

Evaluation of the Tourism Management CHSE Protocol During the Covid-19 Pandemic in the Situ Gunung, Gunung Gede Pangrango National Park

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Abstract

This study aims to evaluate the tourism management “Cleanliness, Health, Safety and Environmental Sustainability (CHSE)” protocol during the covid-19 pandemic in the Situ Gunung, Gunung Gede Pangrango National Park Area. The framework of the approach used in this research was phenomenology, which was then enriched with the data collection techniques of study documentation, observation, and close-ended questionnaire. The analytical method utilized was the One Score One Indicator Scoring System, an analysis model that was used through developing elaboration of questionnaires in collecting data and evaluating various variables that researchers had determined. Then, two critical issues were examined in the polarization analysis to understand the differentiation between actors, namely polarization of direction and rating scale, and then tested statistically using Kruskal Wallis test to know the polarization significance. Overall, based on the assessment of 189 CHSE indicators, the data shows that the implementation of CHSE in Situ Gunung GGPNP results in a reasonable conclusion or score of 6. When we view it based on stakeholder polarization, the data showed that there was no polarization of direction between stakeholders on CHSE management at Situ Gunung. Things are different when we view it in terms of average values, where the study resulted in a present of the polarization of each actor's attitude scale on the CHSE implementation assessment. The aggressive strategy is proposed by optimizing two crucial aspects: 1) strengthening CHSE management policies and implementation; 2) optimizing ecotourism carrying capacity.

Keyword: tourism management CHSE, destination tourism, covid-19, new normal tourism

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Introduction

Tourism is one of the sectors most affected by the covid-19 pandemic. Covid-19 significantly impacted the tourism economy, such as transportation and accommodations (Gossling et al., 2020). Globally, United Nations World Tourism Organization (UNWTO) estimated that international tourist arrivals could fall by 60% to 80% in 2020 (UNWTO, 2020a). In a worst-case scenario, this estimate could translate into a loss of USD 300 to USD 450 billion in global tourism exports, or almost equivalent to one-third of the USD 1.5 trillion earned globally. In Indonesia, the impact of covid-19 on the tourism sector can be seen from the channel of foreign tourist arrivals. Based on the Ministry of Tourism and Creative Economy (Kemenparekraf, 2020) records, foreign tourist arrivals to Indonesia through all entrances in March 2020 were only 470,898 foreign tourists. This number experienced a decline of minus 64.11% compared to the total number of visits in the same period of

the previous year (March 2019) of 1,311,911 foreign tourists. Therefore, governments in tourist destinations worldwide are planning a wide range of actions to accelerate the recovery of the tourism economy (Niewiadomski, 2020).

The Indonesian Government's policy response related to mitigation in the tourism sector was initially to ban travel to several tourist attractions or destinations (Borobudur Temple on March 20, 2020 and Bali on April 6, 2020). In addition, even domestic and international flights were closed, such as Bali's Ngurah Rai and Soekarno-Hatta Airports, on April 24, 2020. The closed airport was due to the decree of the Head of the National Disaster Management Agency Number 9A of 2020 concerning the determination of the status of a certain state of disaster emergency due to the covid-19 disease outbreak in Indonesia. In the context of tourism mitigation, the Government of Indonesia (Ministry of Tourism and Creative Economy) had at least issued a 3-stage soft regulation in managing tourism crisis mitigation. The 3

stages were the first "emergency response" stage (March–29 May, 2020), the "recovery" stage (June–December, 2020) and the "normalization" stage (January–December, 2021) (Kemenparekraf, 2020). These three stages must be adapted and implemented for each region (destination) in Indonesia, down to the village level (tourism village) or tourist attraction. Indonesia began to enter the recovery stage in 2020, or what we know as the "new normal" phase or adaptation to new habits. This new normal was marked by the issuance of the Decree of the Minister of Health of the Republic Indonesia Number HK.01.07/MENKES/382/2020 concerning health protocols for the public in public places and facilities in the context of preventing and controlling covid-19. The decree serves as a guideline for health protocols for every tourist attraction or destination in Indonesia. Boin and Hart (2010) stated that government agencies should work together effectively and sustainably to respond to crises within and across the public and private/community sectors.

One of the tourist destinations that was recovering in the new normal tourism era is the Situ Gunung tourist area in Gunung Gede Pangrango Nasional Park (GGPNP). The Situ Gunung area has been reopened since July 10, 2020, where large-scale social restrictions (PSBB) from the relevant government have gradually eased. Based on available information, the Head of Situ Gunung Resort, GGPNP said that around 10,391 visitors visited the tourist attraction on the suspension bridge area. This new development was undoubtedly a good milestone for tourism revival in the pandemic era, provided that integrated tourism mitigation management was implemented by strictly implementing health protocols at the site level. The recovery of outdoor tourist destinations in the pandemic era was significant considering that the current trend of domestic tourists prefers outdoor activities relatively close to their domicile. This fact is in line with Chebli (2020), who stated that covid-19 significantly affects changes in tourist behavior, including choosing close destinations. Tourists will prefer attractions that are not well known and away from crowds, care about health and hygiene, choose personal travel rather than groups, and travel insurance is essential. In a normative psychological context, this can be understood because of the boredom of everyone who experienced quarantine/self-isolation/working from home for months. Loanides and Gyimóthy (2020) stated, "the covid-19 crisis is an opportunity for escaping the unsustainable global tourism path."

