ISSN: 2456-4559 www.ijbmm.com

Priority Area-Based Tourism Management Model in Sleman Regency, Yogyakarta, Indonesia

Ani Wijayanti¹, Wisnu Setiawan², Perwira Putra Aghni³, Satya Anindita⁴ Edy Suharyono⁵

Universitas Bina Sarana Informatika, Jakarta, Indonesia
Universitas Muhammadiyah Surakarta, Indonesia

3,4 Universitas Gadjah Mada, Yogyakarta, Indonesia

Sekolah Tinggi Pariwisata Ambarrukmo, Yogyakarta, Indonesia
Correspondance author: ani.awi@bsi.ac.id*

Abstract: Priority area-based tourism development is one of the strategic steps to increase tourist interest. Priority areas are divided into several strategic areas that describe tourism areas with certain characteristics as a benchmark for implementing sustainable tourism management. The research aims to formulate a tourism management model in priority areas in Sleman Regency through strategic area mapping as a reference in formulating tourism management recommendations based on regional characteristics. The research used a descriptive quantitative approach with two data analysis techniques: a point rating system and reduction. The research resulted in two strategic areas, coded A2 and B1. Strategic area A2 scores 106.66 in the Turi, Cangkringan and Pakem sub-districts. Strategic area B1 has a score of 112.66 and is located in Prambanan and Kalasan sub-districts. Strategic areas A2 and B1 have different characteristics. Strategic Area A2 is rural and education-based, while Area B2 is heritage-based. Strategic area-based tourism development recommendations are formulated based on the four pillars of tourism development: destination, marketing, industry, and institutions.

Keywords - Strategic Area, Thematic, Mapping, Area Characteristics.

I. INTRODUCTION

Tourism development strategies based on regional mapping are very effective because they can promote tourism through visual information to identify and find the area's best attractions [1]. Implementing tourism mapping can produce accurate, reliable maps as the latest geographic reference [2]. Tourism mapping encourages tourism development with an approach to regional characteristics. The development of tourism areas with a distinctive approach has a different emphasis, including; agro-tourism development [3], batik tourism development [4], accessibility improvement, and local economic development through creative industries [5]. Area-based tourism development can be done with the Honey Pot approach, namely, the development of an area by grouping facilities and activities based on carrying capacity. The concept of honey pot development generally needs to pay more attention to administrative boundaries, in contrast to cluster development (local area) which sets clear tourism area boundaries [6]. Honey pots can be implemented by involving several aspects, namely, types and characteristics of tourist attractions, directions and ways of achieving travel, time efficiency, and geographical distribution of tourist attractions. The honey pot concept has several functions in tourism development, namely, strengthening regional identity, referencing building regional capacity, increasing the value of uniqueness between regions, avoiding utilization conflicts, and increasing site carrying capacity [6].

Tourism area mapping provides accurate information on the characteristics of tourist destinations. Characteristics of tourist destinations can be analyzed using spatial Geographic Information System (GIS) methods, such as proximity index, density estimation, exploration of natural conditions, urban infrastructure, social and economic development, and distribution of regional tourism resources [7]. Spatial characteristics of tourist attractions can be analyzed using spatial geostatistics, including certain abstract features that can be quantified [8]. The characteristics and density of tourist attractions are closely related to the spatial structure that affects the spatial behaviour of tourists and the realization of economic benefits [9], and impacts regional tourism planning and development strategies.

The development of tourism areas must integrate strategies and participation of local communities by offering local solutions for the development of distinctive regional potential [10]. The success of tourism development involves several interrelated aspects and has a significant role, namely the Role of organizational innovation, knowledge management, organizational learning, and transformational leadership [11]. An effective governance structure in development involves local stakeholders in planning, implementing, and monitoring the strategies developed [12]. Stakeholders in tourism development are grouped into two, namely: main stakeholders, including those who receive positive or negative impacts that have a strong influence on the continuity of the program, and supporting stakeholders, namely intermediaries who assist the process of organizing activities as funders, executors, supervisors, and advocacy organizations such as government organizations, NGOs, and the private sector [13].

The tourism sector can encourage the growth of agri-food products as gastronomic resources that allow rural tourism to promote and commercialize quality products. Tourism is essential for development and economic growth by preventing depopulation and economic stagnation in remote area [14]. Tourism is a strategic pillar of economic growth in various countries to realize urbanization and improvement of local communities [15]. Tourism is a very important sector in developing regional competitiveness [16], and promoting regional economic development and employment due to technological change and population movement to more developed areas [17].

Sleman Regency is one of the regencies in the Special Region of Yogyakarta that has tourism potential to attract tourists. The tourism potential offered in Sleman Regency is grouped into five categories: nature tourism, temples, museums, events, and tourist villages. The characteristics of tourism in Sleman Regency are dominated by tourism villages that offer rural nature tourism [18].

