019).

Tasikmalaya Regency has dozens of tourist destinations, some of which have not been optimally developed and managed due to a lack of observers specifically for these tourist destinations (Saputra et al., 2019). Based on data from the Tasikmalaya Regency Tourism Office in 2019, the number of tourists visiting Tasikmalaya Regency reached 1,449,314 people, an increase of 2.07 percent compared to 2017. Of the total visits, 4.22 percent of them (61,161 people) visited Batu Mahpar Geopark Recreational Park. Although there are always opportunities to increase the number of visits from year to year, the quality of tourism facilities and infrastructure still needs to be considered to encourage tourist satisfaction in visiting these attractions (Isa, 2020; Marzuki et al., 2017).

Batu Mahpar Geopark Recreation Park, hereinafter referred to as Batu Mahpar, is one of the natural tourism types of geotourism. Its main attractions are expanses of exotic rocks, a river flowing for approximately 400 meters, and five waterfalls including Manawah Waterfall, Niagara Sunda Waterfall, Crown Waterfall, Cena Waterfall and Kahuripan Waterfall. In addition, Batu Mahpar also has campsite facilities, educational facilities which include a mini zoo, outbound rides, museums and tourist interpretation boards, and recreational facilities which include an outdoor swimming pool and photo spots (Athea et al., 2018). Basically, the Batu Mahpar tourist attraction uses an earth park (geopark) approach because it includes three types of diversity that exist in geoparks, which include: geological

diversity, biodiversity, and cultural diversity (Regulation of the President of the Republic of Indonesia Number 9 of 2019). The following is a photo documentation of Batu Mahpar Geopark Recreation Park, which can be seen in Figure 1.





**Figure 1.** Batu Mahpar Geopark Recreational Park Source: Compilers, 2022

Based on the results of preliminary observations on Batu Mahpar, there are several indications of problems related to the physical assets of tourism. The first indication is that it is difficult to find public transportation that passes Batu Mahpar and a special car parking area. In addition, the guardrail has not completely demarcated the camping area.

The next indication of the problem is that there is a swimming pool that is leaking. Then, the conditions of the crocodile cages and outbound rides are not well maintained because there are several wild plants in the attraction area. In addition, there are ten photo spots that are damaged, it is difficult to find a special building for the visitor information center, and there are trash and sand containers that are not closed.

Furthermore, Batu Mahpar only has one place to eat. Stalls for visitor needs and souvenir stalls are hard to find in Batu Mahpar. Throughout the observation activities, it was seen that the trash cans in Batu Mahpar were not separated based on the type of waste. In addition, the place of ablution between men and women is not separated.

Another indication of the problem is that the cell phone signal has an unstable quality, especially in the waterfall area. Spot the sloping path has no handrails and part of the path is covered by weeds. In addition, there are two toilets in the waterfall area which are dirty and temporarily unusable because there is no water supply to the two toilets.

Research related to the physical assets of natural tourism has been carried out by many researchers before, three of them: **Marzuki et al.** (2017) examined the relationship between natural tourism attributes (including physical, environmental, main facilities, supporting facilities, and infrastructure) and tourist satisfaction at 12 natural attractions; Ginting & Sasmita (2018) researched the development of tourism facilities (including accommodation,

supporting facilities, and tourism auxiliary facilities) in Silalahi Village, Toba Caldera Geopark based on the concept of geotourism; and Gu et al. (2022) examined the evaluation of natural tourism attractiveness (including tourist attractions, accessibility, development conditions, and complementary services) in a biosphere reserve.

State of the art in this research is that the evaluation is carried out specifically on the quality of physical assets of geotourism objects and uses four dimensions of physical assets obtained from the results of collaboration between Ginting & Sasmita's research (supporting facilities dimension), Gu et al. (accessibility dimension), and Marzuki et al. (tourist attraction and infrastructure dimension). This is the first research in Batu Mahpar that specifically discusses the evaluation of the quality of physical assets only. In addition, this research also indirectly discusses three types of diversity in Batu Mahpar based on the geopark approach including geodiversity, biodiversity, and cultural diversity described in the evaluation of the dimensions of tourist attractions (Regulation of the President of the Republic of Indonesia Number 9 of 2019). Another is that there is a quantification process of observation and interview results so that evaluation results are obtained in the form of percentages and interpretations of the quality of Batu Mahpar's physical assets.

Based on the explanation of problem indications and three previous studies, it is necessary to conduct research on the quality of physical assets in a tourist attraction. This study aims to evaluate the physical assets of the Batu Mahpar Geopark Recreation Park which consists of four dimensions including: tourist attractions, accessibility, supporting facilities, and infrastructure based on the results of observations, interviews, and visitor questionnaires (Ginting & Sasmita, 2018; Gu et al., 2022; Marzuki et al., 2017).

#### 2. METHODOLOGY

The object of research is the quality of physical assets with the unit of analysis namely a tourist object called Batu Mahpar Geopark Recreational Park. The research analysis unit is located at Tegal Munding Village RT.15/RW.06, Linggawangi Village, Leuwisari District, Tasikmalaya Regency, West Java 46464. Batu Mahpar has an area of 3.2 hectares, with details of 2.2 hectares being used for tourism and tourism activities. The remaining 1 hectare is still vacant land (idle). This research took place from the 3rd week of September to the 3rd week of December 2022. The following is the location and boundaries of Batu Mahpar, which can be seen in Figure 2.



**Figure 2.** Location of Batu Mahpar as Research Analysis Unit Source: Google Earth, 2022

This research uses descriptive methods with rational quantitative approaches. Data collection techniques consist of observation, interviews, and questionnaires (Sugiyono, 2013). First, namely systematic observation preceded by preliminary observation to find out indications of problems with the quality of Batu Mahpar's physical assets. Then, when collecting data, observation activities are completed with a checklist of the availability and condition of Batu Mahpar's physical assets (Hardani et al., 2020). Second, the interview was conducted in a structured manner with an operational manager for Batu Mahpar as the interviewee with the aim of asking about Batu Mahpar's profile and the quality of its physical assets based on four research dimensions (Hardani et al., 2020). Thirdly, the questionnaire was conducted only to find out visitors' perceptions regarding the quality of Batu Mahpar's physical assets. Questionnaires in the form of a Google form were distributed to tourists aged 17 years and over who are currently or have visited Batu Mahpar at least once in the 2017-2022 period (Sugiyono, 2013).

Sampling technique used is nonprobability sampling with accidental sampling (Sugiyono, 2013). The study used a sample size of 71 samples and was said to be feasible for processing because it exceeded the minimum sample size of 30 samples (Roscoe in Sugiyono, 2013).