Essentially, there needs to be a concerted effort to address the underlying demand shifts in post-pandemic tourism. UNWTO (2020b) in Cheng and Zetina (2021) emphasized the importance of understanding possible changes in consumer preferences and behavior post-crisis. This post-pandemic tourism needs to be addressed by all tourism stakeholders by innovating to revive tourism in the future. It is essential considering the high motivation of domestic tourists to do nature recreation in the country. Sudjana et al. (2021) revealed that domestic destinations would dominate tourist interest in traveling after the covid-19 pandemic. The most popular types of tourism are marine tourism, mountain

nature tourism, and culinary tourism. For this reason, this study will evaluate tourism Cleanliness, Health, Safety, and Environmental Sustainability (CHSE) protocol during the covid-19 pandemic in the Situ Gunung area of GGPNP. In general, CHSE certification is the process of granting certificates to tourism businesses, other related businesses/facilities, the community environment, and tourism destinations. This certification guarantees the public that the products and services provided are following CHSE protocol standards.

Methods

Time and research location The study was conducted from December 2020 to May 2021 in Situ Gunung, GGPNP, administrative region of Sukabumi Region, West Java Province. The primary thing considered in choosing Situ Gunung GGPNP as the study area was based on the latest data that informed this area was a conservation area with the highest number of tourist visits in the covid-19 pandemic era.

Research approach, research instrument, and sampling technique

The framework of the approach used was phenomenology, in which researchers described phenomena that occurred in the field based on researchers' experience and cognitive understanding (Altinay & Paraskevas, 2008). While the data collection techniques used were: 1) study documentation, 2) observation; 3) questionnaire instrument (close-ended questionnaire). Questionnaire statement items were prepared based on the CHSE guidelines for tourist attractions published by the Ministry of Tourism and Creative Economy (Kemenparekraf, 2020). CHSE certification is applied to Situ Gunung GGPNP (tourism destinations) and other tourism products to provide peace of mind and assurance to tourists related to the implementation of cleanliness, health, safety, and environmental sustainability, conducted by the authorities.

The research instrument used was a closed questionnaire (close-ended questionnaire) with a Likert scale guide range of 17 scale (modification of the 15 Likert scale) (Avenzora, 2008). Data obtained from the questionnaire instrument was then analyzed using the one score one indicator scoring system method, an analysis model utilized through the development of questionnaire elaboration in collecting data and evaluating various variables that had been determined by researchers (Avenzora, 2008).

The sampling technique used in the study was random sampling. Anyone who incidentally met the researcher could be used as a sample if the person was suitable as a source of data (Sugiyono, 2012). Roscoe (1982) in Sugiyono (2012) stated that if the sample is divided into categories, then the number of sample members in each category is at least 30 respondents, so the total respondents taken were 90 respondents (30 communities, 30 tourism managers of Situ Gunung GGPNP and 30 tourists).

Analysis method Qualitative data was processed and presented in a tabulated descriptive manner, while quantitative data was processed using basic descriptive statistical techniques in a frequency distribution. Frequency

distribution indicated the number and percentage of respondents and the object of the study included in the existing category to provide initial information about the respondent or entity of study. Thus, frequency distribution could be calculated based on the arithmetic mean or mode. The analysis of the one score one indicator scoring system, an analysis model, were used through the development of a series of questionnaire elaborating on collecting data and evaluating various variables that researchers determined (Avenzora, 2008; Avenzora et al., 2013). This method was utilized to minimize subjectivity and simplify the various components of statements and questions arranged in a questionnaire. Then it was analyzed using a descriptive quantitative method as material for consideration to achieve optimum results.

Two critical issues were examined in the analysis of polarization to understand the differentiation between actors, namely polarization of direction and rating scale. Direction polarization occurred when scores among actors were divided into two dimensions: scores below 4 (3, 2, and 1) and

scores above 4 (5, 6, and 7). In contrast, rating scale polarization occurred when there was absolute score differentiation even though it was in the same dimension (Rachmatullah, 2017).

Results and Discussion

Overall, based on the assessment of 29 CHSE indicators (general guidelines) and 160 CHSE indicators (specific guidelines), the data shows that the implementation results of CHSE in Situ Gunung GGPNP were good or were in the score dimension of 6. It also indicated that all social elements involved, GGPNP managers, PT Fontis Aquam Vivam (PT FAV) managers, communities around the area, and tourists, have collaborated well in implementing the CHSE program in the Situ Gunung GGPNP area. In addition, the strict periodic monitoring and evaluation were vital indicators the manager applied in implementing the CHSE protocol in each room and point of Situ Gunung (Table 1).