The sustainability of tourism is largely determined by the level of tourist visits as a driver of the community's economy. The level of tourist visits in Sleman Regency in 2022 was 7,171,071 consisting of 65,302 foreign tourists and 7,105,769 domestic tourists [19]. The number of tourist visits has decreased significantly compared to 2019 or before the pandemic, which amounted to 10,378,118, consisting of 233,014 foreign tourists and 10,145,104 domestic tourists [20]. The drastic decrease in tourist visits was caused by the Covid pandemic, which occurred at the beginning of 2020, so an appropriate management strategy is needed after the pandemic.

The Sleman Regency Regional Government has made various efforts to increase the number of tourist visits after the pandemic, including organizing cultural, natural and sports-based events. Events can motivate tourism development as a form of marketing tourist destinations. Events that are held can increase the competitiveness of a tourist destination [21]. Many events are held in Sleman Regency, such as cultural events. Sleman Regency has the most cultural heritage sites compared to other regencies in the Special Region of Yogyakarta, namely 181 archaeological sites [22]. Cultural tourism has become one of the international tourism destinations, reaching 39% of other types of tourism activities [23]. Events organized by Sleman Regency after the Covid -19 pandemic have yet to be able to attract tourists optimally, so the quantity and quality need to be increased.

In addition to the number of tourist visits, the length of stay of tourists is one of the targets of tourist destination management. Based on BPS data, the length of stay of tourists in Sleman Regency is still relatively low or below two days, which is in the range of 1.5-1.7 days [19]. Tourists with a high length of stay are expected to be able to improve the welfare of the local community through tourist spending [24]. Tourist spending or spending during tourism activities includes accommodation, performance venues, culinary, transportation, sightseeing packages, souvenirs, and supermarkets. The length of stay of tourists can be increased through the diversity of tour packages that can keep tourists staying longer. However, the variety of tourist activities offered has not been able to increase the length of stay of tourists after the Covid pandemic.

In general, tourism destination development strategies in the Special Region of Yogyakarta can be implemented in several ways, including; maximizing tourism markets and potential with sustainable principles from environmental, socio-cultural and economic aspects, designing tourism marketing to increase tourist visits, developing a competitive tourism industry and creative economy, and developing effective and efficient organizations, human resources, regulations and operational mechanisms [25]. Priority area-based tourism development in Sleman Regency is one of the strategic steps in tourism management. Priority areas are divided into several strategic areas that describe tourism areas with certain characteristics. Differences in regional characteristics become the benchmark for implementing the right tourism development strategy in Sleman Regency.

In 2015 Sleman Regency mapped tourism areas, especially tourist villages. The mapping used ArcGIS 10.1 software to create a map of tourist village locations [26]. The mapping conducted in 2015 requires updating by data developments to determine priority areas for tourism development.

Previous research related to tourism development focuses on several aspects, namely, sustainable new product innovation [27], product involvement and other interrelated aspects [28], new tourist objects [29], development priorities [30], spatial-based development [31], characteristic-based development [3], development with a honey pot approach [6], experience-based development [32], and agriculture-based development [33]. The previous research partially focuses on one or more aspects and has yet to explore the tourism area comprehensively. This research examines priority area-based tourism development by considering regional boundaries and characteristics involving various aspects of tourism development.

This research aims to formulate a tourism development model based on priority areas in Sleman Regency. The formulation of the model is done through three stages. First, mapping the strategic areas of priority areas based on the Decree of the Governor of the Special Region of Yogyakarta Number 193/KEP/2017 on the Strategic Policy for Tourism Development and Development of the Special Region of Yogyakarta Year 2018-2025, the priority areas in Sleman Regency include; Merapi Slope Area and Prambanan - Ratu Boko Area. Second, identify tourism potential in strategic areas. Third, formulate tourism development recommendations based on the characteristics of strategic areas. Development recommendations are expected to guide strategic tourism development after the co-19 pandemic in Sleman Regency.

II. Research Method

This research uses a descriptive quantitative approach to describe priority area-based tourism in Sleman Regency objectively and systematically using factual data in the form of numbers and information analyzed by mixed methods [34]. Primary data were collected using survey techniques through questionnaires, interviews, and field observations. The questionnaires and interviews were conducted through a focus group discussion at the Sleman Tourism Office on December 21, 2022, attended by interested parties in determining the delineation of strategic areas, namely the Sleman Tourism Office, the Sleman Spatial Planning Office, and the Sleman BAPPEDA. The delineation of strategic areas was depicted as a map using the overlay technique. The questionnaire was formulated using the ten attributes (10A) reference as an indicator of measuring the success of tourist destination development that accommodates most of the important aspects in tourism development, including; awareness, attractiveness, availability, access, appearance, activities, assurance, appreciation, action, and accountability [35]. Weighting is done on each element with a value, with a rating scale of 1 to 4 for each criterion. The number of indicators in the questionnaire is 31, so the highest score is 4 x 31 = 124 (representing strategic areas), while the lowest score is 1 x 23 = 31 (representing non-strategic areas). The score interval is obtained by multiplying 31 (the number of questionnaire statement items) by four scales divided by 4, obtaining an interval of 31. Then the ranking categories of the interval are determined as follows; 0 - 31 = Not Strategic; 32 - 62 = Less Strategic; 63 - 93 = Moderately Strategic; and 94 - 124 = Strategic.