The evaluation method is carried out by comparing the physical asset quality standards according to regulations and the existing conditions of physical asset quality in the Batu Mahpar geopark tourist park. These standards are taken based on the following regulations:

Regulation of the Minister of Tourism of the Republic of Indonesia Number 3 of 2018
concerning Operational Guidelines for Managing Special Physical Allocation Funds for
the Tourism Sector. Matters quoted from this regulation are regarding quality standards
for various tourist facilities: There are camping facilities, educational facilities

- (interpretation boards), parking lots, signboards, eating places, souvenir kiosk shopping facilities, toilets, cleaning facilities and security, places of worship and roads.
- 2. Regulation of the Minister of Health of the Republic of Indonesia Number 32 of 2017 concerning Environmental Health Quality Standards and Water Health Requirements for Sanitation Hygiene, Swimming Pools, Aqua Solus and Public Baths. Matters quoted from this regulation: There are quality standards for swimming pool facilities and water quality (including for sanitation hygiene purposes and for swimming pool water media) based on physical parameters.
- 3. Regulation of the Director General of Forest Protection and Nature Conservation Number: P.02/IV-SET/2012 concerning the Development of Natural Tourism Facilities in National Parks, Grand Forests and Nature Tourism Parks. The things quoted from this regulation are related to standards for the development of tourism facilities related to the quality of facilities and infrastructure which: There are parking lots, signage and clean water networks.

In order to find out customer opinions regarding the quality of physical assets, a customer survey was conducted. The survey results were analyzed using mean descriptive statistics to determine whether the quality condition was good, fair or poor. This condition becomes input for managers to improve the quality of the physical assets of Batu Mahpar Tourist Park.

The results of evaluating the quality of physical assets are quantified by calculating the percentage of quality indicators, dimensions, and research variables using the formula Gidlow et al. (2012) as follows:

$$\%Indicator\ \textit{Quality} = \frac{\textit{Number of criteria fulfilled}}{\textit{Total number of criteria}} \times 100\% \qquad ... (1)$$

$$\%Dimension\ Quality = \frac{\Sigma(\%indicator\ 1\ lindicator\ 2\ l\cdots)}{Numbers\ of\ indicators\ in\ the\ dimension} \qquad \dots (2)$$

$$\%Physical\ Asset\ Quality = \frac{\sum (\% indicator\ 1 + indicator\ 2 + \cdots)}{\textit{Number of variable}} \qquad \dots (3)$$

The following categories of interpretation of the quality of Batu Mahpar's physical assets are presented in Table 1.

 Table 1. Physical Asset Quality Interpretation Categories

| intervals       | Interpretation        |
|-----------------|-----------------------|
| 66.67% - 100%   | Good/Adequate         |
| 33.33% - 66.66% | Enough/Quite adequate |
| 0% - 33.32%     | Not good/Inadequate   |

Source: Adaptation of Gidlow et al., 2012

Second, the quantitative data analysis technique uses the average descriptive statistical method (mean) from the data from the questionnaire so that visitors' perceptions about the quality of Batu Mahpar's physical assets are known. Previously, the data from the questionnaire were tested for validity and reliability to measure the validity and reliability of the data (Setiaman, 2020). After that, the data was measured and evaluated using a Likert scale (Sugiyono, 2013). The scale consists of five scale ranges including: scale 1 (strongly disagree), scale 2 (disagree), scale 3 (undecided), scale 4 (agree), and scale 5 (strongly agree). The results of the questionnaire are in the form of visitor perceptions regarding the quality of Batu Mahpar's physical assets which consist of five interpretation categories, as presented in Table 2.

Table 2. Category Interpretation of Visitors' Perceptions of the Quality of Physical Assets

| Scale Range | Interpretation                     |
|-------------|------------------------------------|
| 1.00 - 1.79 | Strongly disagree/Very unfavorable |
| 1.80 - 2.59 | Disagree/Not good                  |
| 2.60 - 3.39 | Undecided/Enough                   |
| 3.40 - 4.19 | Agree/Okay                         |
| 4.20 - 5.00 | Strongly agree/Very good           |

Source: Adaptation of Sugiyono, 2013

All items of questionnaire questions regarding the evaluation of the quality of Batu Mahpar's physical assets are in the form of statements with a total of 12 items. All of these statements represent the four dimensions of Batu Mahpar's physical asset quality.

Evaluation of the quality of tourism physical assets is a series of activities to measure the achievements achieved by tourism facility and infrastructure assets related to their characteristics which can be reviewed based on certain standard dimensions and/or references (Hastings, 2010; Isa, 2020; Kotler in Kusuma & Utomo, 2020; Marzuki et al., 2017; Sugiama, 2013). Facilities and infrastructure contribute to influencing the satisfaction of visiting tourists so it is advisable to evaluate their quality in order to improve the tourist experience (Cheng et al., 2022).

Evaluation of the quality of Batu Mahpar's physical assets includes evaluating the availability and condition of physical assets which are divided into four dimensions including: tourist attractions, accessibility, supporting facilities, and infrastructure (Ginting & Sasmita, 2018; Gu et al., 2022; Marzuki et al., 2017). First, tourist attractions consist of four indicators including: physical scenery, campsites, educational facilities, and recreational facilities (Gu et al., 2022; Marzuki et al., 2017). Second, accessibility consists of road transportation networks, parking lots, signs, and information centers (Ginting & Sasmita, 2018; Gu et al., 2022). Third, supporting facilities consist of seven indicators including: places to eat,

shopping facilities, seats, toilets, trash cans, hygiene and security facilities, and places of worship (Ginting & Sasmita, 2018; Gu et al., 2022; Marzuki et al., 2017). Fourth, infrastructure consists of four indicators including: roads, water networks, electricity networks, and telecommunication networks (Isa, 2020; Marzuki et al., 2017).

In addition to using several theories as its foundation, this research also uses several normative foundations in the form of applicable and relevant laws and regulations of the Republic of Indonesia. The normative basis is used to find out and complete the definitions, provisions and standards for tourism facilities that have not been covered in the theoretical basis.

#### 3. RESULTS AND DISCUSSION

The research results consist of three main discussions including: the results of the validity and reliability tests of the questionnaire, the results of evaluating the quality of physical assets based on the dimensions of tourist attractions, accessibility, supporting facilities, and infrastructure, and the results of evaluating the quality of Batu Mahpar's physical assets which are further explained as follows.

