

RESEARCH ARTICLE





Ecotourism Stakeholders Analysis in Bodogol Resort, Gunung Gede Pangrango National Park, West Java

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ABSTRACT

Tourist visits to Bodogol Resort, Gunung Gede Pangrango National Park (GGPNP), have experienced a downward trend from to 1998-2021. In addition, the Bodogol Resort is directly adjacent to the Lido Special Economic Zone (SEZ) with its main activity of tourism. The level of interest and influence of stakeholders involved in ecotourism development at Bodogol Resort and their role determine progress in ecotourism development. This study aims to assess the stakeholders and their role in ecotourism development at Bodogol Resort. Data collection was performed through observations, interviews, and document deepening. The analyses were performed both quantitatively and qualitatively. Stakeholder analysis was carried out to identify stakeholders, classify and map stakeholders, and analyze the relationships between stakeholders. Sixteen stakeholders related to ecotourism development in the Bodogol Resort were identified. The stakeholder mapping results are three key players, five subjects, and eight crowds. This shows that the stakeholders involved have not played as optimal roles as they should, the division of roles of who does what. Bodogol Resort is one of the key players with the highest level of influence and interest. The results of the matrix analysis of the relationships between stakeholders show that communication, coordination, and cooperation are low.

Introduction

Gunung Gede Pangrango National Park (GGPNP) is in West Java Province in three districts: Cianjur, Sukabumi, and Bogor. According to the GGPNP center [1], management at the site level in the GGPNP is carried out by 15 resorts spread across three districts. One of these resorts is the Bodogol Resort, with its management area in the Bogor and Sukabumi regencies. According to the Indonesian Government [2], national parks are used for research, science, education, supporting cultivation, tourism, and natural recreation. Bodogol Resort has a tourism object specializing in educational tourism in the form of conservation education, namely the Bodogol Nature Conservation Education Center (Pusat Pendidikan Konservasi Alam Bodogol/PPKAB), which was formed in 1998. In addition to PPKAB, the surrounding community applies for a Business Permit for the Provision of Nature Tourism Services (Perijinan Berusaha Penyediaan Jasa Wisata Alam/PBPJWA) and the private party (MNC Land Company) applies for a Business Permit for the Provision of Natural Tourism Facilities (Perijinan Berusaha Penyediaan Sarana Wisata Alam/PBPSWA) in the Bodogol Resort area.

Based on the data obtained from Bodogol Resort, tourist visits to Bodogol Resort from 1998 to 2021 have decreased. The highest number of visitors in 2003 was 6,532, whereas in 2021 there were 1,152 visitors. This decrease in visits was also a result of a decrease in the role of national parks in conservation education. This decline is due to several factors, such as damaged road conditions to Bodogol Resort, and the natural tourism program offered still needs to be updated. In addition, the existing facilities, infrastructure, and personnel are still limited (Head of the Bodogol Resort Personal Communication, interviewed on March 11, 2022).

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Another reason is that in Bodogol Resort, only PPKAB is currently developed into a natural tourism destination location and has more conservation education and special interest tourism, while other locations are still in the process of applying for PBPJWA by the surrounding community and PBPSWA by the MNC Land Company.

The management area of Bodogol Resort is directly adjacent to the Lido Special Economic Zone (SEZ) in accordance with Government Regulation No. 69 of 2021 concerning SEZ Lido [3], where the main activity is tourism. The Lido SEZ area of 1,040 ha located in Bogor Regency can be reached for 2 hours from Jakarta, and it is planned to build artificial tourism by MNC and integrate it with the natural tourism potential in Bodogol Resort through the PBPSWA scheme (Director of MNC Land Company Personal Communication, interviewed on May 19, 2022). Considering the conditions that tourism potential both within and around the Bodogol Resort area is increasingly attracting more stakeholders involved in tourism activities, more specifically ecotourism, it takes the support and contribution of various stakeholders to cooperate and synergize to develop ecotourism activities [4]. Several studies show that stakeholder analysis could be used to formulate strategies for developing ecotourism in various regions of Indonesia [5–7] Therefore, as the aim, the study on which stakeholders and how their role affects the development of ecotourism in Bodogol Resort of GGPNP needs to be conducted.

Materials and Methods

Study Area

This study was conducted from March to May 2022 at Bodogol Resort, GGPNP, and three buffer villages. Geographically, Bogodol Resort is located between 6º32′-6º34′ South Latitude and 106°56′ East Longitude, with an area of 2,209.417 ha (Figure 1). Bodogol Resort has an altitude of between 700–1500 m above sea level with ecosystem types of lower montane forest (sub-Montana) and plantation forest. According to the soil map of West Java Province (Bogor Soil Research Institute), Bodogol Resort consists of various types of soil, namely Regosol, Latosol, and Andosol. According to Schmidt and Ferguson's climate classification, this region is classified as climate type A, with average rainfall ranging between 3,000–4,000 mm year⁻¹ and 251.01 mm month⁻¹.

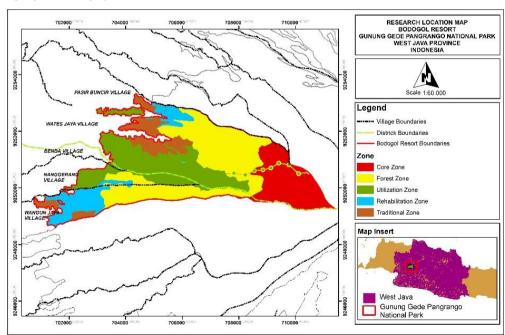


Figure 1. Study area of Bodogol Resort, GGPNP.