The area-based tourism development model was conducted through three stages: determining strategic areas, identifying tourism potential, and formulating tourism development recommendations based on the characteristics of strategic areas in the Sleman Regency. The research flow chart is presented in Figure 1.

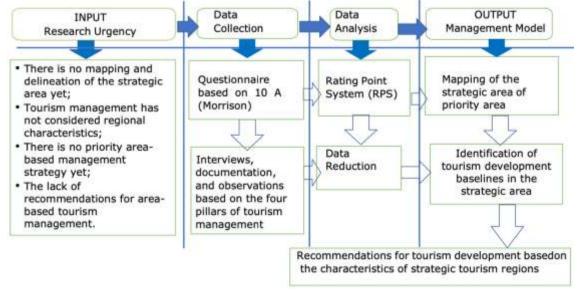


Figure 1. Flowchart of Tourism Management Based on Priority Areas

Source: Researcher (2022).

III. Result and Discussion

Sleman Regency is located in the Special Region of Yogyakarta Province, Indonesia, with the centre of government in Sleman District, which is on the main route between Yogyakarta and Semarang. Sleman Regency covers an area of 574.82 km2 or 18% of the province and has 17 sub-districts with diverse tourism potential according to the characteristics of the sub-districts. The topography of the northern part is mountainous, with Mount Merapi's peak on the Central Java border. Mount Merapi is the most dangerous active volcano but is a leading tourist destination many domestic and foreign tourists visit. Based on statistical data in 2023, the number of tourist visits in Cangkringan and Pakem, the tourist areas of Mount Merapi, reached the highest number, namely 1,205,248 tourists in Cangkringan and 1,536,821 tourists in Pakem [19].

3.1. Mapping of Strategic Areas in Sleman Regency

The mapping of tourism areas in Sleman Regency is one of the drivers of successful area-based tourism management and a reference for the level of stakeholder involvement in tourism development in Sleman Regency [12]. Strategic area mapping was conducted through a survey and analyzed using the Point Rating System (PRS) technique. Strategic area mapping is presented as a map made through an overlay process. Strategic areas are determined from priority areas following the Decree of the Governor of the Special Region of Yogyakarta No. 193/KEP/2017 on the Strategic Policy for the Development and Development of Tourism in the Special Region of Yogyakarta for 2018-2025, which includes the Merapi Slope Area and the Prambanan - Ratu Boko Area. The Merapi Slopes priority area is mapped into four areas in five sub-districts: Cangkringan, Pakem, Turi, Ngemplak, and Ngaglik, hereafter coded A1 to A4. The Prambanan-Ratu Boko priority area is mapped into four areas located in three sub-districts: Prambanan, Kalasan, and Berbah, then coded B1 to B4, as presented in Figure 2.



Figure 2. Map of Priority Areas in Sleman RegencySource: Decree of the Governor of Yogyakarta Special Region (2017)

Figure 2 shows that the priority areas are mapped into eight areas, namely A1, A2, A3, A4, B1, B2, B3, and B4, which have two strategic areas for tourism development, namely A2 and B1. The strategic tourism areas determined through the survey and delineated by the overlay technique can be seen in Table 1.