This research combines and integrates three diversity of a geopark in one tourist object, which includes geodiversity (Ginting & Sasmita, 2018; Marzuki et al., 2017), biodiversity (Gu et al., 2022; Marzuki et al., 2017) and cultural diversity (Ginting & Sasmita, 2018; Gu et al., 2022). The research in Batu Mahpar evaluates the quality of physical assets which indirectly contain these three elements of diversity, including geodiversity contained in the indicator of physical quality of scenery and quality of educational facilities (museum), biodiversity contained in the indicator of quality of educational facilities (museum and cultural diversity contained in the indicator of quality of educational facilities (museum and interpretation boards).

### 3.1 Questionnaire Validity and Reliability Test Results

Test the validity of the research using the Pearson Product Moment test tool (Setiaman, 2020). Based on the test results, all question items produced an r-count value of more than 0.197 and a significance level of less than five percent (5%) and a *Cronbach Alpha* value of 0.939, so that the questionnaire was declared valid and had a perfect level of reliability (Setiaman, 2020; Sugiama, 2008).

### 3.2 Results of Evaluation of the Quality of Tourist Attractions

Tourist attractions are physical assets that are features of tourist objects (Soemitro & Suprayitno, 2018). Evaluation of the quality of tourist attractions is carried out on four

indicators including: the physical quality of the scenery, campsites, educational facilities and recreational facilities (Gu et al., 2022; Marzuki et al., 2017). The assessment of the evaluation results uses the equation formula (1). The following results of the evaluation of indicators on the dimensions of tourist attractions are presented in Table 3.

**Table 3**. Results of Evaluation of Indicators on the Dimensions of Tourist Attractions

| Table 5. A                     | esuits of Evatuation of In  | dicators on the Dimension  Condition   | ns oj Tourisi A      |                                       |
|--------------------------------|---|--|----------------------|---------------------------------------|
| Indicator                      | Standard  | in the field   | Evaluation           | Interpretatio<br>n                    |
| 1. Physical Quality of Scenery | Physical availability of the scene  | There is a view of the expanse of rock and five waterfalls                           | 4/4 x 100%<br>= 100% | Meet the standards; Good;             |
|                                | Physical scenery is rarely found elsewhere                                  | Stone expanses are rarely found elsewhere  |                      | Adequate                              |
|                                | Beautiful physical<br>scenery and clean of<br>garbage                       | The expanses of rocks<br>and waterfalls are<br>beautiful and clean<br>from trash     |                      |                                       |
|                                | The physical form/type of scenery is different from other views             | The shape, type, and process of forming a bed of stones is different from the others |                      |                                       |
| 2. Campgroun d Quality         | Availability of campsites   | There are campsites in<br>the form of fields with<br>media in the form of<br>land    | 3/5 x 100%<br>= 60%  | Does not meet some standards; Enough; |
|                                | Lighting is available every seven meters  The land contour tends to be flat | Only two spotlights are available  Flat  |                      | Adequate                              |
|                                | There is a guardrail that is installed thoroughly  There is maintenance     | There is a guardrail, but it has not been completely installed Yes, preventive, and  |                      |                                       |
| 2 0 1 1                        | on the land   | corrective maintenance   | 16/22                | Dana                                  |
| 3. Quality of Educational      | Availability of cages   | Available (there are 21 units of cages)  | 16/23 x $100%$ =     | Does not meet some                    |
| Facilities                     | The entire physical cage is sturdy and locked                               | Sturdy and well locked   | 69.57%               | standards;<br>Good;<br>Adequate       |
|                                | Visitor interactions with animals are safe                                  |  |                      |                                       |
|                                | The size of the cage that is filled is proportional                         | Proportional   |                      |                                       |
|                                | Clean cage conditions   | No, most of the cages are dirty  |                      |                                       |
|                                | Maintenance has been carried out optimally                                  | Not optimal  |                      |                                       |
|                                | outbound rides  | There are 9 outbound rides   |                      |                                       |

| Indicator     | Standard                               | Condition                                | Evaluation | Interpretatio |
|---------------|--|--|------------|---------------|
|               |  | in the field Not feasible                |            | n             |
|               | Outbound rides are feasible to operate | Not leasible                             |            |               |
|               | outbound guides                        | Available                                |            |               |
|               | Adequate safety                        | Available, but not                       |            |               |
|               | equipment is in place                  | sufficient (only                         |            |               |
|               | oquipinoni is in piuos                 | helmets are available)                   |            |               |
|               | Availability of                        | Available                                |            |               |
|               | museums                                |  |            |               |
|               | Museum guide                           | Available (led by one                    |            |               |
|               | availability                           | person)                                  |            |               |
|               | Availability of                        | Available (3 units) and                  |            |               |
|               | functioning CCTV                       | all working                              |            |               |
|               | Availability of fire extinguishers     | Not available                            |            |               |
|               | Collector's                            | Original collection of                   |            |               |
|               | authenticity                           | historical relics                        |            |               |
|               | Sturdy collection                      | Sturdy                                   |            |               |
|               | storage box                            | 2 001 00)                                |            |               |
|               | Neat collection of                     | Neat                                     |            |               |
|               | objects                                |  |            |               |
|               | Availability of                        | Available, covering                      |            |               |
|               | interpretation boards                  | cultural, religious, and                 |            |               |
|               |  | historical education                     |            |               |
|               | Educational content                    | The interpretation                       |            |               |
|               | adopts historical elements of local    | board contains historical, cultural, and |            |               |
|               | wisdom                                 | religious educational                    |            |               |
|               | Wisdom                                 | content.                                 |            |               |
|               | Attractive visual                      | Interesting                              |            |               |
|               | graphics                               |  |            |               |
|               | The content is                         | Educative                                |            |               |
|               | educative                              |  |            |               |
|               | Durable board                          | The board material is                    |            |               |
|               | material                               | not durable, some of                     |            |               |
|               | T., C., 1                              | the boards are faded                     |            |               |
|               | Information can be seen clearly        | The information on some of the faded     |            |               |
|               | scen cicarry                           | boards is not clearly                    |            |               |
|               |  | visible                                  |            |               |
| 4. Quality of | Availability of                        | Available                                | 4/9 x 100% | Does not      |
| Recreation    | swimming pool                          |  | = 44.44%   | meet some     |
| Facilities    | The swimming pool is                   | There is a swimming                      |            | standards;    |
|               | clean, the ground                      | pool that leaks and is                   |            | Enough;       |
|               | floor of the pool is not               | dirty, slippery, and not                 |            | Adequate      |
|               | slippery, and the                      | filled with water                        |            |               |
|               | water is clear  Availability of pool   | Available (in the form                   |            |               |
|               | regulations                            | of signs)                                |            |               |
|               | Availability of                        | Available (3 staff)                      |            |               |
|               | lifeguards                             | 11. unuois (3 buili)                     |            |               |
|               | Availability of first                  | Available                                |            |               |
|               | aid kits                               |  |            |               |