Wates Jaya and Pasir Buncir villages, two buffer villages of Bodogol Resort, are part of the Bogor district, while Benda village is part of the Sukabumi district in West Java Province. These three villages were selected because the communities there manage ecotourism. The growth of ecotourism at the Bodogol Resort also involves other stakeholders, non-governmental organizations (NGOs), and government agencies and institutions.

Methods of Data Collection and Data Analysis

Three steps were involved in conducting the stakeholder analysis (Figure 2). Stakeholder identification was the first step, during which fieldwork and interviews were conducted. The second step involved mapping and categorizing the stakeholders according to their impact and level of interest. Assessing stakeholder relationships through relationship mapping based on interviews and documentation was step three.

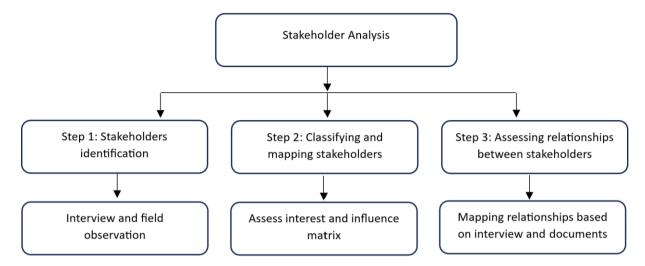


Figure 2. Stakeholder analysis process.

Identification of Stakeholders

To determine who the stakeholders were in the growth of ecotourism at Bodogol Resorts, identification was performed. Purposive and snowball sampling techniques were used in field observations and interviews to identify stakeholders and their interests. Stakeholders were chosen based on their expertise and experience in the research topic. The initial informant's recommendations yield more information[8], and researchers can identify other stakeholders who can provide more complete data.

Classification and Mapping of Stakeholders

By converting the data gathering findings into scores of 1–5 based on the pre-prepared criteria, the stakeholders were mapped and classified. The model used for the score measurement was created by Abbas [5,9] into five-tiered measurements (Table 1).

Table 1. Measurement criteria for level of interest and influence among stakeholders.

Score	Value	Criteria	Explanation			
	Stakeholder interest					
5	20–25	Very high	Strongly supports the ecotourism program in Bodogol			
4	16-20	High	Support the ecotourism in Bodogol			
3	11–15	High enough	Enough to support the ecotourism in Bodogol			
2	6-10	Less height	Lack of support for ecotourism in Bodogol			
1	0–5	Low	Does not support the development of ecotourism in Bodogol			
	Stakeholder influence					
5	20–25	Very high	Strongly influenced the ecotourism in Bodogol			
4	16-20	High	Influence the development of Bodogol ecotourism			
3	11-15	High enough	Enough to influence the development of Bodogol ecotourism			
2	6-10	Less height	Less influence on Bodogol ecotourism development			
1	0–5	Low	Does not affect the development of Bodogol ecotourism			

Based on the size of their influence and their level of interest in the development of tourism, stakeholders were mapped into a stakeholder analysis matrix. The five primary questions that were written beforehand serve as the basis for measuring stakeholders' interests and influences. The degree of interest is evaluated based on factors such as stakeholder involvement in ecotourism development (K1), stakeholder renewal of ecotourism development (K2), stakeholder authority in ecotourism development (K3), stakeholder programs

related to ecotourism development (K4), and degree of reliance on stakeholders in ecotourism development. Based on the stakeholders' involvement in their ability to fight for their ambitions (P1), the facilities they supply (P2), and the institutional capacity/human resources, the level of influence was evaluated in terms of magnitude.

Next, a quadrant of the influence and interest matrix is mapped with the value of the stakeholder influence and interest. Stakeholder mapping with an interest-influences matrix analysis method was used to classify subjects, crowds, key players, and context setters, according to Reed et al. [10]. Figure 3's interest-influence matrix shows the quantitative data of interest and influence. Next, a quadrant of the influence and interest matrix is mapped with the value of the stakeholder influence and interest. Stakeholder mapping has been used to map subjects, crowds, context setters, and key players using an interest-influence matrix analysis method [11].

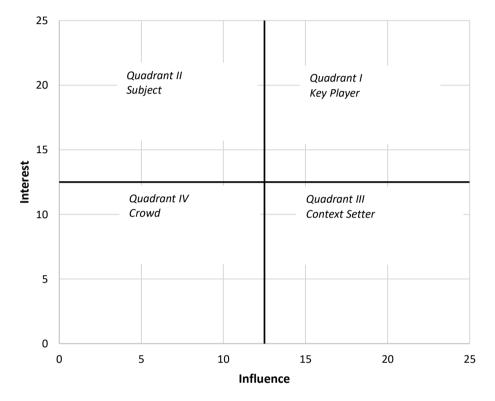


Figure 3. Interest-influence matrix.

Stakeholders Relationships

Documents and interviews with key informants served as the basis for mapping interactions between various parties. The process of mapping stakeholder relationships involves describing such ties in writing and employing the description method to execute them in the field. Stakeholder connections can be divided into three categories: cooperation, coordination, and communication.

