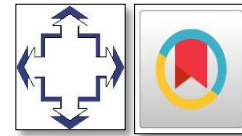


The Role of Stakeholders in Sustainable Tourism using Mactor Analysis: Evidence from Kragilan's Top Selfie, Magelang, Indonesia



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ABSTRACT

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Sustainable tourism development has to pay attention to social, economic, and environmental factors, which is essential in supporting the Sustainable Development Goals (SDGs). The key actors' involvement in tourism development determines its success. This study aims to analyze the strength and convergence between stakeholders or actors who play a role and are involved in the development of Top-Selfie in Kragilan, Magelang, Indonesia, especially from the strategic issues of Increasing Income, Expanding Employment, Increasing Tourists, Poverty Reduction, and Maintaining Local Wisdom, Infrastructure Development, and Pine Forest Conservation. In-depth interviews were conducted with seven important actors, namely (1) The Youth, Sports, and Tourism Office, and (2) the Mount. Merbabu National Park, (3) the village government, (4) the Tourism Awareness Group, (5) Visitors, (6) Local Communities, and (7) Business Actors. The result is the Youth, Sports, and Tourism Offices, Mount. Merbabu National Park and tourism awareness groups are the main actors in developing sustainable tourism in Kragilan's Top Selfie.

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1. Introduction

The tourism sector is one sector that has a great opportunity to increase the income and employment of residents (Jomsri 2019). In recent years, the tourism sector in the Southeast Asia region has contributed positively significantly to the income of these countries, one of them Indonesia. In Indonesia, the tourism sector's contribution reached 4.97%, well above the global growth of only 3.60% (BPS 2021). In addition to having a positive impact, the tourism sector also has a negative impact as a contributor to climate change of around 5.00% of global CO₂ emissions, which comes from accommodation such as tourist transportation and the operation of other facilities that are not environmentally friendly (World Tourism Organization 2013). Several countries responded to this problem by initiating sustainable tourism, which is a derivative of Sustainable Development Goals (SDGs) in three goals: First, points 8 about sustainable economic growth; second, point 12 about sustainable consumption and production; third, points 14 about conserve and sustainable resources.

Kragilan Pine Forest, Magelang, a Traditional Area of Mount Merbabu National Park, has developed into a Top-Selfie tourist attraction. A total of 140,000 tourists visited this tourist destination in 2018 and 2019. During the 2020-2021 pandemic, it was completely closed and reopened in early 2022. Communal management by involving the community around the Top Selfie selfie attraction in Kragilan initiated by *Pokdarwis*. The development of Top-Selfie requires synergy from related stakeholders who are the main actors. Sustainable tourism development must pay attention to the role of all stakeholders in achieving goals and for stakeholder analysis with the MACTOR method, extracting actors who have more influence after the creation phase is considered more practical. The focus of the analysis is on the innovation of multiple stakeholder analysis of the development of Top Selfi Kragilan using a sustainable tourism perspective with economic, social, and environmental aspects.

2. Literature Review

Rebalance requires the active involvement of broader stakeholders in collaborative efforts to achieve long-term sustainable development goals. The critical role of stakeholder involvement as a sustainable tourism initiative is being responded to both in academia and industry. This is due to stakeholders' interdependent and influential role in tourism destinations that depends on stakeholder synergy and collaboration. Several studies have examined the importance of stakeholders' role in sustainable tourism development, as Ilkhanizadeh (2021) researched the contribution and collaboration of key stakeholders in the management of policy planning sustainable tourism in Northern Cyprus. The study results indicate that in the planning and implementation stages for sustainable tourism development, the role of the Government of North Cyprus is influenced and depends very dominantly on all stakeholders. In addition, government and non-governmental organizations should synergize to plan programs such as training to raise awareness and contribute to the sustainable tourism growth of local communities.

Different findings by Boumaour et al. (2018) discusses the process of managing high ecological coastal protected areas that require stakeholder involvement. This research was conducted by direct interviews and analyzed using the "MACTOR" method. The study results indicate that the involvement of management actors and local contexts has not been maximized due to conflicts over territorial disputes, lack of coordination and communication, and limited resources and qualified personnel. This is a shortcoming of most Mediterranean MPA managers, who rarely have minimum requirements regarding qualifications and financial resources to manage the proper sites under their responsibility. Managers, therefore, need to encourage participatory management to ensure support from local and national authorities, which is essential to the success of the MPA.