| Indicator | Standard               | Condition in the field | Evaluation | Interpretatio<br>n |
|-----------|------------------------|------------------------|------------|--------------------|
|           | Availability of        | Not available          |            |                    |
|           | emergency protocol in  |                        |            |                    |
|           | writing                |                        |            |                    |
|           | Availability of small  | Not available          |            |                    |
|           | pool                   |                        |            |                    |
|           | All photo spots can be | There are 10 damaged   |            |                    |
|           | used                   | photo spots            |            |                    |
|           | Photo spot designs     | Varies                 |            |                    |
|           | vary                   | 0 11 0015 0 11         | . 2010 G   | 1 200              |

Source: Arizal & Nugroho, 2022; Bagri & Kala, 2015; Camilleri, 2018; Cavnar et al., 2004; Dardanila et al., 2021; Gu et al., 2022; Hermawan et al., 2018; Regulation of the Minister of Health of the Republic of Indonesia Number 32 of 2017; Regulation of the Minister of Tourism of the Republic of Indonesia Number 3 of 2018; Panghastuti, 2016; Pop & Borza, 2014; Pratiwi et al., 2021; Tarigan et al., 2020

There are two indicators in Table 3 which are supported by data from the questionnaire results, namely educational facilities, and recreational facilities. The following are presented in Table 4.

**Table 4.** Results of the Visitor Questionnaire related to Indicators on the Dimensions of Tourist Attractions

| of Tourist Autous  |  |           |          |          |           |               |      |
|--|--|-----------|----------|----------|-----------|---------------|------|
| Statement  | Percentage of Respondents<br>Answers (%) |           |          |          | Means     | Interpretatio |      |
| Statement  | STS (1)                                  | st<br>(2) | R<br>(3) | S<br>(4) | SS<br>(5) | weuns         | n    |
| 1.The interpretation board attraction at Batu Mahpar has attractive visual graphics.     | 2,8                                      | 12,<br>7  | 21,<br>1 | 47,<br>9 | 15.<br>5  | 3.61          | Good |
| 2. The educational content on the interpretation board attractions broadens my horizons. | 1,4                                      | 4,2       | 15.<br>5 | 47,<br>9 | 31        | 4.03          | Good |
| 3.I am interested in taking pictures at the Batu Mahpar photo spot attraction.           | 4,2                                      | 7         | 11,      | 56,<br>3 | 21,       | 3.83          | Good |

Source: Results of Google Form and SPSS Data Processing, 2022

Based on Table 4, there are two statements related to educational facilities (i.e., interpretation boards) and one statement related to recreational facilities (namely photo spots). Statements 1 and 2 produce a mean value of 3.61 and 4.03, respectively. That is, the average visitor considers that the interpretation board has attractive visual graphics and the educational content presented adds to their insight. Meanwhile, statement 3 produces a mean value of 3.83. That is, the average visitor considers that the photo spot attractions at Batu Mahpar are of good quality and attract their attention.

The assessment of the four indicators in Table 3 uses the equation (2) and produces the mean value of the dimensions of tourist attractions. The following is an assessment of the

quality dimensions of tourist attractions at the Batu Mahpar Geopark Recreation Park presented in Table 5.

 Table 5. Quality Dimensions of Tourist Attractions

| Indicator                          | Percentage | Quality<br>Interpretation |
|------------------------------------|------------|---------------------------|
| The physical quality of the scene  | 100%       | Good                      |
| Campsite quality                   | 60%        | Enough                    |
| Quality of educational facilities  | 69.57%     | Good                      |
| Quality of recreational facilities | 44.44%     | Enough                    |
| Average (Mean)                     | 68.50%     | Good                      |

Source: Compiler Data Processing Results, 2022

Based on Table 5, it is known that the average quality of physical assets in the dimensions of tourist attractions is 68.50 percent with the interpretation of "good". That is, the dimensions of the tourist attraction dimensions of the Batu Mahpar Geopark Recreation Park are good and adequate standard.

### 3.3 Results of Accessibility Quality Evaluation

Accessibility is everything whose availability is related to the costs incurred by tourists as well as the speed and convenience that tourists get (Pantiyasa et al., 2018). Accessibility refers to the level of ease and difficulty in moving from one place to another (Gu et al., 2022). Evaluation of the quality of accessibility is carried out on four indicators which include: road transportation networks, parking lots, signs, and information centers (Ginting & Sasmita, 2018; Gu et al., 2022). The assessment of the evaluation results uses the equation formula (1). The following results of the evaluation of indicators on the accessibility dimension are presented in Table 6.

 Table 6. Evaluation Results of Indicators on the Accessibility Dimension

|                  | U                      | Condition               | Evaluatio  | Interpretatio |
|------------------|------------------------|-------------------------|------------|---------------|
| Indicator        | Standard               | in the field            | n          | n             |
| 1.The quality of | Availability of public | Only motorbike taxis    | 1/3 x 100% | Does not meet |
| the road         | transport motorbikes   | are available, the base | = 33.33%   | some          |
| transport        | and cars               | is 500 meters from      |            | standards;    |
| network          |                        | Batu Mahpar             |            | Enough;       |
|                  | Ease of finding        | There is no public      |            | Adequate      |
|                  | public transportation  | transportation that     |            | -             |
|                  | •                      | passes Batu Mahpar.     |            |               |
|                  |                        | Meanwhile, the          |            |               |
|                  |                        | nearest motorcycle      |            |               |
|                  |                        | taxi base is quite far  |            |               |
|                  |                        | from Batu Mahpar        |            |               |
|                  | Ease of access for     | The road is easily      |            |               |
|                  | various types of       | accessible by various   |            |               |
|                  | vehicles               | types of motorized      |            |               |