Results and Discussion

Stakeholders Identification

The results of stakeholder identification show that were 16 stakeholders involved directly or indirectly in the development of ecotourism at Bodogol Resort, divided into government, community, private, NGO, and university groups. According to Mahfud et al. [12], stakeholders are individuals or groups that have interests and influences (positive or negative) and are involved in a development program. According to Bryson [13], stakeholders are individuals or groups of people who influence or are influenced by the success of an organization. They can be men or women, communities, socioeconomic groups, or institutions in various dimensions at every level of society. Following their duties and functions, stakeholders have roles as shown in Table 2.

Table 2. Stakeholders and their role in ecotourism development at the Bodogol Resort.

No.	Stakeholder	Role
1	Bodogol Resort-GGPNP	The smallest management of the GGPNP Center, the implementer of field-level management, plays a role in carrying out the main activities of preservation and utilization protection. Especially for utilization one of them is to manage & develop ecotourism at Bodogol Resort.
2	Department of Culture and Tourism of Bogor Regency	The Bogor Regency Culture and Tourism Office has the main task of assisting the Regent in carrying out government affairs in culture and tourism and assistance duties. Currently, what is related to Bodogol Ecotourism is providing coaching and training, especially to Pokdarwis Ciwaluh and Watesjaya Village through Deswita Watesjaya.
3	Department of Tourism of Sukabumi Regency	Based on the Regional Regulation of Sukabumi Regency Number 7 of 2021, the task of the Tourism Office is to carry out government affairs in the tourism sector. However, there is currently no role in developing ecotourism at Bodogol Resort
4	Watesjaya Village	Fostering and coordinating its citizens through the establishment of decree of Pokdarwis Ciwaluh and Deswita Watesjaya, where these two groups each proposed PB PJWA in the Bodogol Resort utilization zone
5	Pasir Buncir Village	Fostering and supporting its citizens, especially Paguyuban Wangunjaya Bersatu proposed PBPJWA at Bodogol Resort.
6	Benda Village	Making decree of Bodogol Kampung Hoya (BKH), holding Hoya cultivation training, and participating in promoting BKH at certain events.
7	Kelompok Sadar Wisata (Pokdarwis) Ciwaluh	Developing ecotourism in Ciwaluh which is integrated with natural attractions in Bodogol Resort through the PBPJWA submission scheme.
8	PBPJWA-Jamaludin	Developing, promoting, and selling ecotourism packages at Bodogol Resort.
9	Paguyuban Wangunjaya Bersatu	Developing ecotourism by applying for PBPJWA at Bodogol Resort
10	Bodogol Kampung Hoya (BKH)	Developing Hoya plant-themed ecotourism in Bodogol village which is integrated with ecotourism activities at Bodogol Resort.
11	Forum Interpreter Bodogol (FIB)	A forum for interpreters who oversee accompanying visitors at PPKAB- Bodogol Resort.
12	Volunteer TEPALA	Evacuation of visitors, security of the area, promotion of ecotourism Bodogol Resort. Some of its members become interpreters at Bodogol Resort.
13	Volunteer EAGLE	Evacuation of visitors, security of the area, promotion of ecotourism Resort Bodogol.
14	Conservation International Indonesia	One of the founders of PPKAB, built several PPKAB facilities. Providing training and assistance to BKH & Paguyuban Wangun Jaya Bersatu in developing ecotourism integrated with Bodogol resort.
15	Universitas Terbuka	Carrying out community empowerment activities through community service programs (ABDIMAS) to Pokdarwis Ciwaluh for ecotourism development by combining potential in the village and Bodogol Resort. Building and assisting Pokdarwis Ciwaluh intensively after the ABDIMAS program.
16	MNC Land Company	Through cooperation agreement between MNC Land Company-GGPNP, developing natural tourism with locations in the Bodogol utilization zone and surrounding buffer areas. Apply for PBPSWA in the Bodogol Resort utilization zone, whose natural tourism activities will be integrated with the Lido SEZ.

The identification of stakeholders is a crucial and essential step in the analysis of stakeholders as it offers a comprehensive picture of their engagement in the growth of ecotourism at Bodogol Resorts. The role of stakeholders, such as the government as decision-makers and policymakers and the private sector as players in the tourism industry, academia, the community, and other parties, is integral to the development of natural tourism in conservation areas. The concept of tourist development that cannot be carried out alone is demonstrated by the role of stakeholders in the development of natural tourism in conservation areas. This idea calls for cooperation in the direction of action and balance between stakeholders [14].

The success and sustainability of ecotourism initiatives depend on the active participation and collaboration of stakeholders. Ecotourism efforts can achieve a harmonious balance between environmental preservation, socio-economic progress, and cultural safeguarding by involving stakeholders at all levels and considering their perspectives [15]. According to the outcomes of the stakeholder identification process, the stakeholders comprise commercial companies, NGOs, communities, universities, and local and federal government organizations. Bodogol Resort's ecotourism development includes sixteen stakeholders (Table 2).