Table 1 Recapitulation of assessment and evaluation of CHSE management in Situ Gunung GGPNP

Aspects	Criteria	Indicator	Score	Kruskal Wallis	Means
CHSE general guidelines	CHSE general guidelines	29 indicators	6.0	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
CHSE special guidance in the entrance area	Manager's special guide	13 indicators	5.7	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
	Special visitor guide	6 indicators	5.6	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
	Employee specific guidelines and local guides	10 indicators	5.7	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
CHSE special guidance at destination counter area	Manager's special guide	17 indicators	5.8	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
	Special visitor guide	4 indicators	5.7	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
	Employee specific guidelines and local guides	11 indicators	5.8	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
CHSE special guidance in tourism organization areas	Manager's special guide	10 indicators	5.7	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
	Special visitor guide	7 indicators	5.7	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
	Employee specific guidelines and local guides	11 indicators	5.7	$H_0 (p\text{-value}=0.368 > \alpha=5\%)$	Good
CHSE special guidance on facilities & public areas	Manager's special guide	11 indicators	5.9	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
	Special visitor guide	4 indicators	5.8	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
	Employee specific guidelines and local guides	11 indicators	5.9	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
CHSE special guidance on exit areas	Manager's special guide	8 indicators	6.0	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
	Special visitor guide	6 indicators	5.9	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
	Employee specific guidelines and local guides	6 indicators	5.9	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
CHSE special guidance in office areas	Manager's special guide	7 indicators	6.0	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
	Employee specific guidelines and local guides	6 indicators	5.9	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
CHSE special guidelines in employee lounge areas	Manager's special guide	5 indicators	6.1	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
	Employee specific guidelines and local guides	7 indicators	6.0	$H_0 (p\text{-value}=1.000 > \alpha=5\%)$	Good
Total CHSE indicators general guidance and specific guidance		189 indicators	5.9	$H_0 (p\text{-value}=1.000 \text{ and } 0.368 > \alpha=5\%)$	Good

CHSE Management Evaluation (General Guidance)

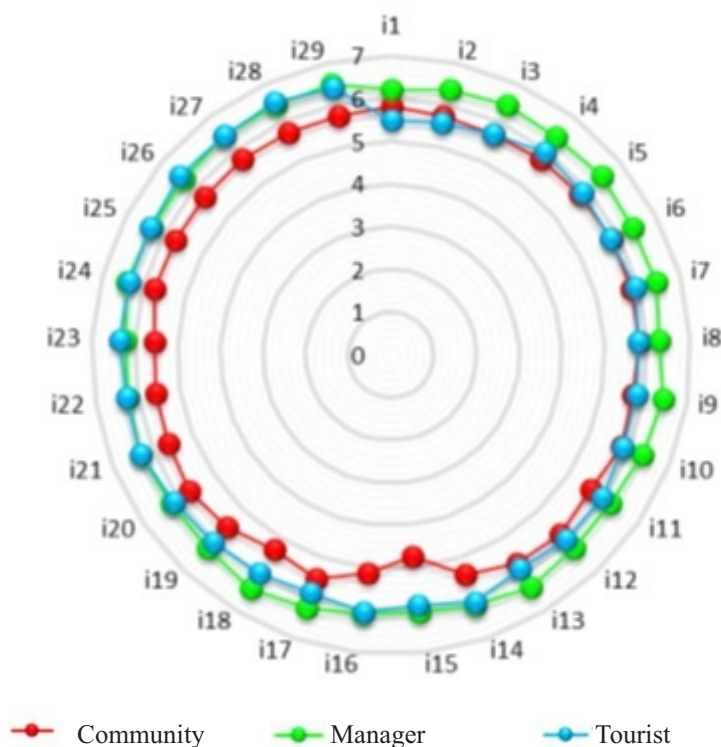


Figure 1 CHSE management evaluation (general guidance).

Description:

A. Attitude scale: 1 = very poor; 2 = poor; 3 = somewhat poor; 4 = moderate; 5 = somewhat good; 6 = good; 7 = very good.

B. Indicators: **i1)** update information and instructions of the Central Government and Local Government related to covid-19; **i2)** communicate CHSE SOPs to employees, visitors, local communities; **i3)** train employees, local tour guides, and/or local communities in implementing SOPs for tourism activities; **i4)** provide and post written appeals to implement health protocols; **i5)** provide hygiene and health equipment at tourist attractions; **i6)** use of masks/PPE by all parties (managers, tourists and local communities); **i7)** provide safety and security equipment and supplies; **i8)** conduct body temperature checks on each individual; temperatures $\geq 37.3^{\circ}\text{C}$ are allowed to enter the area; **i9)** ensure body temperature measuring devices are functioning properly and checked regularly; **i10)** provide written information to visitors about body temperature and health conditions of employees and local tour guides; **i11)** have a refund system/mechanism for visitors who are not allowed to enter for health and safety reasons for the prevention and handling of covid-19; **i12)** regulate the capacity of visitors to ensure that there are no crowds in and around the tourist attraction; **i13)** implement visit management in the form of visitor flow, regulation of the length of time of visit, and the number of people allowed according to the capacity and characteristics of the tourist attraction; **i14)** provide reservation services via telephone, social media, and other online media, as well as cashless payments to avoid crowds and physical contact; **i15)** provide online-based forms; **i16)** organizing tour packages with a limited number of participants; **i17)** tourism activities follow health protocols and CHSE guidelines; **i18)** organizing art performances, must follow health protocols and CHSE guidelines; **i19)** if tourist transportation is available, it is required to follow the applicable health protocols in the transportation mode (there is a temperature measuring device, hand sanitizer, good air circulation, clean vehicles and sprayed with disinfectant 3x a day); **i20)** establish and train a special team for handling health, safety, and security emergencies; **i21)** coordinate with the nearest health care facility for handling visitors, employees, and local tour guides who experience health problems;

B. Indicators (continued): **i22)** coordinate intensively with the Health Office, Regional Disaster Management Agency, Fire Department, local police, and Regional Covid-19 Task Force for handling emergencies; **i23)** in the event of a covid-19 case at the tourist attraction location, the manager coordinates with the Regional Covid-19 Task Force and local health service facilities to ensure risk management for the community and the surrounding environment according to health protocols, such as self-isolation, disinfection, and/or temporary closure; **i24)** provide health and/or accident insurance for visitors, especially for high-risk types of tourism activities; **i25)** ensure as much as possible the use of equipment and materials that are environmentally friendly so that they can be recycled, reduced, reused, and replaced; **i26)** ensure the utilization of water and energy sources, such as electricity and/or gas, in an efficient and healthy manner in order to maintain the balance and sustainability of the ecosystem; **27)** ensure the processing of garbage and liquid waste of tourist attractions is carried out thoroughly, healthily, and environmentally friendly; **i28)** ensure beautiful and comfortable conditions in the fish environment at tourist attraction locations naturally and/or using technical engineering; **i29)** monitoring and evaluating the application of guidelines and SOPs for the implementation of cleanliness, health, safety, and environmental sustainability at tourist attractions.

CHSE management evaluation (general guidance) In various indicators (Figure 1), the data showed no significant differences between actors in evaluating CHSE management (general guidelines) in the Situ Gunung GGPNP area as each actor gives a good attitude (score 6). The result was evident from the Kruskal-Wallis statistical ($p\text{-value} = 1.000 > \alpha = 5\%$), which means H_0 accepted or the average management aspects (CHSE general guidelines) between stakeholders were the same. This result can be interpreted as all CHSE management forms carried out by the GGPNP management party (a collaboration between Situ Gunung Resort GGPNP management and PT FAV) had been comprehensively understood and implemented by various actors; managers, communities, and tourists. In addition to the 28 indicators applied, there was a policy for the manager to implement restrictions on tourist visit quotas during the covid-19 pandemic. The visit restriction was implemented through the application of the maximum number of tourists as much as 50% of the usual before the pandemic period. In addition, the various indicators above were responses from the management in reacting to various policies of the Government of the Republic of Indonesia in mitigating the tourism crisis at the emergency response stage (Teguh, 2020). At least three stages of tourism crisis mitigation management were adjusted by the Ministry of Tourism and Creative Economy of the Republic of Indonesia from the World Tourism Organization-UNWTO standards. The three stages are the first "emergency response" stage (March–May 29, 2020), the "recovery" stage (June–December, 2020), and the "normalization" stage (January–December, 2021) (Kemenparekraf, 2020). These three stages must be adapted and implemented for each region (destination) in Indonesia, down to the village level (tourism village) or tourist attraction. Now, Indonesia itself has begun to enter the recovery stage or what we know as the "new normal" phase or adaptation to new habits, which is marked by the issuance of a decree (Ferdiansyah et al., 2020).

Meanwhile, for tourists, various health and hygiene protocol (CHSE) policies carried out by managers in the Situ Gunung GGPNP area can be said to be quite good, where there were at each central point of the destination hand washing facilities and hand sanitizers. Apart from that, every employee or manager (both GGPNP and PT FAV)

consistently wore personal protective equipment (PPE) and masks every working time. This practice was a form of awareness that needs to be appreciated in the context of tourism service in the new normal era. In the context of psychology, it should also be understood that tourists who travel to every destination in the pandemic era tend to be careful in every activity, where tourists were very concerned about aspects of safety, comfort, cleanliness, and hygiene. Thus, evolutionary psychology postulates that humans have inherited not only physiological characteristics, but also psychological mechanisms that manifest in various motives such as self-protection, disease avoidance, affiliation, status, mate acquisition, mate retention, and skin care (Griskevicius & Kenrick, 2013). Fenichel et al. (2013) found that tourists performed self-protective behaviors (such as voluntarily missing flights) during the 2009 swine flu epidemic, and empirically linked antecedents, such as perceived susceptibility to ebola, to travel avoidance (Cahyanto et al., 2016).