The research by Serravalle et al. (2019) aims to identify the role of several stakeholders (consisting of owners, governments, benefactors, employees, visitors, the general public, associations

of friends, sponsors, and suppliers of services and goods) in creating museum value. The results show that needs and desires are created by the unique combination of external and internal stakeholders to create and increase value by and for all stakeholders. The same findings by Pelyukh et al., (2021) focus on stakeholder analysis implemented in Ukraine to support the forestry policy reform process. In this context, only 15 stakeholders were involved in collaborative participation, and the results confirmed that stakeholder involvement positively impacted the social acceptance of the resulting decisions.

Another study conducted by Longart et al. (2017) identify stakeholder relationships in tourism development service learning projects in Ecuador. The study consisted of 16 stakeholders, and the results showed that the project was full of challenges and obstacles although the project was beneficial for all stakeholders, including students and teachers, in enhancing the academic experience as well as in planning activities keeping in mind the needs of the people involved in the project. tourism, which is not aligned with university scheduling. In addition, lack of solid leadership and irresponsibility resulted in low power and legitimacy of each stakeholder.

Aryawan, Sara, and Purnami (2019) studied with MACTOR to determine the role of stakeholders who play a role in the development of agro-tourism in Catur Village, Kintamani District, Bangli Regency, Bali Province, Indonesia. The results showed that the role of the community, farmers, government, private sector, and local tourism institutions influenced agro-tourism development in Catur Village. The preparation of a roadmap for developing facilities and infrastructure for agro-tourism institutions needs to involve local governments and communities. In addition, academic guidance and socialization are needed to develop agro-tourism in Catur Village.

This study uses MACTOR to analyze the strength and convergence the actors who play a role and are involved in the development of Top-Selfie in Kragilan, Magelang, on the strategic issues. The Youth, Sports, and Tourism Offices, Mount. Merbabu National Park and tourism awareness groups are the main actors in developing sustainable tourism in Kragilan's Top Selfie.

3. Research Method

This research was conducted in the Pogalan village, Pakis sub-district, Magelang district, Central Java province, Indonesia. This research used mixed-method with a combination of qualitative and quantitative analysis using a stakeholder analysis tool of Matrix of Alliances and Conflicts: Tactics, Objectives, and Recommendations (MACTOR) to identify and choose between strategic options with three steps: stakeholder identification, classification, and describing stakeholder relationships (Bendahan, Camponovo, and Pigneur 2004).

Mactor's analysis consists of four stages: first, determining system actors. Second, determining a set of goals. Third, describing the power relations of actors as measured on a scale of 0 (no influence) to 4 (very high influence). Fourth, describing the attitude of actors towards goals as measured by a (+) scale favor, (0) neutral, and (-) against and goal salience for actors as measured on a scale of 0 (not important) to 4 (very important) (Riadh 2022). This research was conducted in-depth with seven stakeholders involved in managing Kragilan's Top Selfi tourism, such as The Youth, Sports and Tourism Office Magelang district, Mount. Merbabu National Park, Village government Pogalan, Tourism Awareness Group (*pokdarwis*) Kragilan's Top Selfi, Visitors Kragilan's Top Selfi, Local Community Pogalan Village, and Business Actors in Kragilan's Top Self. The strategic issues of this study are Income Increase, Employment Expansion, Increase in Tourists, Poverty Reduction, Maintaining Local Wisdom, Infrastructure Development, and Pine Forest Conservation (See figure 1).