Stakeholders Classification

Stakeholder classification is a crucial factor that establishes the existence of stakeholders in addition to their roles. According to Reed et al. [10], stakeholders are categorized according to their degree of influence and interest. Furthermore, stakeholder roles can be classified into primary, secondary, and tertiary classes [15]. Stakeholders involved in ecotourism can be classified based on their interests and motivations in ecotourism activities as follows: (1) Conservation-Oriented Stakeholders: Environmental NGOs, Wildlife Enthusiasts, Ecologists and Biologists; (2) Community-Centered Stakeholders: Local Residents, Indigenous Groups, and Local Businesses; (3) Education and Awareness Stakeholders: Educators and Researchers, Environmental Educators; and (4) Government and Policy Stakeholders [15].

The degree of interest encompasses concern, interest, and support from stakeholders for the growth of ecotourism at the Bodogol Resort. The degree of influence encompasses the ability, legitimacy, and sway of stakeholders to promote the adoption of ecotourism initiatives at the Bodogol Resort. Table 3 displays the findings from the key informant interviews with each stakeholder regarding their degree of interest.

Table 3. Stakeholder interest level in ecotourism development at Bodogol Resort.

No.	Stakeholder	Interest					Total
	Stakenoluei		K2	К3	K4	K5	- Total
1	Bodogol Resort - GGPNP	5	5	5	4	4	23
2	Department of Culture and Tourism of Bogor Regency	2	3	1	2	1	9
3	Department of Tourism of Sukabumi Regency	1	1	1	1	1	5
4	Watesjaya Village	2	5	2	3	1	13
5	Pasir Buncir Village	2	1	1	1	1	6
6	Benda Village	1	4	1	2	1	9
7	Pokdarwis Ciwaluh	2	5	2	4	2	15
8	PBPJWA-Jamaludin	5	5	2	3	3	18
9	Paguyuban Wangunjaya Bersatu	1	4	1	4	1	11
10	BKH	4	4	3	3	2	16
11	FIB	4	5	3	4	2	18
12	Volunteer TEPALA	3	4	2	1	1	11
13	Volunteer EAGLE	3	3	1	1	1	9
14	Universitas Terbuka (UT)	1	1	2	4	1	9
15	Conservation International (CI) Indonesia	3	3	3	3	1	13
16	MNC Land Company	3	3	3	5	1	15

Information: 5 = very high, 4 = high, 3 = high enough, 2 = low height, 1 = low, K1 = Stakeholder involvement related to ecotourism development at Bodogol Resort, K2 = Benefits of ecotourism development at Bodogol Resort for stakeholders, K3 = Authority of stakeholders related to ecotourism development at Bodogol Resort, K4 = Stakeholder program related to ecotourism development at Bodogol Resort, K5 = The level of dependence of stakeholders on ecotourism development at Bodogol Resort.

Table 3 shows that Bodogol Resort has a very high interest in ecotourism development. This is because the Bodogol Resort, as a regional stakeholder, as Hakim et al. [16] mentioned, is directly responsible for management in the area in terms of area protection, preservation of biodiversity, and sustainable use. Bodogol Resort, in this case, is a representative of GGPNP and is obliged to empower the surrounding community in the context of efforts to preserve conservation areas with environmental services that can encourage an increase in community income so that the pressure of disturbance to the area is low. These efforts were made by coaching the surrounding communities. Other stakeholders with high-interest values are the FIB, PBPJWA-Jamaludin and BKH, who are residents of Bodogol village. These three stakeholders have a high interest because involvement in ecotourism activities at Bodogol Resort is an alternative source of income for this community group. The development of Hoya cultivation, which is a native/local plant of the GGPNP, is a community product with economic value.

The MNC Land Company has an interest level with high ecotourism development. This is in line with the tourism management plan for land integrated with natural tourism in the Bodogol Resort area. The MNC Land Company controlled most of the land outside the area to develop SEZs in buffer villages. Land ownership by the community is so small that most people cultivate MNC land. However, this is temporary if the MNC is going to use land and the community must have other business alternatives. Ecotourism development is one way to improve community welfare. The levels of influence of the 16 stakeholders identified in the research results are listed in Table 4.

Table 4. Stakeholder influence level in ecotourism development at Bodogol Resort.

No.	Stakeholder	Influence					Total
	Stakenolder		P2	Р3	P4	Р5	Total
1	Bodogol Resort - GGPNP	5	4	4	2	4	19
2	Department of Culture and Tourism of Bogor Regency	2	1	2	1	3	9
3	Department of Tourism of Sukabumi Regency	1	1	1	1	1	5
4	Watesjaya Village	1	1	2	1	2	7
5	Pasir Buncir Village	2	1	1	1	1	6
6	Benda Village	2	1	2	1	3	9
7	Pokdarwis Ciwaluh	4	1	3	1	4	13
8	PBPJWA-Jamaludin	3	2	2	1	3	11
9	Paguyuban Wangunjaya Bersatu	3	1	3	1	3	11
10	BKH	3	1	2	1	3	10
11	FIB	4	1	2	1	3	11
12	Volunteer TEPALA	3	1	2	1	3	10
13	Volunteer EAGLE	2	1	2	1	3	9
14	UT	2	2	3	1	3	11
15	CI Indonesia	3	3	2	3	4	15
16	MNC Land Company	3	2	3	2	3	13

Information: 5 = very high, 4 = high, 3 = high enough, 2 = low height, 1 = low, P1 = The ability of stakeholders to fight their aspirations, P2 = Contribution of facilities provided by stakeholders, P3 = Institutional capacity/human resources assigned by stakeholders, P4 = Stakeholder budget support used related to ecotourism development at Bodogol Resort, P5 = The ability of stakeholders to carry out ecotourism development at Bodogol Resort.