Table 1. Questionnaire Data for Tourism Strategic Area Determination

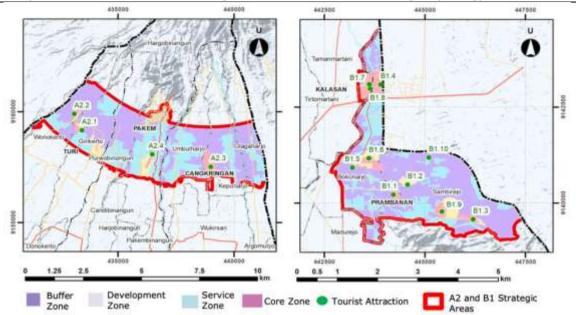
No	Criteria	Indicator/Sub criteria/Aspect			Priority Areas						
	Criteria	Assessment		A1 A2	A2	A3	A4	B1	B2	В3	B4
1	Awareness	1	Potential travelers' awareness of								
			tourist destinations	10	12	9	9	12	9	9	9
2	Attractive-	2	The uniqueness of tourist destinations	10	11	10	9	11	10	10	10
	Ness	3	Diversity of tourist destinations	7	11	10	10	11	8	10	10
3	Availability	4	Ease of ordering	9	10	10	9	12	11	10	9
		5	Cleaning services and facilities	9	11	10	11	12	8	11	10
		6	Information and ticketing services	9	11	9	10	12	9	8	9
		7	Availability of health services	9	9	10	8	10	10	7	6
		8	Availability of security services	8	10	8	9	10	8	10	9
		9	Availability of culinary facilities	8	11	10	11	12	8	8	9
		10	Availability of lodging	9	9	9	9	10	9	8	8
		11	Availability of souvenir sales	8	10	10	8	11	8	7	6
4	Accessibility	12	Travel time from the nearest airport	8	8	9	9	10	10	9	9
		13	Road Access to Destination	9	11	10	8	12	10	10	9
		14	Road Access within the Destination	10	10	10	10	12	10	10	9
		15	Connectivity between attractions	9	10	10	10	11	10	10	10
5	Appearance	16	Tourist impressions during the trip	9	11	10	9	11	8	7	8
6	Activities	17	Diversity of tourism activities	9	11	10	11	11	10	7	8
7	Assurance	18	Disaster mitigation	11	11	9	9	12	11	9	6
8	Appreciation	19	Friendliness and tourist services	9	10	7	8	10	9	10	7
9	Action	20	Short, medium, and long-term								
			programs	8	10	7	8	10	9	10	7
		21	Online and offline marketing								
			programs	10	10	7	8	10	9	10	7
		22	Cooperation with stakeholders	9	11	8	8	10	9	8	7
		23	Conservation program	10	10	7	8	10	10	10	7
		24	Human resource quality improvement	9	10	10	8	9	8	8	8
		25	Tourism policy	9	11	10	10	11	9	9	7
		26	Community empowerment	9	10	10	9	10	8	8	10
		27	Spatial-based development	8	11	8	9	11	8	11	11
10	Accounta-	28	Economic value in the form of								
	bility		income	8	10	8	9	12	9	9	8
	_	29	Duration of tourist visit	9	9	10	8	9	8	8	6
		30	Number of domestic tourists	10	10	9	8	12	8	8	9
		31	Number of foreign tourists	9	11	7	9	12	9	8	8
Total Strategic Level Assessment Score					320	281	279	338	280	277	256
Average Strategic Level Sub-Assessment Score					106,6			112,6			
	_ 3			92,66	6	93,66	93	6	93,33	92,33	85,33

Source: Researcher (2022).

Based on Table 1, there are two strategic tourism areas in Sleman Regency which are seen from the highest scores in strategic areas A and B, as follows;

- 1. Strategic area A2 with a score of 106.66. Strategic area A2 is part of the Lereng Merapi priority area, which includes three sub-districts: Turi, Cangkringan, and Pakem.
- 2. Strategic area B1 with a score of 112.66. Strategic area B1 is part of the Prambanan-Ratu Boko priority area, which covers two sub-districts, Prambanan and Kalasan.

Maps of strategic tourism areas A2 and B1 and the distribution of tourist destinations are presented in Figure 3 and Table 2.



 $Figure \ 3. \ Distribution \ map \ of \ Tourism \ destinations \ in \ Strategic \ Areas$

Source: Researcher (2022)

Strategic areas A2 and B1 have a destination distribution with different characteristics, as presented in Table 2.

Table 2. Distribution Data of Tourism Destinations in Strategic Areas A2 and B1

Code	Code Featured Attractions		Tourist Destinations in Strategic Areas		Kecamatan	
A2	Merapi Museum	A2.1	CBT of Nganggring	Rural	Turi	
		A2.2	CBT of Tunggularum		Turi	
		A2.3	Merapi Golf	Education	Cangkringan	
		A2.4	Merapi Museum		Pakem	
B1	Prambanan TempleRatu Boko Site	B1.1	Banyunibo Temple	Cultural Heritage	Prambanan	
	Breksi Cliff	B1.2	Barong Temple		Prambanan	
		B1.3	Ijo Temple		Prambanan	
		B1.4	Prambanan Temple		Prambanan	
		B1.5	CBT of Plempoh		Prambanan	
		B1.6	Ratu Boko Palace		Prambanan	
		B1.7	Ramayana Ballet		Kalasan	
		B1.8	Trimurti Art Building		Kalasan	
		B1.9	Breksi Cliff	Geo Heritage	Prambanan	
		B1.10	Riyadi Spot	Photography	Prambanan	

Source: Reseacher (2022)

Identification of Tourism Potential Based on Strategic Areas in Sleman Regency

Identifying tourism potential in strategic areas is carried out to analyze the potential and characteristics of areas closely related to the spatial structureruang [9]. The identification is carried out to formulate recommendations for the direction and development of tourism based on the characteristics of strategic areas in Sleman Regency.

3.1.1. Identification of Potential of Strategic Area A2 in Merapi Slope Priority Area

Tourism strategic area A2 is located in three sub-districts: Turi, Cangkringan, and Pakem. Strategic area A2 has two characteristics, namely rural tourism and education.

- 1. Rural-based tourism is developed in Nganggring village and Tunggularum village. The Merapi Slope area has hill and mountain topography, a beautiful rural atmosphere, and agricultural potential. Community participation in the Merapi Slopes tourism area measures the success of rural-based tourism management in developing the distinctiveness of tourism potential. The tourism sector is a tool to accelerate the development of agricultural potential in Sleman Regency.
- 2. Education-based tourism is focused on Merapi Museum and Merapi Golf. Merapi Museum presents various collections that are a track record of the activity of Mount Merapi. Merapi Museum is a vehicle to learn how to form volcanoes until the eruption. Merapi Golf offers spots with natural forest nuances and beautiful views of Mount Merapi. The tourist destination offers educational tours for tourists.