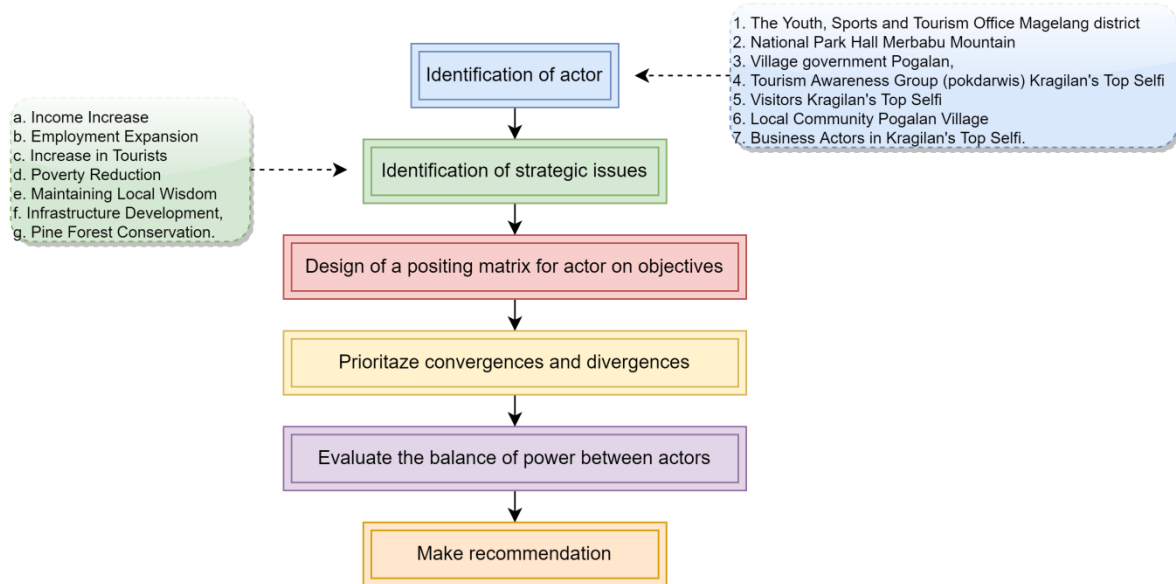


Figure 1. The Steps of MAXTOR Methodology

4. Results and Discussion

The focus of the analysis is on the innovation of the multiple stakeholder analysis of the development of Kragilan's Top Selfi using a sustainable tourism perspective with economic, social, and environmental aspects. Sustainable tourism development must pay attention to the roles of all stakeholders in achieving the objectives. For the stakeholder analysis by the MACTOR method, it was considered more effective to extract the actors that have more influence after the creation phase. The tourism stakeholders consist of: (1) The Youth, Sports, and Tourism Office (disporpar), (2) Mount. Merbabu National Park (btn), (3) Village government (pemdes), (4) Tourism Awareness Group (*pokdarwis*), (5) Visitors (visitors), (6) Local Community (ml), and (7) Business Actors (pb). The objectives of this study are (1) Income Increase (pp), (2) Employment Expansion (plk), (3) Increase in Tourists (pw), (4) Poverty Reduction (pk), and (5) Maintaining Local Wisdom (mkl), (6) Infrastructure Development (pi), and (7) Pine Forest Conservation (php).

The matrix of Direct and Indirect Influences (MDII) determines the direct or indirect influences of actors. The direct and indirect influence levels of each actor are visible on the line, while the direct and indirect dependence levels of each actor are visible on the column. Figure 2 shows the values of direct and indirect influences between actors. Actor Mount. Merbabu National Park (btn) and Village government (pemdes) have a high score (140), so it means those actors have a high influence on other actors. Meanwhile, visitors (visitors) have high scores on independence levels compared with others.

MDII	disporapar	btn	pemdes	pokdarwis	visitors	ml	pb	∑
disporapar	17	16	18	17	18	18	16	103
btn	17	16	18	17	18	18	16	104
pemdes	18	16	19	17	19	18	16	104
pokdarwis	17	16	18	17	18	17	16	102
visitors	11	12	12	12	12	12	11	70
ml	13	13	14	14	14	14	14	82
pb	11	10	11	11	11	11	11	65
Di	87	83	91	88	98	94	89	630

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Figure 2. Values of direct and indirect influences between actors

Source: Primary data processed by Mactor, 2022

In-depth interviews were conducted with seven actors. Interviews were conducted with saturated samples for village government, visitors, and business actors, and then the mean was calculated to assess the relationship between actors and objectives. The results of stakeholder interviews found information that the informants agreed with the idea of developing tourism potential in Top Selfi. All stakeholders emphasize that tourism development in Top Selfi can be increased as long as it does not damage nature and the environment. Mount Merbabu National Park, village government, and *Pokdarwis* said, "the tourism potential in Top Selfi is huge and coordination is needed between all parties who have the authority to optimize it. The results of the analysis with MACTOR produced the value as follows:



Figure 3. Map of influence and dependence between actors

Source: Primary data processed by mactor, 2022

Figure 3 shows that three actors are in quadrant 1, a condition with high influence and high dependency. Actors in this quadrant were the Youth, sports, and tourism office, Mount. Merbabu National Park and tourism awareness group (*pokdarwis*). This indicates that actors are the leading actors in developing sustainable tourism in Kragilan's Top Selfie. There is only one actor in quadrant 2, a condition with high influence and low dependency, which is the village government. This happens because even though the actor has a high influence, they are very dependent on decisions and policies carried out by other actors. There is only one actor in quadrant 3, a condition with low influence and dependency, which is business actors. This condition indicates that the activities of other actors do not influence all their activities. Actors in quadrant 4, a condition with low influence and high dependency, are the local community and visitors. This is because the local community and visitors, as parties involved in planning, program activities, and policies, the main actors are the Youth, sports, and tourism office, Mount. Merbabu National Park, and *pokdarwis*.