Table 4 shows that Bodogol Resort has the highest influence on ecotourism development. In accordance with the duties and functions of the organization, mandated in Law No. 5 of 1990 concerning the Conservation of Natural Resources and its Ecosystem, National Parks have the function of developing education that contains conservation/environment or ecotourism. Facility support for carrying out activities continues to be provided, although it is not optimal. In addition, the existence of PPKAB since 1998 has yet to boost a significant increase in visits, where one of the inhibiting factors is the difficulty of access to the location. CI Indonesia also has a high influence, whereas a partner of GGPNP supports ecotourism development efforts with a location at Bodogol Resort. The form of support carried out involves priority animal research and human resources and contributes to maintaining infrastructure facilities in supporting ecotourism activities. In addition, CI Indonesia also supports community empowerment carried out by forest farmer groups (KTH), Bodogol Kampung Hoya, by facilitating Hoya cultivation. Ecotourism training was then conducted at Paguyuban Wangunjaya Bersatu, especially on how to receive tourist visits. The numerous limitations in the development of nature tourism have resulted in improper management of nature tourism efforts [17]. To overcome these limitations, especially in the local community, local tourism stakeholders are empowered through participation in the development process [18].

Regarding the MNC area directly adjacent to GGPNP, especially Bodogol Resort, GGPNP is a general asset with its charm as an essential potential to support natural tourism development. The entrance to the GGPNP location is through the MNC road, where the two stakeholders considerably influence each other. However, on the other hand, if the two stakeholders do not collaborate, it can also affect the insistence on the sustainability of the GGPNP area. Good collaboration between the two stakeholders creates a new color in the development of ecotourism. Several other stakeholders, such as the Department of Culture and Tourism of Bogor Regency and the Department of Tourism of Sukabumi Regency, in their main duties and functions, have authority in tourism affairs but have yet to influence the development of ecotourism at Bodogol Resort. This is because of the perception of regional restrictions and budget constraints, so it has yet to make a major contribution other than training. In addition, these two local government agencies lack information about ecotourism development activities at Bodogol Resort, so their roles and involvement are lacking. It is necessary to improve communication, coordination, and cooperation between these two stakeholders. Stakeholder mapping also involves creating a matrix utilizing a stakeholder grid to compare the number of interest levels and influence of each stakeholder. Siregar [19] asserts that it is important to take into account the fact that the stakeholder influence and interest matrices are subject to alter at any time. The stakeholder interest and influence matrix (Figure 4) presents quantitative data on stakeholder interests and influence.

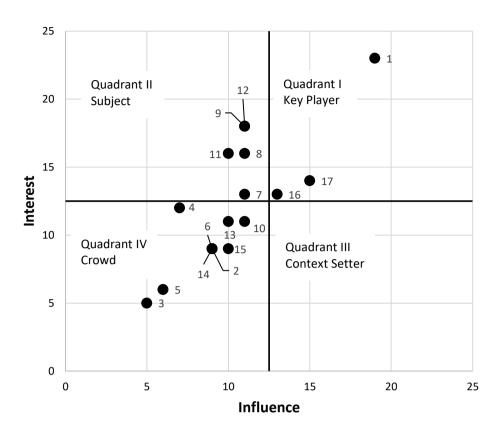


Figure 4. Quadrant matrix of interest and influence. Information: 1. Bodogol Resort, 2. Department of Culture and Tourism of Bogor Regency, 3. Department of Culture and Tourism, Sukabumi Regency, 4. Wates Jaya Village, 5. Pasir Buncir Village, 6. Benda Village, 7. Pokdarwis Ciwaluh, 8. PBJWA-Jamaludin, 9. Paguyuban Wangun, Jaya Bersatu, 10. BKH, 11. FIB, 12. Volunteer TEPALA, 13. Volunteer EAGLE, 14. UT, 15. CI Indonesia, 16. MNC Land Company.

Key player (High Interest-High Influence)

The stakeholders in this quadrant are the most important because they have a strong stake in and may affect management success [20]. Managers with legal power always maintain a position as the primary stakeholder in any natural resource management activity [16,21]. The results also show that Bodogol Resort, as a manager and regional stakeholder, has the greatest interest and influence. Effective interaction between managers and regional stakeholders can be achieved through open communication, stakeholder engagement, and understanding stakeholder needs. By establishing shared goals, resolving conflicts, and emphasizing mutual benefits, collaboration can be fostered to maximize the interests of all parties involved in the development of ecotourism [22].

Bodogol Resort, as the smallest management at the site level of the GGPNP, has higher authority and influence than other stakeholders so it has the highest value of influence and interest. The MNC Land Company collaborates with the GGPNP with locations in Bodogol Resort and its surroundings through collaboration agreement No. PKS.2579/BBTNGGP/KBTU/KS/12/2016 of 2016, which is currently being extended. Through this collaboration, the MNC has contributed, especially in PPKAB, by building prayer rooms and repairing interpretation lines, table chairs, interpreter uniforms, and toilets. The MNC is in the process of applying for PBPSWA and is already in the final stage; later, PBPSWA will be integrated with artificial tourism in the Lido SEZ.