The tourism attraction of strategic area A2 consists of rural and educational tourism with a Dinopark vehicle. The Merapi Slopes area is a plateau with cold, cool air and suitable for family tourism. Road access to strategic area A2 is quite adequate and easily accessible by tourists. Facilities and infrastructure available in the Merapi Slopes area include; accommodation, restaurants, toilets, parking lots, prayer rooms, gazebos, merchandise shops, cafes, mini markets, wifi, wheelchairs, large fields, multipurpose buildings, homestays, learning areas, gamelan, and viewing posts.

Some aspects that need to be improved based on existing conditions in strategic area A2 include; facilities and infrastructure, marketing, institutions, and other aspects. The available facilities and infrastructure are still considered inadequate, both in quantity and quality, including; toilets are still minimal and less clean, accommodation, mini markets, restaurants, and merchandise stores still very limited, disabled facilities are not yet adequate, exhibitions in museums are less well maintained, free wifi capacity is limited, lighting and sound systems are still lacking, play facilities are not yet adequate. Payment facilities such as ATMs still need to be increased. The marketing program still needs to be improved through the use of social media, the distribution of vehicle brochures, and collaboration with related stakeholders [25]. Based on the survey results, most tourists get information on tourist destinations from other people rather than from social media. This fact shows that digital marketing efforts are still relatively limited. Tourism institutions must be improved through vision-mission alignment, mentoring and training, and increasing understanding of tourism villages to the community [36]. Several other aspects need to be improved based on input from respondents, including increased conservation, differentiation of tourist attractions, organizing regular events, adding animal species to the mini zoo, and making outbound.

3.1.2. Identification of Potential of Strategic Area B1 in the Prambanan-Ratu Boko Priority Area

Strategic tourism area B1 is located in Prambanan and Kalasan sub-districts. Strategic area B1 has the main characteristics of heritage tourism.

- 1. Cultural Heritage Tourism is focused on Banyunibo Temple, Barong Temple, Ijo Temple, Prambanan Temple, Plempoh Tourism Village, Ratu Boko Palace, Ramayana Ballet, and Trimurti Arts Building. The temple is a cultural heritage as an acculturation of Indian and Indonesian culture, a protected cultural heritage. Prambanan Temple is Indonesia's largest Hindu temple complex.
- 2. Geo Heritage Tourism is developed in the tourist destination of Tebing Breksi. Tebing Breksi is a geological heritage site formed from mining land with scientific, educational, cultural, and aesthetic values

Tourist destinations in strategic area B1 have a relatively close interconnection of tourist destinations between temples, making it easier for tourist mobility. In addition, strategic area B1 also offers a cool atmosphere, and high cultural value, namely temples as cultural heritage and breccia cliffs as geo heritage, as well as photo spots with attractive landscapes. Road access to tourist destinations is quite adequate and easily accessible by tourists. Facilities and infrastructure available in the Prambahan-Ratu Boko area include; restaurants, homestays, large fields, toilets, prayer rooms, *joglo*, gazebos, photo spots, jeeps, and roofed seating.

In strategic area B1, there are still facilities and infrastructure that need to be improved, including; restaurants are still minimal, inns are not yet adequate, toilets are still limited and less clean, parking lots equipped with roofs are not yet available, fleets to go up to the location and around the cliff are not yet adequate, little flower gardens, rides and directions are still minimal, photo spots have not been updated regularly, cliff cleanliness needs attention, making gates, increasing facilities for disabled, and souvenirs that have characteristics are still limited. The marketing program needs to be improved through the creation of creative content on social media, promotion through schools, installation of billboards,

collaboration with sponsors, tourism ambassadors and influencers, and organizing regular events [25]. Non-physical tourism aspects that need to be improved include; the management of performances and entertainment, and cultural attractions.

3.2. Priority area-based tourism management model in Sleman Regency

Tourism development that relies on partial aspects has yet to be able to accommodate various management constraints comprehensively. This research examines a comprehensive tourism development model in a priority area by involving various aspects of tourism management. The priority area-based tourism management model is carried out through three stages: strategic area mapping, identification of area potential, and recommendations for the direction and development of tourism based on strategic area characteristics, as presented in Figure 4.

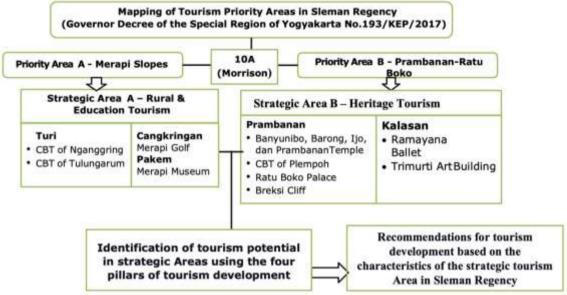


Figure 4. Tourism Development Model Based on Priority Areas in Sleman Regency Source: Reseacher (2022)

In Figure 4, it is noted that the strategic area-based tourism management model involves four important aspects, namely;

1. Strategic areas

The strategic areas of Sleman Regency were obtained by determining the delineation of priority areas through surveys and interviews with the tourism office, spatial planning office, and Bappeda. The delineation of the area becomes the reference scope in identifying tourism potential by looking at the area's characteristics. Regional characteristics become a reference in formulating tourism themes with uniqueness and excellence as a promotional tool with strong competitivenessmempunyai keunikan dan keunggulan sebagai alat promosi yang mempunyai daya saing kuat [16, 17].