The opinions of each stakeholder will be analyzed against the objectives. The results show that all actors agreed on the objectives of income increase, employment expansion, increase in tourists, poverty

reduction, maintaining local wisdom, infrastructure development, and pine forest conservation because these objectives to synergetic economic, social, and environmental interests (See Figure 4).

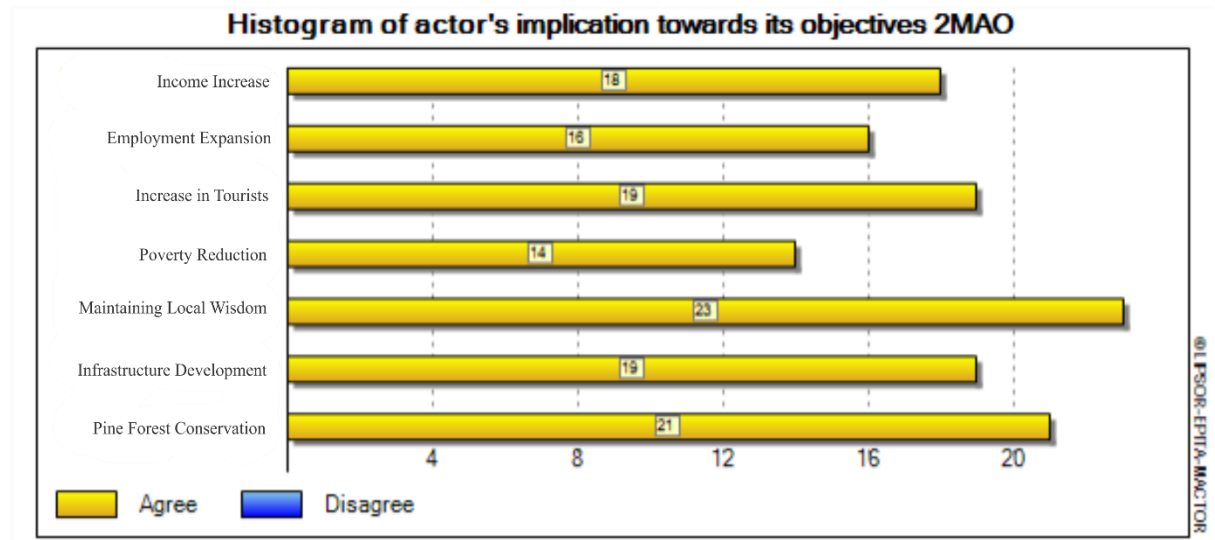


Figure 4. Implications of objectives for actors
Source: Primary data processed by mactor, 2022

The subsequent analysis measures the convergence between actors against the objectives (using order 3). The processing results are shown as follows (See Figure 5).