CI Indonesia, which has now changed to Yayasan Konservasi Indonesia (YKI) in April 2022, is one of the founders of PPKAB, together with GGPNP and the Mitra Alam Foundation. At the beginning of the establishment of PPKAB, this stakeholder contributed to building dormitories and the Bodogol Research Station and assigned staff to assist in the management of PPKAB. However, YKI's role in developing ecotourism in Bodogol, especially PPKAB, has decreased. The contribution and role of key players are greater than those of other stakeholders because they have funding[5] that supports ecotourism at Bodogol Resort.

Subject (High Interest-Low Influence)

PBPJWA-Jamaludin, FIB, BKH, Wates Jaya Village, Pokdarwis Ciwaluh, and BKH are examples of themes with strong interest but limited influence. Because of the benefits from increased welfare in the form of alternate revenue from ecotourism, these stakeholders have high interest values. The village head of Wates Jaya is in the midst of filing an application for the PBPJWA. Pokdarwis Ciwaluh is also in the midst of putting out a proposal to PBPJWA via representatives of its members to get heavily involved in promoting ecotourism at Bodogol Resort, which works in tandem with the village's already-operating tourism. Meanwhile, PBPJWA-Jamaludin, BKH and FIB have already been directly involved. Based on a study by Alviya et al. [23], parties falling under the topic category typically do so because of inadequate resource capacity, lack of human resources, or something else not explicitly mentioned in the management's primary responsibilities.

Crowd (Low Interest-Low Influence)

There is little interest in or power held by the tourism departments for the Sukabumi Regency and Bogor Regency. The two government organizations ought to be powerful. The primary responsibility of the Bogor Regency Department of Culture and Tourism is to support regents in managing government issues in the areas of culture, tourism, and assistance. Government affairs in the tourism sector are the responsibility of the Department of Culture, as per the Sukabumi Regency Regional Regulation No. 7 of 2021. This is due to the fact that the local administration believes it has no jurisdiction over the Bodogol Resort area, which is under the jurisdiction of the central government. This type of sectoral ego must be crushed [24].

Santoso et al. [14] explain the idea that tourism development is a collaborative effort requiring the cooperation of all stakeholders is put forth by those involved in the development of natural tourism in conservation zones. However, the Bodogol Resort's information and participation through the GGPNP are similar for local government stakeholders. Applications for PBPJWA are being made by other stakeholders, including Paguyuban Wangunjaya, a resident of Pasir Buncir Village, through representatives of its members. Since its founding, the organization has concentrated on managing natural tourism in the area, as suggested by the PBPJWA. However, this stakeholder does not participate in regular tourism management activities because a permit has not yet been provided. The programs offered by Benda Village and Pasir Buncir Village include the development of ecotourism.

This may be because of financing. Financial support is a key factor for the development and sustainability of local tourism initiatives. Local tourism can receive financial support from sources such as government funding, international aid, public-private partnerships, tourism taxes, grants, crowdfunding, and financial institutions [25]. But it is not easy, challenges in obtaining funding for local tourism include limited access to capital, competition for resources, uncertain returns, seasonal cash flow, lack of awareness, regulatory hurdles, and sustainability concerns. Another way is to combat corruption and lobbying forces [26].

Relationship of the Stakeholders

The relationships among the stakeholders are explained in Table 5. Riani [27] mentioned that relationships between stakeholders can be divided into communication relationships (1), coordination (2), and cooperation (3). From the results of the analysis, 46 relationships between stakeholders were obtained from 120 potential relationships, consisting of 17 communications, 26 coordination, and three cooperation. This shows that the level of the relationship between stakeholders is low. Bodogol Resort was the most active participant, interacting with thirteen other parties. On the other hand, the Sukabumi Regency's Department of Tourism interacts the least with other stakeholders. This is due to the fact that the majority of ecotourism, which is now operating, is found in the Bogor Regency's administrative region. Likewise, the Sukabumi Regency's Department of Tourism did not obtain any information regarding ecotourism at Bodogol Resort. Although communication between the Bodogol Resort and Bogor Regency Department of Culture and Tourism has increased, it is still not very intense. Alikodra [28] asserted that implementing coordination-integration-synchronization (KIS) to create a sustainable environmental region and prioritize community-enhancing methods is essential to boosting stakeholder performance in ecotourism management [29].

The matrix (Table 5) explains the patterns of these relationships. This pattern is crucial for understanding because each stakeholder has a different interest in the development of ecotourism. Some behaviors include environmental conservation, community engagement, economic benefits, cultural preservation, and long-term viability [30]. The attitudes and behaviors of ecotourists directly impact the sustainability of ecotourism initiatives. By promoting environmentally responsible practices, supporting local communities, preserving cultural heritage, and advocating sustainable tourism development, ecotourists can contribute to the natural conservation and resources of culture and the overall success of sustainable ecotourism.