2. Ten attributes of successful tourism destination management

The success of tourist destination management is measured through ten attributes that accommodate physical and non-physical aspects, including; awareness, attractiveness, availability, access, appearance, activities, assurance, appreciation, action, and accountability [35]. Ten attributes are used to identify the strategic level of the tourism area so that it becomes a priority recommendation for tourism development at a certain time.

3. Thematic tourism

Based on the analysis results, different tourism themes were formulated in the priority areas of Merapi Slopes and Prambanan-Ratu Boko. The Lereng Merapi area has the theme of rural tourism and education, while Prambanan-Ratu Boko has the theme of heritage tourism. The difference in themes impacts differences in market segments, marketing strategies, and strategic area management strategies according to the characteristics of the area and market segments. Thematic tourism can realize the optimum tourist experience and encourage repeat visits.

4. Pillars of tourism development

Tourism development includes four pillars: destination, industry, marketing, and tourism institutions. The four pillars become recommendations for tourism development that can be implemented in the priority areas of Merapi Slopes and Prambanan-Ratu Boko according to the area's characteristics.

3.3. Recommendations for Tourism Development Based on Regional Characteristics in Sleman Regency

Recommendations in the form of tourism development directions in strategic areas are formulated based on the results of surveys, interviews, field observations, and documentation. Each tourist area has differences and similarities in the direction of development according to the characteristics of each area. Recommendations are grouped based on the four pillars of Indonesian tourism development: destinations, marketing, industry, and institutions.

1. Tourism Destinations

Tourism product development is carried out through innovation and thematic product diversification. Strategic area A2 is developed as a tourism destination based on rural tourism and education, while strategic area B1 is developed as a heritage-based tourism destination. Conservation and revitalization programs are emphasized in environmental and cultural fields. Spatial planning of tourism areas is strengthened on aspects of Community Based Tourism (CBT), museums, temple halls, and breccia cliffs. The development of science and technology-based tourism attraction is optimized in museum dioramas, temples, breccia cliffs, and ballet. Thematic tourism events are organized regularly in culinary, culture, and sports. Beautiful rural areas are synergized into tourist destinations with forest, museum, temple, and breccia cliff tourism. The quality and quantity of physical and non-physical facilities and infrastructure still need to be improved, including; restaurants, lodging, toilets, mini markets, souvenir shops, facilities for people with disabilities, museum exhibition rooms, free wifi capacity, lighting, sound systems, payment facilities, parking lots, fleets to surround cliffs, flower gardens, rides, directions, photo spots, cliff cleanliness, gates, holding periodic events, adding animal species to the mini zoo, outbound activities, show management and cultural attractions.

2. Tourism Marketing

The manager of strategic area A2 works on potential markets for rural tourism and education, while strategic area B1 works on potential markets for cultural heritage tourism. Marketing strategies that can be implemented include; marketing mix, image development, optimization of tourism information centres, and participating in travel marts. Increased digital marketing through implementing the Digital Marketing Brand 24 application, optimization of the Sleman Regency website, and promotion through visiting Jogja, Facebook, Instagram, Youtube, Twitter, email, and others.

3. Tourism Industry

The sustainability of the tourism industry in strategic areas is carried out through developing MSMEs, product standardization, providing tourism business incentives, and strengthening tourism partnerships. MSME development through empowering local communities and implementing regulations can encourage industrial development. Product standardization is applied by improving price, service, product quality and certification standards.

4. Tourism Institutionalization

The level of community involvement, human resource capacity, and the role of tourism organizations measures the quality of tourism institutions. A healthy institution involves the community in tourism management, from planning to program monitoring and evaluation. Improving human resources is essential to support institutional sustainability through training, competency certification, and strengthening tourism awareness.

IV. Conclusions

The priority area-based tourism management model is carried out through three stages: mapping priority areas to determine the delineation of strategic tourism areas using the 10A attribute, identifying tourism potential, and recommending tourism development based on the characteristics of strategic areas with reference to the four pillars of tourism development. Tourism themes can be developed in Sleman Regency priority areas based on strategic areas, namely rural tourism and education for the Merapi Slopes priority area and heritage tourism for the Prambanan-Ratu Boko priority area. Tourism development recommendations based on the characteristics of strategic tourism areas in Sleman Regency include; diversification of thematic products, conservation, revitalization, spatial planning of tourist areas, implementation of science and technology, organizing events, synergizing villages as tourist villages, marketing digitalization, product standardization, strengthening partnerships, increasing human resource capacity, and strengthening tourism organizations.