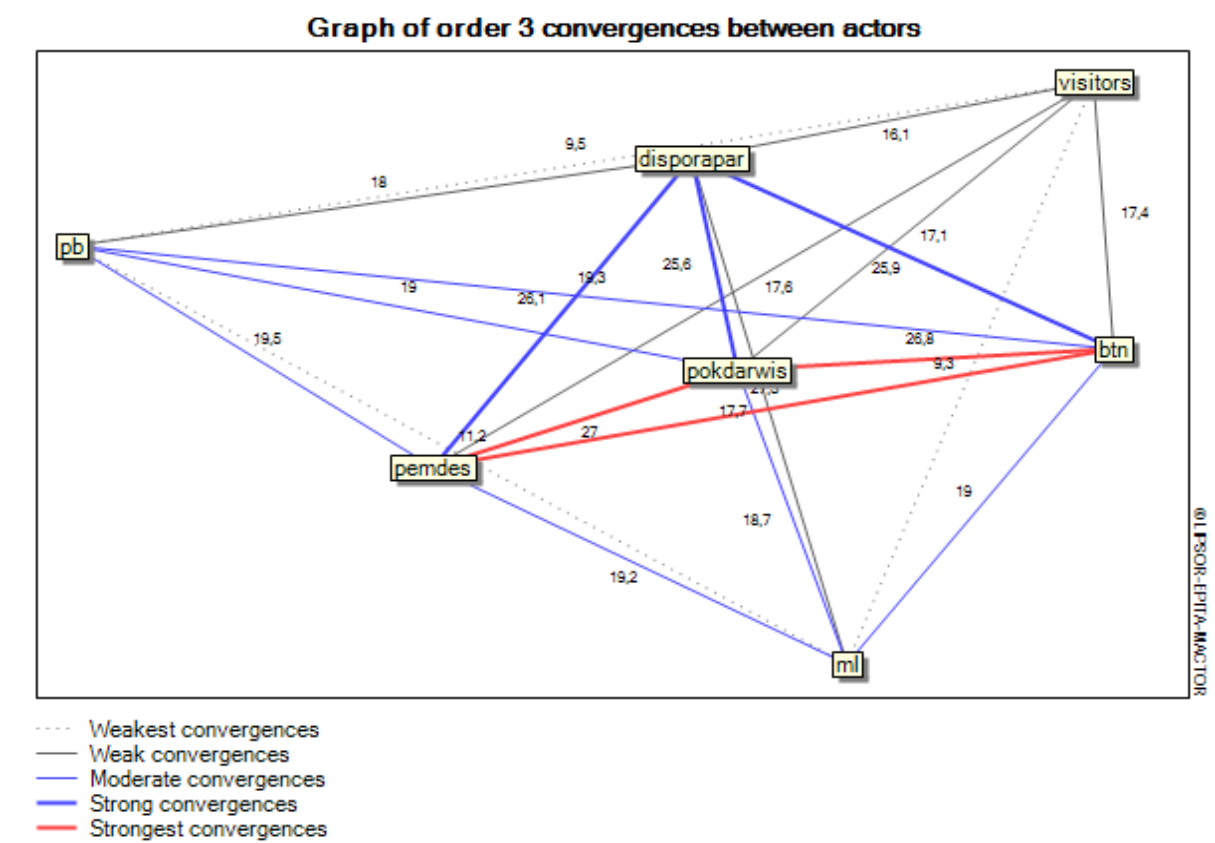


Figure 5. Convergence between actors against objectives
Source: Primary data processed by mactor, 2022

Figure 5 shows that actors with very strong convergence are the Mount. Merbabu National Park, Village government, and *Pokdarwis* because all three have partner relationships. The Gunung Merbabu National Park Office's main manager of Kragilan's Top Selfi partnered with *Pokdarwis* to realize "Sapta Pesona" in increasing local tourism development and partnering with village governments for facilitators and regulators to create sustainable tourism. Strong convergence is shown by the youth, sports and tourism office, Mount. Merbabu National Park, and village government, while moderate convergence occurs between the Mount. Merbabu National Park, *pokdarwis*, business actors, and village government. The convergence between the local community, visitors, and business actors. This indicates that the community has not been actively involved and can capture opportunities as a tourist destination. Besides that, the visitors are not too responsive to criticism and suggestions to improve the quality of services and amenities in tourist destinations. This finding will be used as a reference in determining policies, namely developing community capacity and visitors so that they can be more actively involved in social, ecological, and economical.

5. Conclusion

The analysis results in the strength and convergence between stakeholders or actors who play a role and are involved in the development of Top-Selfie in Kragilan, Magelang, Indonesia, especially from the strategic issues of Increasing Income, Expanding Employment, Increasing Tourists, Poverty Reduction, and Maintaining Local Wisdom, Infrastructure Development, and Pine Forest Conservation are :

- a. Stakeholders or actors who have more influence are Youth, sports, and tourism offices, Mount. Merbabu National Parks and tourism awareness groups (*pokdarwis*) are among the main actors in developing sustainable tourism in Kragilan's Top Selfie. The village government relies heavily on decisions and policies made by other actors. The activities of other actors do not influence the activities of business actors. Local communities and visitors are the parties involved in planning, program activities, and policies whose main actors are the Youth, sports, and tourism offices, Mount. Merbabu National Parks, and *pokdarwis*.
- b. Convergence between actors shows that very strong convergence is the Mount. Merbabu National Park, the Village government, and *Pokdarwis*. The Gunung Merbabu National Park Office's main manager of Top Selfi Kragilan partners with *Pokdarwis* to develop local and sustainable tourism. Strong convergence is demonstrated by Youth, sports, and tourism agencies, Mount. Merbabu National Parks and village governments. Convergence breeds between the national park authority, *pokdarwis*, business actors, and village governments. A weak convergence between local communities, visitors, and businesses shows that these actors have not been actively involved and can seize opportunities as tourist destinations. Visitors do not provide criticism and suggestions to improve the quality of services and facilities in tourist destinations.

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