Collaborative efforts among stakeholders to promote sustainable ecotourism can lead to a win-win situation that benefits the environment and local livelihoods. Key factors for success include effective partnerships, inclusive decision making, and shared responsibility. By working together towards a common goal, ecotourism initiatives can have a lasting and positive impact on local communities, ensuring mutual benefits for all involved parties [29]. Fostering dialogue, cooperation, and mutual understanding between conservation and livelihood stakeholders are key to establishing a harmonious connection that promotes environmental sustainability and community well-being. Balancing the needs for conservation with those of local livelihoods is crucial for ensuring long-term success and resilience in conservation efforts.

Table 5. Matrix of stakeholder relationships.

ID	Bodogol Resort Dept. of Culture and Tourism of Bogor Regency Dept. of Culture and Tourism of Sukabumi Regency Watesjaya Village Pasir Buncir Village Benda Village Pokdarwis Ciwaluh PBPJWA Jamaludin Paguyuban Wangunjaya Bersatu BKH FIB Volunteer TEPALA Volunteer EAGLE UT CI Indonesia
Bodogol Resort	2 - 2 2 2 2 2 2 2 2 2 2 3 3
Department of Culture and Tourism of Bogor Regency Department of Culture and Tourism of Sukabumi Regency	_ 2 2 2 - 2
Watesjaya Village	
Pasir Buncir Village	2 1
Benda Village	2 1 1
Pokdarwis Ciwaluh	1 3 - 2
PBPJWA Jamaludin	- 2 2 1 2
Wangunjaya	2 -
ВКН	2 1 2 2
FIB	1 1 - 1 2
TEPALA	1 - 1 1
EAGLE	- 1 1
UT	-
CI Indonesia	1
MNC	

Conclusions

According to the findings, 16 parties played a direct or indirect role in the growth of ecotourism at the Bodogol Resort. These parties include communities, governmental organizations, private industry, academic institutions, and NGOs. Three stakeholders were significant players, five were subjects, and eight were crowds, according to the matrix of interests and influences. This suggests that stakeholders did not have the best possible role to perform. The matrix analysis of the relationships among stakeholders yielded data indicating a lack of coordination, cooperation, and communication. Schemes for collaboration that designate one stakeholder as the leader among key players to improve synergy and cooperation are only project-oriented and necessary to break down sectoral egos.

Author Contributions

TT: Conceptualization, Methodology, Investigation, Writing - Review & Editing; **RS**: Conceptualization, Methodology, Supervision; **TS**: Conceptualization, Methodology, Supervision.

Conflicts of Interest

There are no conflicts to declare.

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References

- 1. BBTNGGP (Balai Besar Taman Nasional Gunung Gede Pangrango). *Laporan Statistik Balai Besar Taman Nasional Gunung Gede Pangango*; BBTNGGP and Ministry of Environment and Forestry Republic of Indonesia: Cianjur, Indonesia, 2021.
- 2. Indonesian Government. Government Regulation Number 5 of 1990 Concerning Conservation of Natural Resources and Its Ecosystem. Available online: https://peraturan.bpk.go.id/Details/46710/uu-no-5-tahun-1990 (accessed on 5 January 2024).
- 3. Indonesian Government. Government Regulation Number 69 of 2021 Concerning SEZ Lido. Available online: https://peraturan.bpk.go.id/Details/171100/pp-no-69-tahun-2021 (accessed on 5 January 2024).
- 4. Fairuza, M. Kolaborasi antar *stakeholder* dalam pembangunan inklusif pada sektor pariwisata (Studi kasus wisata Pulau Merah di Kabupaten Banyuwangi). *Kebijak. Dan Manaj. Publik* **2017**, *5*, 1–13.
- 5. Haryoso, A.; Hidayati, S.; Kurniawan, S.; Al Manar, P.; Sandra, E.; Zuhud, E.A.M. Stakeholders role for developing sustainable utilization of sugar palm in Kekait Village, West Lombok, West Nusa Tenggara. *Media Konserv.* **2021**, *26*, 208–216, doi:10.29244/medkon.26.3.208-216.
- 6. Paramitha, N.; Manik, Y.; Halog, A. Identification, characterization and stakeholder analysis of ecotourism destinations in Lake Toba area. *Int. J. Tour. Hosp. Asia Pasific* **2019**, *2*, 1–7, doi:10.32535/ijthap. v2i1.355.
- 7. Yuliani, S.; Humsona, R.; Pranawa, S. Stakeholder analysis in community-based ecotourism development in Gedong Pass. In Proceedings of the Third International Conference on Social Transformation, Community and Sustainable Development (ICSTCSD 2019), Purwokerto, Indonesia, 6–8 August 2019.
- 8. Widodo. Metodologi Penelitian Populer dan Praktis; PT Raja Grafindo Persada: Jakarta, Indonesia, 2017.
- 9. Abbas, R. Mekanisme Perencanaan Partisipasi Stakeholder Taman Nasional Gunung Rinjani. Dissertation, Institut Pertanian Bogor, Bogor, 2005.
- 10. Reed, M.S.; Graves, A.; Dandy, N.; Posthumus, H.; Hubacek, K.; Morris, J.; Prell, C.; Quinn, C.H.; Stringer, L.C. Who's in and why? A typology of stakeholder analysis methods for natural resource management. *J. Environ. Manage.* **2009**, *90*, 1933–1949.
- 11. Ackermann, F.; Eden, C. Strategic management of stakeholders: Theory and practice. *Long Range Plan* **2011**, *44*, 179–196, doi:10.1016/j.lrp.2010.08.001.
- 12. Mahfud, M.; Haryono, B.; Anggraeni, N. Peran dan koordinasi stakeholder dalam pengembangan kawasan minapolitan di Kecamatan Nglegok, Kabupaten Blitar. *JAP* **2015**, *3*, 2070–2076.
- 13. Bryson, J. What to do when stakeholders matter. Public Manag. Rev. 2004, 6, 21–53.
- 14. Santoso, H.; Muntasib, E.K.S.H.; Kartodihardjo, H.; Soekmadi, R. Peranan dan Kebutuhan pemangku kepentingan dalam tata kelola pariwisata di Taman Nasional Bunaken, Sulawesi Utara. *J. Penelit. Sos. Dan Ekon. Kehutan.* **2015**, *12*, 197–211, doi:10.20886/jsek.2015.12.3.197-211.