|                              | a   | Condition  | Evaluatio              | Interpretatio  |
|------------------------------|---|--|------------------------|--|
| Indicator                    | Standard  | in the field   | n                      | n  |
|                              |   | vehicles   |                        |  |
| 2.Parking Space<br>Quality   | Availability of motorbike and car parking spaces  |  | 4/6 x 100%<br>= 66.67% | Does not meet<br>some<br>standards;<br>Good;             |
|                              | Availability of lighting installed at a height of 6-15 meters                                   |  |                        | Adequate   |
|                              | There is a parking attendant  | There isn't any  |                        |  |
|                              | The parking lot does not interfere with traffic activity  | Do not interfere with traffic activity                             |                        |  |
|                              | The parking lot does<br>not interfere with<br>water absorption                                  | with water absorption  |                        |  |
|                              | Parking lots don't damage trees   | trees  |                        |  |
| 3.Signboard<br>Quality       | Availability of signboards to tourist attractions, tourist attractions, and to other facilities | Available  | 4/5 x 100%<br>= 80%    | Does not meet<br>some<br>standards;<br>Good;<br>Adequate |
|                              | Signage is easy to see  | Easy on the eyes   |                        | -  |
|                              | Messages on informative signage   | Informative  |                        |  |
|                              | Availability of identity gateways   | gates available  |                        |  |
|                              | Gapura is in a strategic location   | Not strategic  |                        |  |
| 4.Information Center Quality | Availability of special information center building   | Not available  | 1/3 x 100%<br>= 33.33% | Does not meet some standards;                            |
|                              | Availability of attraction information facilities and tourist attraction plans                  | banners for Batu<br>Mahpar tourist<br>attractions are<br>available |                        | Enough;<br>Adequate                                      |
|                              | Information about tourist objects can be accessed on the application <i>platform</i>            | Accessible   |                        |  |

Source: Ayu & Indrawati, 2020; Camilleri, 2018; Regulation of the Director General of Forest Protection and Nature Conservation Number: P. 02/IV-SET/2012; Regulation of the Minister of Tourism of the Republic of Indonesia Number 3 of 2018; Ginting & Sasmita, 2018; Gusleni, 2016; Jesus, 2020; Matulessy et al., 2020; Rozy & Koswara, 2017

There are two indicators in Table 6 which are supported by data from the questionnaire results, namely the signboard and the information center. The following data is presented in Table 7.

 Table 7. Visitor Questionnaire Results related to Indicators on the Accessibility Dimension

| Statament  | Percentage of Respondents<br>Answers (%) |           |          |          | Magne     | Interpretatio |                |
|--|--|-----------|----------|----------|-----------|---------------|----------------|
| Statement  | STS (1)                                  | st<br>(2) | R<br>(3) | S<br>(4) | SS<br>(5) | Means         | n              |
| 1.I can easily find the signboard at Batu Mahpar.  | 5,6                                      | 5,6       | 18,<br>3 | 52,<br>2 | 18,<br>3  | 3.72          | Good           |
| 2.In my opinion, a special building for a visitor information center needs to be available at Batu Mahpar. | 1,4                                      | 2,8       | 7        | 42,      | 46.<br>5  | 4.30          | Strongly agree |

Based on Table 7, there is one statement each for indicator boards and information centers. Statement 1 regarding the signage produces a mean value of 3.72. That is, the average visitor thinks that the signboard is easy to find at Batu Mahpar. Meanwhile, statement 2 regarding the information center produces a mean value of 4.30. That is, the average visitor strongly agrees that a special building for a visitor information center should be available at Batu Mahpar.

The assessment of the four indicators in Table 6 uses the formula in equation (2) and produces the *mean value* of the accessibility dimension. The following is an assessment of the quality dimensions of the accessibility of the Batu Mahpar Geopark Recreation Park presented in Table 8.

**Table 8.** Accessibility Dimension Quality

| Indicator                                    | Percentage | Quality<br>Interpretation |
|--|------------|---------------------------|
| The quality of the transport network Highway | 33.33%     | Enough                    |
| Quality of parking space                     | 66.67%     | Good                      |
| Signboard quality                            | 80%        | Good                      |
| Information center quality                   | 33.33%     | Enough                    |
| Average (Mean)                               | 53.33%     | Enough                    |

Source: Compiler Data Processing Results, 2022

Based on Table 8, it is known that the average quality of physical assets in the accessibility dimension is 53.33 percent with the interpretation of "enough". This means that the accessibility dimensions of the Batu Mahpar Geopark Recreation Park have sufficient quality.

## 3.4 Results of Quality Evaluation of Supporting Facilities

Supporting facilities are facilities that can make tourists visiting these attractions feel comfortable (Ginting & Sasmita, 2018). Evaluation of the quality of supporting facilities was

carried out on seven indicators including: places to eat, shopping facilities, seats, toilets, trash cans, hygiene and safety facilities, and places of worship (Ginting & Sasmita, 2018; Gu et al., 2022; Marzuki et al., 2017). The assessment of the evaluation results uses the equation formula (1). The following results of the evaluation of indicators on the dimensions of supporting facilities are presented in Table 9.

**Table 9.** Results of Evaluation of Indicators in Supporting Facilities

| Indicator         | Standard  | Condition                          | Evaluation                  | Interpretation  |
|-------------------|---|------------------------------------|-----------------------------|-----------------|
|                   |   | in the field                       |                             | _               |
| 1.Dining          | There are places to eat with                      | There is only one                  | $4/5 \times 100\%$<br>= 80% | Does not meet   |
| Quality           | a minimum number of types of stalls of five types | place to eat                       | - 80%                       | some standards; |
|                   | without duplication                               |                                    |                             | Good;           |
|                   | Identity banner available                         | Available                          |                             | Adequate        |
|                   | The identity <i>banner</i> can be                 | Well readable                      |                             |                 |
|                   | read properly                                     |                                    |                             |                 |
|                   | Clean dining conditions                           | Clean                              |                             |                 |
|                   | Easily accessible location                        | Easily accessible                  |                             |                 |
| 2.Quality         | Availability of kiosks for                        | Not available                      | 0/3 x 100%                  | Does not meet   |
| of                | basic needs of visitors                           |                                    | = 0%                        | some            |
| Shopping          | Availability of souvenir                          | Not available                      |                             | standards; Not  |
| Facilities        | stalls  |                                    |                             | good;           |
|                   | The souvenir stall location                       | There are no                       |                             | Inadequate      |
|                   | is easy to access                                 | souvenir stalls                    |                             |                 |
| 2 Sections        | Avoilability of against and                       | available There are 9              | 3/3 x 100%                  | Meet the        |
| 3.Seating Quality | Availability of <i>gazebos</i> and benches        | There are 9 gazebos and 42         | = 100%                      | standards;      |
| Quanty            | benefics  | benches and 42                     | 10070                       | Good;           |
|                   | Gazebo and benches are                            | Clean                              |                             | Adequate        |
|                   | clean   |                                    |                             | 1               |
|                   | Gazebo and bench safety                           | The gazebo and                     |                             |                 |
|                   | -   | benches are                        |                             |                 |
|                   |   | physically sturdy                  |                             |                 |
|                   |   | and free from                      |                             |                 |
|                   |   | broken                             |                             |                 |
|                   |   | glass/bolts/screws                 |                             |                 |
|                   |   | protruding so they are safe to use |                             |                 |
| 4.Quality         | Availability of toilets                           | There are 23 toilets               | 6/9 x 100%                  | Does not meet   |
| of Toilets        | Toilets for men and women                         | Separated Separated                | = 66.67%                    | some            |
|                   | are separated                                     | z sparacea                         |                             | standards;      |
|                   | Changing room availability                        | Available                          |                             | Good;           |
|                   | Availability of washroom                          | Available                          |                             | Adequate        |
|                   | Air ventilation is provided                       | Available, in the                  |                             |                 |
|                   |   | form of glass                      |                             |                 |
|                   |   | equipped with an                   |                             |                 |
|                   | Watanana f tailat Jaan                            | air gap                            |                             |                 |
|                   | Waterproof toilet door material                   | Waterproof                         |                             |                 |
|                   | The condition of all toilets                      | The condition of                   |                             |                 |
|                   | is clean  | the men's rinse                    |                             |                 |
|                   |   | room and two                       |                             |                 |