CHSE management evaluation (specific guidance). *Evaluation of CHSE management in the CHSE area in the entrance area* The study results showed that there was a differentiation in the attitude scale towards CHSE management in the Situ Gunung GGPNP entrance area, where the community and visitors gave a score of 5 (Figure 2). In contrast, the manager gave a score of 6. Although there were differences in attitude scales between actors, the Kruskal Wallis test showed no significant difference with the conclusion of accepting H_0 ($p\text{-value} = 1.000 > \alpha = 5\%$). The existing attitude scale differentiation can be interpreted as follows: 1) the community and tourists saw inconsistencies from the management in the implementation of the CHSE protocol in the entrance area, such as sterilization boxes that were not operated every day; 2) tourists also think that on certain days and conditions (weekends and holiday seasons) there was a fairly large density of visitors which caused physical/social distancing not to run optimally; 3) for the manager himself, the score of 6 with the good meaning given above can be interpreted that the various existing health protocol facilities were actually following the direction of the Ministry of Tourism and the Regional Covid-19 Task Force. However, in its implementation, the manager also realized

that it was not entirely perfect due to various limitations in coordination and health protocol equipment. Thus, the outcomes of the government's policy responsiveness to and information dissemination transparency about the covid-19 pandemic should reflect the government's performance (Wong & Lai, 2022). Residents perceive good governance might reduce negative emotions (Fong et al., 2020).

Evaluation of CHSE management in the destination counter area The existing data proved that there were differences in the attitude scale on CHSE management in the Situ Gunung GGNP destination counter area; visitors gave a score of 5 while the community and managers gave a score of 6 (Figure 2). Although there were differences in attitude scales between actors, the Kruskal Wallis test showed no significant difference with the conclusion of accepting H0 (p -value = 0.368 > α = 5%). This result indicated a form of evaluation awareness that tends to be comprehensive from tourists in seeing all forms of CHSE protocols implemented. This can be understood considering the wide mobilization of

tourists who, on certain occasions, had carried out tourist activities in other destinations so that their psychognitive in comparing various experiences exists. Meanwhile, managers and people who work at Situ Gunung destination thought that the various existing protocols were following the standard operating procedure where there were temperature checks, hand washing facilities, and hand sanitizers placed at the point of the destination counter area.

Based on the available data, it showed that all actors understand the same domain of thinking that various CHSE standards/procedures in the tourist counter area are essential and need consistency to be implemented by all parties. For example, the existence of sterilization booths in the counter area also needs to be operated every day; both on weekends and weekdays, regardless of the rotating schedule of the Regional Covid-19 Cluster Unit. This rotation means that, in this case, the management needs to allocate more budget consistently to providing various CHSE protocols at every point in the Situ Gunung area. Then another example that needs to be done consistently by the manager is to inform

CHSE Management Evaluation (Specific Guidance)