V. Limitations and Future Research

This research examines the priority area-based tourism development model using the 10A indicators: awareness, attractiveness, availability, access, appearance, activities, assurance, appreciation,

action, and accountability [35]. Identification of tourism potential and recommendations for tourism development in strategic areas using indicators of the four pillars of tourism development. Future research can involve other indicators not used in this study, including Sustainable Development Goals (SDGs) indicators. In addition, tourism in the Merapi Slope area can be developed based on disaster mitigation, given the characteristics of disaster-prone areas.

REFERENCES

- [1] O.V. Eboy, O. V, Tourism Mapping: An Overview Of Cartpgraphy and The Use Of GIS. *Journal for Suastinable Tourism Development*, 6(1), 2017, 61–67, doi: https://www.researchgate.net/publication/334169807
- [2] D.D. Olabintan and J. Ajirotutu, J, Application of Geographic Information System (GIS) in Tourism Mapping for Sustainable Tourism Development in Owo Local Government Area (LGA), Ondo State, Nigeria, *Paper Presented on 4th International Conference on Educational and New Learning Technologies*, 2012.
- [3] Sumiyati, L. Sutiarso, and P.S. I Wayan Windia, Application of Analytical Hierarchy Process (AHP) to Determine Subak Development Strategy, *Agritech*, *31*(2), 2012, 138–145.
- [4] A. Sukmasakti and B, Hayati, Development Strategy of Batik Tourism Objects in Pekalongan City. *Diponegoro Journal of Economics*, 1(1), 2012, 1–10, doi: http://ejournal-s1.undip.ac.id/index.php/dbr
- [5] M. Yusri, Surojizulam, E. Badarudin, The Priority Local Economic Development Program through Creative Industries Household Based in Realizing Sustainable Development of the Region. *Liste*, 6(7), 2016, 60–67.
- [6] A.A. Noor, E, Susanto, S. Sanjaya, T.H. Erwin, S. Hastuti, and R.P. Trihartanti, Designing Sustainable MICE Indicators as a Form of Collaboration between Universities and the Industrial World. *Journal of Engineering Applications and Community Services*, 4(2), 2020, 67, doi: https://doi.org/10.36339/je.v4i2.320
- [7] J. Xu and P. Wang, Study on distribution characteristic of tourism attractions in international cultural tourism demonstration region in South Anhui in China. *PLoS ONE*, *17*, June, 2022, 1–16., doi: https://doi.org/10.1371/journal.pone.0269948
- [8] P.K.Shit, G.S. Bhunia, and R. Maiti, Spatial analysis of soil properties using GIS based geostatistics models. *Modeling Earth Systems and Environment*, 2(2), 2016, 1–6, doi: https://doi.org/10.1007/s40808-016-0160-4
- [9] T. Wang, L. Wang, and Z. Z. Ning, Spatial pattern of tourist attractions and its influencing factors in China. *Journal of Spatial Science*, 65(2), 2020, 327–344, doi: https://doi.org/10.1080/14498596.2018.1494058
- [10] G.J. Hospers, Localization in Europe's periphery: Tourism development in Sardinia, *European Planning Studies*, 11(6), 2003, 629–645, doi: https://doi.org/10.1080/0965431032000108369
- [11] Y. Rao, M. Yang, M, and Y. Yang, Y, Knowledge Sharing, Organizational Learning and [8] P.K. Shit, G.S. Bhunia, and R. Maiti, Spatial analysis of soil properties using GIS based geostatistics models. *Modeling Earth Systems and Environment*, 2(2), 2016, 1–6, doi: https://doi.org/10.1007/s40808-016-0160-4
- [12] P. Breathnach, Regional Governance and Regional Development: Implications of the Action Programme for Local Government, *New Regional Governance in Ireland: Perspectives & Challenges*, 3(1), 2013, 1–5.
- [13] Iqbal, Analysis of the role of stakeholders and their implementation in agricultural development. *Journal of Agricultural Research and Development*, 26(3), 2007, 9–99.
- [14] D. Nigohosyan, M. Bocci, S. Miller, Y. Loon, T. Kiss-Gálfalvi, and T. Paulovic, Study on the contribution of tourism to local and regional development Evidence from the European structural and investment funds 2012-2018, 2020, Final report. EASME/COSME/2018/034. European Comission.
- [15] S. S. Huang an G. Chen, G, Current state of tourism research in China, *Tourism Management Perspectives*, 20, 2016, 10–18, doi: https://doi.org/10.1016/j.tmp.2016.06.002
- [16] F. G. Alberti and J.D. Giusti, J. D, Cultural heritage, tourism and regional competitiveness: The Motor Valley cluster, *City*, *Culture and Society*, *3(4)*, 2021, 261–273, do: https://doi.org/10.1016/j.ccs.2012.11.003
- [17] J. Jackson and P. Murphy, Clusters in regional tourism An Australian case. *Annals of Tourism Research*, 33(4), 2006, 1018–1035, doi: https://doi.org/10.1016/j.annals.2006.04.005
- [18] Tourism Authority of Yogyakarta Special Region, Final Report on the Study of Sustainable Tourism Development in the Special Region of Yogyakarta. Final Report of Tourism Authority of Yogyakarta Special Region, 2022.