| Indicator                    | Standard   | Condition in the field   | Evaluation             | Interpretation                  |
|------------------------------|--|--|------------------------|---------------------------------|
|                              |  | toilets in the<br>waterfall area is<br>dirty   |                        |                                 |
|                              | The entire toilet floor is not slippery  | The condition of<br>the men's rinse<br>room floor and two<br>toilets in the<br>waterfall area is<br>slippery |                        |                                 |
|                              | Maintenance of toilets   | Not all toilets are maintained optimally   |                        |                                 |
| 5.Trash<br>Can               | Availability of trash  | There are 20 trash cans  | 2/3 x 100%<br>= 66.67% | Does not meet some              |
| Quality                      | Placement of trash cans<br>scattered at various points  Trash can be divided into<br>three types (organic,<br>inorganic, and B3) | Only one type of trash can available (not differentiated)  |                        | standards;<br>Good;<br>Adequate |
| 6.Quality                    | Availability of a sink   | There are 9 sinks  | 7/10 x                 | Does not meet                   |
| of<br>Hygiene<br>and         | All sinks work fine Availability of lawn mowers  | Works fine There is one lawn mower available   | 100% = 70%             | some<br>standards;<br>Good;     |
| Safety<br>Facilities         | The lawn mower works fine Availability of CCTV   | Works fine There are 8 CCTV units available  |                        | Adequate                        |
|                              | All CCTVs works fine Availability of fire extinguishers  | Works fine Not available   |                        |                                 |
|                              | Availability of guard post building  | Not available  |                        |                                 |
|                              | Availability of white lighting   | Available  |                        |                                 |
|                              | There are lights every seven meters  | The installation distance between the lamps is irregular   |                        |                                 |
| 7.Quality<br>of Places<br>of | Availability of places of worship  | There is a mosque<br>named "Batu<br>Mahpar Mosque"   | 6/7 x 100%<br>= 85.71% | Does not meet some standards;   |
| Worship                      | The location of the mosque is easily accessible  | Easily accessible  |                        | Good;<br>Adequate               |
|                              | The minimum mosque capacity can accommodate 30 people  | The mosque can accommodate up to 40 people   |                        | -                               |
|                              | Availability of ventilation/AC   | There is ventilation<br>in the form of a<br>glass window<br>equipped with an<br>air gap                      |                        |                                 |
|                              | Availability of worship equipment  | Available, in the form of mukena,  |                        |                                 |

| Indicator | Standard                    | Condition in the field | Evaluation | Interpretation |
|-----------|-----------------------------|------------------------|------------|----------------|
|           |                             | sarong, and sejadah    |            |                |
|           | Availability of ablution    | Available              |            |                |
|           | places                      |                        |            |                |
|           | The ablution places for men | Not separated          |            |                |
|           | and women are separated     |                        |            |                |

Source: Ayu & Indrawati, 2020; Camilleri, 2018; Cavnar et al., 2004; Ginting & Sasmita, 2018; Regulation of the Minister of Tourism of the Republic of Indonesia Number 3 of 2018; Meo & Suryawan, 2018; Nadjih et al., 2020; Pop & Borza, 2014; Ramyar et al., 2020; Rozy & Koswara, 2017

There are four indicators in Table 9 which are supported by data from the questionnaire results, namely shopping facilities, seating, hygiene and security facilities, and places of worship. The following data is presented in Table 10.

**Table 10.** Visitor Ouestionnaire Results related to Indicators on Supporting Facilities

|  | Perce | entage      | of Re    | sponde   | ents     |       |                |
|--|-------|-------------|----------|----------|----------|-------|----------------|
| Statement  |       | Answers (%) |          |          |          |       | Interpretatio  |
| Statement  | STS   | st          | R        | S        | SS       | Means | n              |
|  | (1)   | (2)         | (3)      | (4)      | (5)      |       |                |
| 1.Kiosks that sell visitors' basic needs (such as toiletries, etc.) need to be available at Batu Mahpar. | 2,8   | 16,<br>8    | 25,<br>4 | 46.<br>5 | 8,5      | 3,41  | Agree          |
| 2. Souvenir/souvenir stalls need to be available at Batu Mahpar.   | 5,5   | 8,5         | 15.<br>5 | 42,<br>3 | 28,<br>2 | 3.79  | Agree          |
| 3. <i>Gazebo</i> /seating at Batu Mahpar is comfortable to use.  | 2,8   | 8,5         | 29.<br>5 | 47,<br>9 | 11,      | 3.56  | Good           |
| 4. Fire extinguishers (APAR) need to be available at Batu Mahpar.  | 4,2   | 2,8         | 21,<br>1 | 36,<br>6 | 35,<br>3 | 3.96  | Agree          |
| 5. Wudu facilities for men and women must be made separately.  | 1,4   | 1,4         | 8,5      | 31       | 57,<br>7 | 4,42  | Strongly agree |

Source: Results of Google Form and SPSS Data Processing, 2022

Based on Table 10, there are five statements related to indicators on the dimensions of supporting facilities. Statements 1 and 2 regarding shopping facilities yield mean values of 3.41 and 3.79, respectively. This means that, on average, visitors agree that shopping facilities in the form of visitor needs kiosks and souvenir kiosks need to be available at Batu Mahpar. Then, statement 3 produces a mean value of 3.56. That is, the average visitor considers *that the gazebo* /seating at Batu Mahpar is comfortable to use. Furthermore, statement 4 produces a mean value of 3.96. This means that the average visitor agrees that an APAR should be available at Batu Mahpar. Lastly, statement 5 produces a mean value of 4.42. This means that the average visitor strongly agrees that places for ablution for men and women need to be made separately.