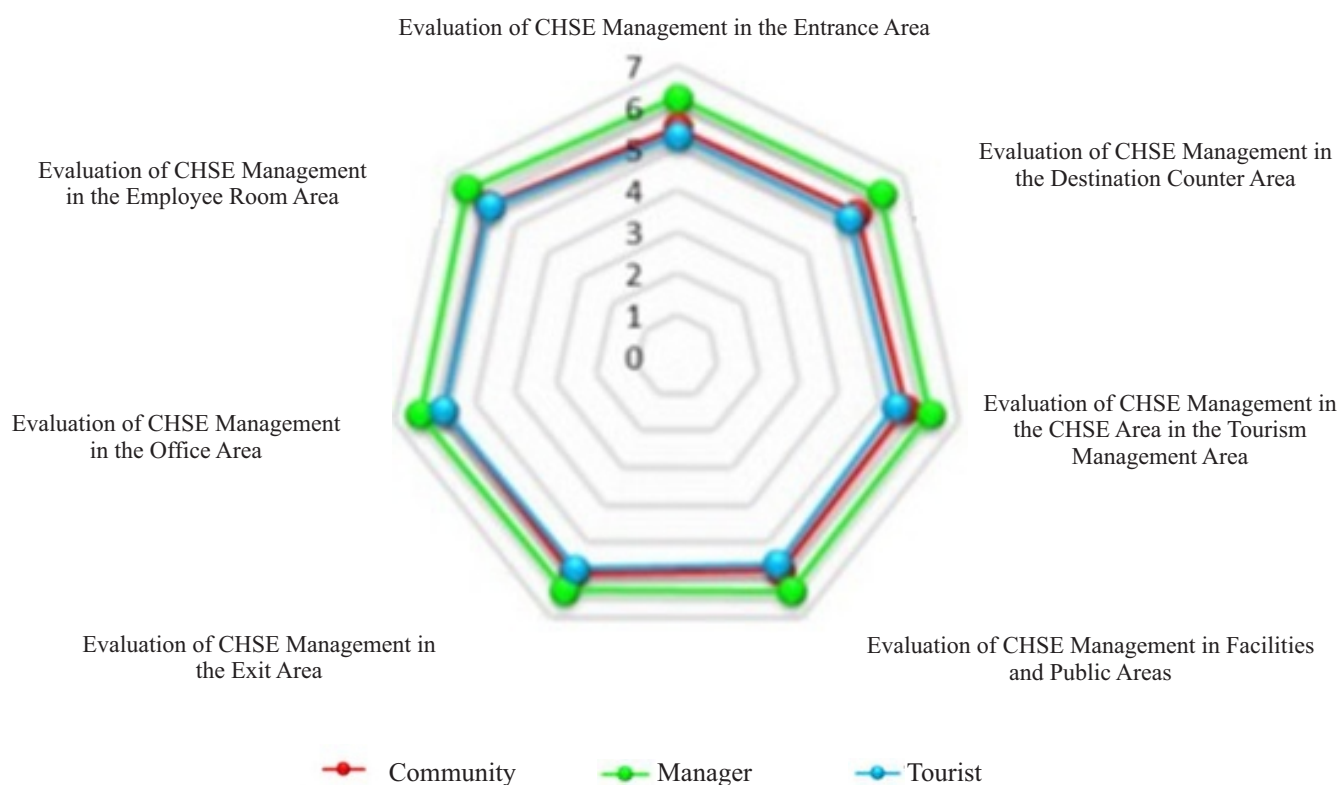


Figure 2 CHSE management evaluation (specific guidance).

Description:

Attitude scale: 1 = very poor; 2 = poor; 3 = somewhat poor; 4 = moderate; 5 = somewhat good; 6 = good; 7 = very good.

visitors about the standard of traveling in the destination when visitors have finished making transactions/reservations entering the Situ Gunung area. This information needs to be conveyed by the manager not only to the tour group but also to be transferred to independent visitors so that the CHSE concept is maintained properly and correctly. Safety is understood as the level of security felt by tourists when traveling and visiting a destination. Safety is subjective depending on the extent to which a person's perception of security is (Wang et al., 2019).

Evaluation of CHSE management in the CHSE area in the tourism management area The existing data proved that there were differences in the attitude scale on CHSE management in the Situ Gunung GGPNP tourism management area; visitors gave a score of 5 while the community and managers gave a score of 6 (Figure 2). Although there were differences in attitude scales between actors, the Kruskal Wallis test showed that there was no significant difference with the conclusion of accepting H_0 (p -value = 0.368 > α = 5%). This indicated similarities in the thinking of each actor about the importance of CHSE management, especially at the point of organizing tourism. It should be noted that the point of tourism is where tourists gather to enjoy every attraction. Tourist attraction in a tourist destination; in which the direct effect needs to be observed, has a high potential for violations of social distancing, as there is a standard policy from the relevant government to avoid and/or crowds. For the managers themselves, various instructions from the Covid-19 Task Force and based on the existing CHSE guideline forced them to prepare various facilities and equipment for covid-19 or CHSE protocols such as the placement of hand sanitizers and hand washing stations at certain points, the provision of trash bins every 100200 m on tourist routes and written appeals placed at certain points. However, these various existing facilities also need to be assisted by the placement of workers specifically assigned as the covid-19 protocol standby team to assist in disciplining each crowd of tourists or for other emergency tasks. This practice is important to increase the sense of security and comfort of visitors traveling to tourist destinations, ultimately leading to high visitor satisfaction.

Evaluation of CHSE management in facilities and public areas The existing data proves that there was no difference in the attitude scale between stakeholders on CHSE management in Situ Gunung GGPNP public facilities and areas; where all actors gave a score of 6 meaning good (Figure 2). This was also supported by the Kruskal Wallis test where the data showed there was no significant difference between actors; by producing a conclusion to accepting H_0 (p -value = 1.000 > α = 5%). This proved that there was satisfaction that tends to be good for each actor; especially tourists in traveling and utilizing various facilities and other public areas in the new normal era. In general, tourists see that various CHSE protocols in public facilities and areas have been implemented well by the management in the Situ

Gunung area. One fundamental note that needs to be optimized by the management is their consistency in informing the importance of CHSE management to every social element participating in the Situ Gunung tourism area. This is important considering that there are still some people selling in the area who are often found not wearing masks or other PPE. It would be better to communicate its hygiene protocols to consumers if they want their business to survive (Magnini & Zehrer, 2021).