- [19] Central Bureau of Statistics of Sleman Regency, *Sleman Regency in Figures 2022. Sleman, 2022, Pp. 249.*
- [20] Central Bureau of Statistics of Sleman Regency, Sleman Regency in Figures 2019. Sleman. 2019, Pp. 401
- [21] D. Getz, D, Event tourism: Definition, evolution, and research. *Tourism Management*, 29(3), 2007, 403–428, doi: https://doi.org/10.1016/j.tourman.2007.07.017
- [22] A.M. Pradoko, A. M, Tourism Development Of Sleman District Based On Ecological Setting Of Cultural Heritage Environment. *Sembada_Jurnal Kebudayaan Kabupaten Sleman*, 5(1), 2017, 1–8.
- [23] G. Richards, *The experience industry and the creation of attractions. In G. Richards (Ed.), Cultural attractions and European tourism, CABI, (UK: Oxfordshire Publishing, 2001, 55-69).*
- [24] C. Thrane and E. Farstad, Tourists' length of stay: The case of international summer visitors to Norway. *Tourism Economics*, 18(5), 2012, 1069–1082, doi: https://doi.org/10.5367/te.2012.0158
- [25] B. Budisetyorini, D. Adisudharma, D.A. Salam, S. Tinggi and P. Bandung, Tourism Activity Development Model in the Cilimbung River Area, Garut Regency, *Journal of Entrepreneur Development*, 2, 2021, doi: 10.33370/jpw.v23i2.573
- [26] A.S. Putra, A. S and A. Fauzy, A, Location Mapping of Potential Tourism Villages in Sleman Regency 2015. *Ajie*, 4(2), 2015, 123–129, doi: https://doi.org/10.20885/ajie.vol4.iss2.art7
- [27] S.L. Ratnasari, S. L, E.N, Susanti, and G. Sutjahjo, An Experience of Tourism Development: How is the Strategy? Dio Caisar Darma Sekolah Tinggi Ilmu Ekonomi Samarinda, INDONESIA. *Article in Journal of Environmental Management and Tourism*, 11(7), 2020, 1877-1886, doi: https://doi.org/10.14505/jemt
- [28] I.M. Semara, Strategic Planning For Kertagosa Tourism Development In Klungkung District. *Jurnal Ilmiah Hospitality Management*, 4(1), 2013, doi: https://opac.perpusnas.go.id/DetailOpac.aspx?id=1142775
- [29] A.N. Dunets, I.B. Vakhrushev, M.G.. Sukhova, M. S. Sokolov, K.M. Utkina, and R.A. Shichiyakh, R. A, Selection of strategic priorities for sustainable development of tourism in a mountain region: Concentration of tourist infrastructure or nature-oriented tourism, *Entrepreneurship and Sustainability Issues*, 7(2), 2019, 1217–1229, doi: https://doi.org/10.9770/jesi.2019.7.2(29)
- [30] H. Sumarsono, H.W. Arti, H. W, and Y.H. Soesilo, *The Development Strategy of Tourism Sector in Ponorogo, Indonesia*, 124, 2020, 994–1004, doi: https://doi.org/10.2991/aebmr.k.200305.169
- [31] A. Pike, A. Rodríguez-Pose, and J. Tomaney, Shifting horizons in local and regional development. *Regional Studies*, *51*(1), 2017, 46–57, doi: https://doi.org/10.1080/00343404.2016.1158802
- [32] Richards, G, Cultural tourism: A review of recent research and trends. *Journal of Hospitality and Tourism Management*, 36, 2018, 12–21, doi: https://doi.org/10.1016/j.jhtm.2018.03.005
- [33] H.M. Baptista Alves, J.R. Pires Manso, J. R., Z.M.D.S. Serrasqueiro Teixeira, C.M. Santos Estevão, and A.C. Pinto Nave, A. C, Tourism-based regional development: boosting and inhibiting factors, *Anatolia*, *33*(1), 2022, 128–142, doi: https://doi.org/10.1080/13032917.2021.1924211
- [34] Nursalam, Nursing Science Research Methodology: A Practical Approach, A Practical Approach 5th Edition. 4(1), 2020, doi: https://api.penerbitsalemba.com/book/books/08-0284/contents/fc506312-5e09-4027-a661-9ba646dced46.pdf
- [35] A. Morrison, Marketing and Managing Tourism Destinations (London: Routledge, 2019)
- [36] M.A. Uddin, M. A, L. Fan, L, and A.K. Das, A Study of the Impact of Transformational Leadership, Organizational Learning, and Knowledge Management on Organizational Innovation. *Management Dynamics*, *16*(2), 2017, 42–54. https://doi.org/10.57198/2583-4932.1068