The assessment of the seven indicators in Table 9 uses the formula in equation (2) and produces the *mean value* of the dimensions of the supporting facilities. The following is an

assessment of the quality dimensions of supporting facilities for the Batu Mahpar Geopark Recreation Park presented in Table 11.

**Table 11.** Dimensional Quality of Supporting Facilities

| Indicator                                | Percentage | Quality        |
|--|------------|----------------|
|  |            | Interpretation |
| Quality of dining                        | 80%        | Good           |
| Quality of shopping facilities           | 0%         | Not good       |
| Seat quality                             | 100%       | Good           |
| Quality of toilets                       | 66.67%     | Good           |
| Trash quality                            | 66.67%     | Good           |
| Quality of hygiene and safety facilities | 70%        | Good           |
| Quality of places of worship             | 85.71%     | Good           |
| Average (Mean)                           | 67.01%     | Good           |

Source: Compiler Data Processing Results, 2022

Based on Table 11, it is known that the average quality of physical assets in the dimensions of supporting facilities is 67.01 percent with the interpretation of "good". That is, the quality dimensions of the supporting facilities for the Batu Mahpar Geopark Recreation Park are good and adequate according to standards.

### 3.5 Infrastructure Quality Evaluation Results

Infrastructure is all the facilities that enable economic processes to run smoothly so as to make it easier for humans to meet their needs. Infrastructure that supports a tourist attraction will be an added value in addition to the superior natural potential that exists in the tourist attraction (Siregar et al., 2019). Infrastructure quality evaluation is carried out on four indicators including: roads, water networks, electricity networks and telecommunications networks (Isa, 2020; Marzuki et al., 2017). The assessment of the evaluation results uses the equation formula (1). The following results of the evaluation of indicators on the infrastructure dimension are presented in Table 12.

**Table 12.** Results of Evaluation of Indicators on the Infrastructure Dimension

| Indicator      | Standard   | Condition in the field         | Evaluation          | Interpretation                |
|----------------|--|--------------------------------|---------------------|-------------------------------|
| 1.Road Quality | Availability of a<br>highway to Batu<br>Mahpar   | Available                      | 3/8 x 100% = 37.50% | Does not meet some standards; |
|                | The minimum width of the road body is 7.5 meters |                                |                     | Enough;<br>Adequate           |
|                | Road conditions are smooth                       | Some of the roads are potholes |                     |                               |
|                | Availability of footpaths in Batu                | Available                      |                     |                               |

| Tu di 4            | CtondI                        | Condition                    | Evolvette            | Intomestation       |
|--------------------|-------------------------------|------------------------------|----------------------|---------------------|
| Indicator          | Standard                      | in the field                 | Evaluation           | Interpretation      |
|                    | Mahpar                        |                              |                      |                     |
|                    | The sloping walkway           | Some of the                  |                      |                     |
|                    | is equipped with              | sloping                      |                      |                     |
|                    | handrails on at least         | walkways do not              |                      |                     |
|                    | one side                      | have handrails               |                      |                     |
|                    | All walkways are free         | Some of the trail            |                      |                     |
|                    | of disturbing wild            | areas are                    |                      |                     |
|                    | plants                        | overgrown with               |                      |                     |
|                    | F1-4 1 f                      | wild plants                  |                      |                     |
|                    | Flat road surface             | Flat                         |                      |                     |
|                    | The entire surface of         | Part of the trail surface is |                      |                     |
|                    | the trail is not slippery     | surface is slippery          |                      |                     |
| 2.Network          | Availability of clean         | Available                    | 3/4 x 100% =         | Does not meet       |
| Water Quality      | water network                 | Available                    | 75%                  | some                |
| water Quality      | The construction of           | There is a trash             | 7370                 | standards;          |
|                    | water networks above          | can that is not              |                      | Good;               |
|                    | ground level pays             | closed, thereby              |                      | Adequate            |
|                    | attention to aesthetics       | reducing the                 |                      | 110040000           |
|                    |                               | aesthetic value              |                      |                     |
|                    | The quality of water          | Qualify                      |                      |                     |
|                    | for sanitary hygiene          | •                            |                      |                     |
|                    | purposes meets the            |                              |                      |                     |
|                    | requirements                  |                              |                      |                     |
|                    | Water quality for             | Qualify                      |                      |                     |
|                    | swimming pools meets          |                              |                      |                     |
|                    | the requirements              |                              |                      |                     |
| 3.Power Grid       | Availability of               | Available, the               | $3/3 \times 100\% =$ | Meet the            |
| Quality            | electricity network           | total capacity of            | 100%                 | standards;          |
|                    |                               | 13,000 watts                 |                      | Good;               |
|                    | Adequate power grid           | Adequate                     |                      | Adequate            |
|                    | Availability of cell          | Available                    |                      |                     |
| 4 TD 1             | phone charging points         | A '1 1 1                     | 2/2 1000/            | D. M.M.             |
| 4.Telecommuni      | Availability of               | Available                    | $2/3 \times 100\% =$ | Does Not Meet       |
| cations            | telecommunication             |                              | 66.67%               | Some                |
| Network<br>Quality | network The cell phone signal | Unstable                     |                      | Standards;<br>Good; |
| Quality            | quality is stable             | Olistable                    |                      | Adequate            |
|                    | Availability of               | Available, in the            |                      | Adequate            |
|                    | telecommunications            | form of wifi,                |                      |                     |
|                    | equipment                     | television and               |                      |                     |
|                    | - quipmont                    | handy talky                  |                      |                     |
|                    |                               | nanay iaiky                  |                      | l ·                 |

Sources: Cavnar et al., 2004; Regulation of the Government of Republic of Indonesia Number 34 of 2006; Regulation of the Director General of Forest Protection and Nature Conservation Number: P. 02/IV-SET/2012; Regulation of the Minister of Health of the Republic of Indonesia Number 32 of 2017; Regulation of the Minister of Tourism of the Republic of Indonesia Number 3 of 2018; Hasrianti & Nurasia, 2016; Jesus, 2020; Marzuki et al., 2017; Matulessy et al., 2020; Rieuwpassa et al., 2015; Rozy & Koswara, 2017

There are two indicators in Table 12 which are supported by data from the questionnaire results, namely roads and telecommunications networks. The following data is presented in Table 13.