Evaluation of CHSE management in the exit area The primary data above proved that there was no difference in the attitude scale between stakeholders on CHSE management in the exit area of Situ Gunung GGPNP, where all actors gave an assessment score of 6 (Figure 2), meaning good. This was also evidenced by the Kruskal Wallis test, where the data showed no significant difference between actors; by producing a conclusion to accept H_0 (p -value = 1.000 > α = 5%). This conclusion indicated that all actors realize there were anticipatory forms in maintaining the CHSE protocol in the exit area, aimed at tourists, managers, and local employees and guides. The tourist path at the Situ Gunung destination managed by PT FAV has three different paths even though it leads to the same exit. As for tourists, the most important thing in traveling in the pandemic era was that there are no crowds and queues at all points of tourist destinations, including at the destination exit point. For this reason, it is important to regulate tourism's rhythm and carrying capacity in the covid-19 pandemic era. Therefore all tourism development efforts must consider the analysis of the environmental supply and the environmental core capital according to the characteristics of each destination (Sharpley, 2009).

Evaluation of CHSE management in the office area Various data proved that there was no difference in the attitude scale between stakeholders on CHSE management in the Situ Gunung GGPNP office area, where both actors scored 6, meaning good (Figure 2). This result was also evidenced by the Kruskal Wallis test, where the data showed no significant difference between actors; by producing a conclusion to accept H_0 (p -value = 1.000 > α = 5%). For the manager himself, the main and secondary offices at each point of Situ Gunung have a vernacular building design with very open ventilation and do not use air conditioners. In supporting the CHSE protocol, the manager also placed hand washing stations accompanied by hand sanitizers in each primary and secondary office, both inside and outside the workspace.

Evaluation of CHSE management in the employee room area Various data proved (Figure 2) that there was no difference in the attitude scale between stakeholders on CHSE management in the Situ Gunung GGPNP employee room area, where both actors gave an assessment score of 6, meaning good. This was also evidenced by the Kruskal Wallis test, where the data showed no significant difference

between actors by producing a conclusion to accept H_0 (p -value = $1.000 > \alpha = 5\%$).

Strengthening CHSE management policy and implementation Political aspects and regional policies in the recovery of the tourism sector are crucial in the current pandemic and new normal tourism era. At least 20 regulations were issued by the central government in preventive efforts and recovery of the Indonesian tourism sector as well as regional and destination scales.

Vaccination of all GGPNP and PT FAV employees The management needs to order its employees to take part in vaccination without exception. The administration carries out this vaccination to prevent and suppress the transmission of the Coronavirus at tourist attraction sites and as support for the management of the government program. Vaccination of all Situ Gunung GGPNP and PT FAV employees is critical in the covid-19 pandemic and new normal tourism era, considering that workers are constantly dealing with different tourists every day. In addition to the vaccination program aimed at the management, this program also needs to be extended to people who are entrepreneurs in the Situ Gunung destination area. This needs to be done not only as a form of support for government programs but also, more importantly, as a form of anticipation of the spread of the covid-19 virus, where it is strongly suspected that there is always a surge in tourists at every long weekend and holiday.

Tightening the screening of tourist health documents In this case, tourists who will stay at tourist sites were required to show the results of the SWAB antigen test accompanied by a covid-19 vaccine card. Meanwhile, for tourists who did not stay overnight, the tourist needs to attach a covid-19 vaccine card which was strengthened by GeNose C19 screening. The advantage of using GeNose C19 is that the test results are fast and do not require reagents or other chemicals as in the rapid test examination. The cost of the Corona virus detection test using GeNose C19 was relatively cheap, which was around IDR15,000–IDR25,000. Taking a test sample in the form of a breath is considered much more convenient than sampling with the swab method. The efficacy of the GeNose C19 test has also been tested on 600 samples at Bhayangkara Hospital and Covid-19 Special Field Hospital Bambanglipuro Yogyakarta, which showed an accuracy rate of up to 97%.

Creating a health and safety protocol merchandise The manager provided a kind of merchandise of masks and hand sanitizers (30–60 mL) for each tourist at the time of ticket purchase. In the technical implementation, each ticket purchased by tourists can be increased by IDR5,000 for each tourist ticket package. For example, if the convention ticket price is IDR50,000 with a general tourist trekking route, the ticket price can be increased to IDR55,000 by getting the merchandise. The masks and hand sanitizers can be used as a micro-scale business managed by the management and the local community. This means that in the production process, local communities can be invited to produce masks (3-layer

fabric) and hand sanitizers that need to be tested for organoleptic and for viscosity tests to meet the quality of the Indonesian national standard (SNI). As an idea, perhaps turmeric leaf extract can be used to make hand sanitizer. The quality test results of turmeric leaf extract for hand sanitizer with various volume variations have good quality according to the SNI. Quantitative test results show the value obtained in the pH test is 4.5–6.0. The viscosity test with a value of 2,000–4,000 cPs and antibacterial tests showed a strong inhibition zone against *Escherichia coli* and *Staphylococcus aureus* bacteria. The best formulation on the quality of turmeric leaf extract for hand sanitizer based on all types of tests is the formulation, including formula 4 (15 mL), (10 mL), 2 (5 mL), and 1 (0 mL). The lowest quality turmeric leaf extract hand sanitizer is formulation 5 (20 mL). With the merchandise of masks and hand sanitizers for 1 tourist, at least it can strengthen CHSE management for each tourist.