- 15. Sethy, M.K.; Senapati, A.K. Perceptions towards ecotourism practice and the willingness to pay: Evidence from Chilika coastal wetland ecosystem, Odisha. *Int. J. Geoheritage Parks* **2023**, 11, 497–513.
- 16. Hakim, G.H.; Sunarminto, T.; Santoso, N. Optimization of the roles of stakeholders in the development of Samares Ecotourism in Biak Numfor Regency. *Media Konserv.* **2021**, *25*, 194–202, doi:10.29244/medkon.25.3.194-202.
- 17. Mallick, S.K.; Rudra, S.; Samanta, R. Sustainable ecotourism development using SWOT and QSPM approach: A study on Rameswaram, Tamil Nadu. *Int. J. Geoheritage Parks* **2020**, *8*, 185–193.
- 18. Shafieisabet, N.; Haratifard, S. The Empowerment of local tourism stakeholders and their perceived environmental effects for participation in sustainable development of tourism. *J. Hosp. Tour. Manag.* **2020**, *45*, 486–498.
- 19. Siregar, M. Peranan Stakeholders terhadap Pengembangan Ekowisata di Taman Nasional Teluk Cenderawasih Kabupaten Teluk Wondama Provinsi Papua Barat. Thesis, Institut Pertanian Bogor, Bogor, 2011
- 20. Widodo, M.L.; Soekmadi, R.; Arifin, H.S. Analisis stakeholders dalam pengembangan ekowisata di Taman Nasional Betung Kerihun Kabupaten Kapuas Hulu. *J. Pengelolaan Sumberd. Alam Dan Lingkung.* **2018**, *8*, 55–61, doi:10.29244/jpsl.8.1.55-61.
- 21. Sukristiyono; Purwanto, R.H.; Suryatmojo, H.; Sumardi. Stakeholder analysis on Sungai Wain Protected Forest management in Balikpapan City, East Kalimantan Province. *J. Sylva Lestari* **2021**, *9*, 252–268.
- 22. Chen, F.; Liu, J.; Wu, J.; Sjafrie, N.D.M.; Rahmadi, P.; Putranto, R.Y. Measuring the relationship among stakeholders from value-satisfaction-demand in the development of ecotourism of marine park. *Mar. Policy* **2021**, *129*, 104519.
- 23. Alviya, I.; Suryandari, E.; Maryani, R.; Muttaqin, M. Meningkatkan peran pemangku kepentingan dalam pengelolaan wilayah hulu Daerah Aliran Sungai Ciliwung. *J. Penelit. Sos. Dan Ekon. Kehutan.* **2016**, *13*, 121–134.
- 24. Hidayah, N.A.; Hutagalung, S.S.; Hermawan, D. Analisis peran *stakeholder* dalam pengembangan wisata talang air peninggalan kolonial Belanda di Kelurahan Pajaresuk Kabupaten Pringsewu. *J. Ilmu Adm. Publik* **2019**, *7*, 55–71, doi:10.31289/ publika.v7i1.2179.
- 25. Lee, J.; Choi, H.O. Stakeholders' views on reducing financial support in government-led ecotourism areas. *Ocean Coast. Manag.* **2017**, *144*, 7–15.
- 26. Heshmati, M.; Gheitury, M.; Shadfar, S. Factors Affecting possibility of ecotourism development and sustaining natural resources using SWOT approach in West Iran. *Int. J. Geoheritage Parks* **2022**, *10*, 173–183.
- 27. Riani, W.M. Mekanisme Hubungan Para Pihak dalam Pengelolaan Wisata Alam di Kota Bandar Lampung dan Sekitarnya, Provinsi Lampung. Undergraduate Thesis, Institut Pertanian Bogor, Bogor, Indonesia, 2012.
- 28. Alikodra, H. Model Pembangunan Kepariwisataan Berbasis Ekowisata; IPB Press: Bogor, ID, 2019;
- 29. Samal, R.; Dash, M. Ecotourism, biodiversity conservation and livelihoods: Understanding the convergence and divergence. *Int. J. Geoheritage Parks* **2023**, *11*, 1–20.
- 30. Alarcón-del-Amo, M.C.; Lorenzo-Romero, C.; Crespo-Jareño, J.A. Heterogeneous attitudes and behaviors in relation to participation in the ecotourism: Do customer segments play a role?. *Heliyon* **2023**, *9*, 1–10, doi:10.1016/j.heliyon.2023.e17930.