 Table 13. Visitor Questionnaire Results related to Indicators on Infrastructure Dimensions

| Statement  |         | Percentage of Respondents<br>Answers (%) |          |          |        |      | Interpretatio |
|--|---------|--|----------|----------|--------|------|---------------|
| Statement  | STS (1) | st<br>(2)                                | R<br>(3) | S<br>(4) | SS (5) | S    | n             |
| 1.The highway leading to the Batu Mahpar location is of good quality/no holes. | 11,3    | 15.<br>5                                 | 45,<br>1 | 19,<br>6 | 8,5    | 2.99 | Enough        |
| 2.My cell phone signal quality is stable while in Batu Mahpar.                 | 16,9    | 26,<br>8                                 | 29,<br>6 | 16,<br>9 | 9,8    | 2.76 | Enough        |

Source: Results of Google Form and SPSS Data Processing, 2022

Based on Table 13, there is one statement each for the two indicators on the infrastructure dimension. Statement 1 regarding road indicators produces a mean value of 2.99. That is, the average visitor considers that the road leading to Batu Mahpar is of sufficient quality. Meanwhile, statement 2 regarding telecommunications network indicators produces a *mean value* of 2.76. That is, the average visitor assesses that their cell phone signal is of sufficient quality.

The assessment of the four indicators uses the formula equation (2) and produces the *mean value* of the infrastructure dimension. The following is an assessment of the quality of the infrastructure dimensions presented in Table 14.

 Table 14. Infrastructure Dimension Quality

| Indicator                          | Percentage | Quality        |
|------------------------------------|------------|----------------|
|                                    |            | Interpretation |
| Road quality                       | 37.50%     | Enough         |
| Network water quality              | 75%        | Good           |
| Network quality                    | 100%       | Good           |
| Telecommunications network quality | 66.67%     | Good           |
| Average (Mean)                     | 69.79%     | Good           |

Source: Compiler Data Processing Results, 2022

Based on Table 14, it is known that the average quality of physical assets in the infrastructure dimension is 69.79 percent with the interpretation of "good". This means that the overall quality of the infrastructure dimensions of the Batu Mahpar Geopark Recreation Park is good and adequate according to standards.

### 3.6 Results of Evaluation of the Quality of Physical Assets of Batu Mahpar

The quality of physical assets can be known from the average of the four dimensions based on observations and interviews according to the equation formula (3). The following is the quality of the physical assets of the Batu Mahpar presented in Table 15.

**Table 15.** *Interpretation of Physical Asset Quality of Batu Mahpar* 

| Dimensions            | Percentage | Interpretation |
|-----------------------|------------|----------------|
| tourist attractions   | 68.50%     | Good           |
| Accessibility         | 53.33%     | Enough         |
| Supporting facilities | 67.01%     | Good           |
| Infrastructure        | 69.79%     | Good           |
| PHYSICAL ASSET        | 64.66%     | Enough         |
| QUALITY               |            | · ·            |

Source: Compiler Data Processing Results, 2022

Based on Table 15, the average value of the quality of physical assets obtained is 64.66% with the interpretation of "enough". Thus, it can be concluded that the physical assets of the Batu Mahpar Geopark Recreation Park in Tasikmalaya Regency based on the dimensions of tourist attractions, accessibility, supporting facilities, and infrastructure are of sufficient quality according to standards.

As whole, the physical of Batu Mahpar geopark asset quality still need to be improved, especially the quality of the telecommunications network, water network, the quality of campsites, recreational facilities, parking lots, while the physical assets that need to be added are souvenir shops, cell phone networks, information center buildings, cleaning facilities, cleanliness and security.

The novelty of this research is that it uses dimensions and indicators from research by Gu et al (2022), Ginting and Sasmita (2018) and Marzuki (2017) in accordance with the standards of the Director General of Forest Protection and Nature Conservation Regulation Number: P. 02/ IV-SET/2012; Regulation of the Minister of Health of the Republic of Indonesia Number 32 of 2017; Regulation of the Minister of Tourism of the Republic of Indonesia Number 3 of 2018; Republic of Indonesia Government Regulation Number 34 of 2006; Presidential Regulation of the Republic of Indonesia Number 9 of 2019 concerning the Development of Earth Parks (Geoparks).

### 4. CONCLUSIONS

Based on the results and discussion above, the following are conclusions and research suggestions. Evaluation of the quality of the physical assets of the Batu Mahpar Geopark Recreation Park resulted in five conclusions. There are:

Evaluation of the quality of physical assets based on observation and interview techniques which were subsequently quantified showed the result that the quality of Batu Mahpar's physical assets was sufficient according to standards.

For the four indicators on the dimensions of tourist attractions, they are as follows: physical scenery is available and of good quality, campsites are available and of sufficient quality, educational facilities are available and of good quality, and recreational facilities are available and of sufficient quality.

For the four indicators on the accessibility dimension, they are as follows: the road transportation network has sufficient quality, parking lots are available, and the quality is sufficient, signs are available, and the quality is good, and the information center building is not yet available, so the quality is sufficient.

For the seven indicators on the dimensions of supporting facilities, namely as follows: places to eat are available and of good quality, shopping facilities are not yet available so the quality is not good, seats are available and the quality is good, toilets are available and the quality is good, trash cans are available and of good quality, hygiene and security facilities are not yet fully available, but the quality is good, and places of worship are available and of good quality.

The four indicators on the infrastructure dimension are as follows: roads and footpaths are available and of sufficient quality, water networks are available and of good quality, electricity networks are available and of good quality, and telecommunications networks are available and of good quality.

Based on the conclusions above, there are two suggestions put forward, including:

- 1. Preferably sixteen indicators of physical assets which include: campsites, educational facilities, recreational facilities, road transportation network, parking lots, signs, information centers, places to eat, shopping facilities, toilets, trash cans, hygiene and security facilities, places of worship, roads, water networks, and telecommunication networks to improve their quality to be even better so that all of them can be adequate according to standards.
- 2. The quality of physical Batu Mahpar tourism facilities can be improved even better through the development of facilities. Based on the diversity of types of attractions it has, the development of these facilities should apply relevant concepts, two alternatives of which are the *geopark concept* and the geotourism concept. Find out the strategies through the further research for improving physical assets of Batu Mahpar qualities.

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