Ecotourism carrying capacity optimization The application of carrying capacity in tourist destinations was a hot issue discussed by all academics, technocrats, regulators, and tourism entrepreneurs during the new normal of tourism. In August 2021, the Ministry of Home Affairs, the Ministry of Tourism and Creative Economy, and the Provincial Government and Regency/City Government issued a policy in the form of the capacity of hotels, restaurants, and tourist attractions being 50%. In the context of tourist destinations, it might be wise for the regulatory instructions to be re-examined; especially at the destination site scale space. Each site has different natural characteristics, including the destination area, the intensity of space use, ecological indicators and the number of tourists. Simon et al. (2004) explained that the ecological indicators considered are the condition of the site area, type and intensity of site use, noise level, water quality, and the number of tourists. Carrying capacity in tourism activities is site-specific and dynamic, influenced by the type and intensity of activities, the number and characteristics of users, time and time distribution, and the accompanying environmental conditions when the action occurs (Cooper et al., 1998; Pigram & Jenkins 1999; Seidl & Tisdell, 1999).

As for the mitigation of tourism destinations in the Situ Gunung GGPNP area, it is necessary to compile a study and implement the theory of ecotourism carrying capacity. Ecotourism carrying capacity can be interpreted as the ability of all elements of the natural and artificial environment on the site/ tourist destination to accommodate tourists (maximum number of tourists) without causing environmental and socio-cultural degradation. Inskip (1991) in Liu (1994) explained that the carrying capacity of ecotourism is the maximum number of people who can use the site without causing unacceptable physical changes to the environment and without causing further impacts on society, economy, and culture in the tourist area. Theoretically, academics and practitioners agree that the concept of ecotourism carrying capacity consists of 4 primary components, namely ecological or biophysical carrying capacity, carrying capacity of recreational facilities and management, socio-

cultural carrying capacity, and psychological carrying capacity.

In applying the carrying capacity of ecotourism in the Situ Gunung GGPNP area, managers must apply the idea of biophysical carrying capacity, carrying capacity of recreational facilities and management, and psychological carrying capacity. Ecological carrying capacity is used to limit the maximum level of use of the ecosystem in accommodating the number of users or types of activities carried out on the site before reducing unacceptable ecological values (Pigram & Jenkins, 1999; Simon et al., 2004). Ecological carrying capacity is influenced by natural factors (erosion, soil fertility, temperature, and rainfall), ecosystem fragility, environmental resilience, vegetation and wildlife species sensitivity, spatial use patterns, and adopted management. An amount of tourist visitation that is no longer ecologically acceptable can lead to disturbances such as soil degradation and disturbance of vegetation and wildlife habitats (Prato, 2009). Psychological carrying capacity is the maximum number of people the site can accommodate in terms of providing a quality tourist experience (Ceballos-Lascurain, 1996). Then in identifying the psychological carrying capacity, the manager in identifying factors: 1) several tourists; 2) length of stay; 3) characteristics of tourists; 4) spatial distribution; 5) type of activity; 6) accessibility within the site; 7) level of use and capacity of infrastructure (Nurazizah, 2014). Implementing ecotourism carrying capacity was applied by the manager at Situ Gunung GGPNP, the benefits achieved were gaining the complete trust of tourists to travel safely and comfortably and gaining appreciation from multiple parties (especially the government). It became a role model that consistently succeeds in implementing CHSE in the era of new normal tourism.

From some of the previous research, there has been no research related to the study of tourism crisis mitigation due to covid-19 facing the recovery phase or the new normal phase. The development of a mitigation system in a destination is significant to study because it becomes the responsibility of tourist destination managers to improve the excellent perception of tourists (Rittichainuwat et al., 2018) related to safety and comfort.

Conclusion

Overall, based on the assessment of 29 CHSE indicators (general guidelines) and 160 CHSE indicators (specific guidelines), the data showed that the implementation of CHSE in Situ Gunung GGPNP results in a reasonable conclusion or is in the score dimension 6. This result also indicated that all social elements involved, GGPNP managers, PT FAV managers, communities around the area, and tourists, had collaborated well in implementing the CHSE program in the Situ Gunung GGPNP area. In addition, the strict periodic monitoring and evaluation are vital indicators the manager applied in implementing the CHSE protocol in each room and point of Situ Gunung. Based on stakeholder polarization, the data showed there was no direction polarization between stakeholders on CHSE management at Situ Gunung. Things are different when

viewed in terms of average values, where the study results showed the polarization of each actor's attitude scale on the CHSE implementation assessment. Although there was a polarization of the attitude scale, it turns out that the Kruskal-Wallis test proved that there was no significant difference between actors. The differentiation of the attitude scale lies in the intuition of tourists who see the need for consistency in the application of CHSE at all points, as well as discipline for the management (staff) and local entrepreneurs around the area to continue implementing the 5 M movement and CHSE in general. The strategy can be interpreted by optimizing two critical aspects, namely: 1) strengthening CHSE management policy and implementation; 2) ecotourism carrying capacity optimization.

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