Understanding the Drivers and Barriers of Community Participation in Green Tourism Development: A Qualitative Study of Kahayya Tourist Village, Indonesia

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ABSTRACT:

This study examines the driving and restraining factors influencing community participation in green tourism development in Kahayya Village, Bulukumba Regency, South Sulawesi, Indonesia, an emerging rural destination characterized by strong ecological assets such as coffee agroforestry systems, natural landscapes, and conservation-based tourism resources. Employing a qualitative research design supported by NVivo 15 software, data were collected through in-depth interviews, direct observation, and documentation involving eight categories of purposively selected informants. The analysis followed a systematic thematic approach through open, axial, and selective coding, with outputs visualized using word frequency queries, hierarchy charts, and coding-by-person matrices to uncover patterns of participation and their determining factors. The findings indicate that driving forces are distributed across six principal themes, with Government and External Party Support emerging as the most dominant, followed by Collaboration and Partnership and Economic Opportunities and Welfare Enhancement. Additional supporting factors include Natural Potential and Agritourism, Social and Cultural Motivational Factors, and Community Awareness and Initiative. Conversely, restraining factors are heavily dominated by Resource Limitations and Local Capacity constraints, representing the majority of coding references, with infrastructure identified as the most critical sub-theme. Community participation in Kahayya reflects diverse typologies, ranging from self-mobilization in creative and economic initiatives to more limited involvement in waste management and institutional governance. This study offers empirical contributions from an underrepresented rural ecotourism context in Eastern Indonesia and demonstrates the value of integrating NVivo-assisted thematic analysis with participatory typology mapping to systematically capture the

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complex dynamics shaping community participation in green tourism development..

Keywords: Green Tourism; Community Participation; Community-Based Tourism; Tourism Village; Sustainable Tourism; NVivo.

1. Introduction

Kahayya Village, located in Bulukumba Regency, South Sulawesi, Indonesia, possesses significant ecological and landscape potential for the development of conservation-based green tourism. The area is characterized by diverse natural and agro-ecological resources, including Donggia Peak, the Balantieng River, Lurayya Lake, extensive organic coffee plantations, and protected forest areas. These environmental assets provide opportunities to integrate nature-based tourism, environmental education, and agro-ecotourism activities within a sustainable tourism framework (Riswandi, 2023; Muhtasom et al., 2019; Wahyuni, 2020). Unregulated human activities in ecologically fragile areas can cause irreversible changes to ecological processes, including degradation of natural resources, vegetation structure, and decreasing upstream water flow, which makes careful tourism planning in Kahayya particularly critical. Ecologically, Kahayya also functions as an important upstream water catchment area that contributes to freshwater supply and microclimate regulation in the surrounding region. Forests help maintain high water quality, influence the volume of available water, and regulate surface and groundwater flows, while also performing important buffering functions such as cooling effects, interception of precipitation, and water infiltration and retention, functions that collectively contribute to microclimate regulation in surrounding areas (Wagner, 2026). Consequently, tourism development in the area must be aligned with conservation principles and long-term environmental sustainability. Collaborative action and engagement of local communities, with a focus on long-term environmental action, are widely seen as essential for sustainable nature-based tourism, particularly in areas where biodiversity richness and quality are at risk of gradual degradation (Torsney, O'Driscoll and Buckley, 2025). The core principles of ecotourism, that it is nature-based, low-impact, contributes to conservation, involves learning, is culturally appropriate, and benefits local people, provide a normative foundation for evaluating tourism initiatives in ecologically sensitive areas (Miller, Cox and Morse, 2023). The challenge of handling conservation and livelihood simultaneously has been central to sustainable development debates since the 1980s, and more recently tourism has been integrated into the sustainable livelihood model as a mechanism for addressing both livelihood improvement and ecological preservation (Woyesa and Kumar, 2021).

However, the success of green tourism development is not determined solely by the availability of natural resources but also by the extent of local community participation. Within the sustainable tourism framework, local communities are increasingly recognized as key actors whose involvement significantly influences the effectiveness, legitimacy, and sustainability of tourism initiatives (Fong and Lo, 2022; Jin, Takao and Yabuta, 2022; Puig-cabrera, 2025). Previous studies highlight that community participation can enhance environmental stewardship, strengthen social legitimacy, and promote a more equitable distribution of tourism benefits (Pretty, 1995; Tosun, 2006). Ecotourism promotes the fair and equitable sharing of available opportunities among local people to ensure social equity, sustainable economic prosperity, and tourism sustainability, with immediate economic benefits including job creation in various tourism-related enterprises and improved household incomes (Tiwari and Nguyen, 2024; Ativetin, 2025). Empirical evidence confirms that enhanced community participation contributes to ecotourism development, which in turn

promotes sustainable tourism development, while community participation itself is consistently identified as the weakest link in the development chain in many developing countries (Dündar and Karacaer, 2024). The ultimate idea of community-based ecotourism is sustainable development, wherein key stakeholder's participation in decision-making, involvement and control over resources, and dissemination of knowledge and awareness among visitors are the primary focuses (Kunjuraman, Hussin and Aziz, 2022). Key constraints on community gains include inequitable benefit-sharing mechanisms, seasonal fluctuations in tourism income that undermine livelihood stability, and the dominance of external capital that can marginalize local stakeholders (Yan *et al.*, 2025). Community-based tourism ensures revenue remains within the community and provides livelihoods beyond traditional agriculture, improving resilience (Jackson, 2025).

Despite these insights, the implementation of community-based tourism frequently encounters structural and institutional challenges. In Kahayya Village, constraints such as limited infrastructure, insufficient human resource capacity, and weak coordination among stakeholders remain significant barriers (Wahyuni, 2020; Sannu *et al.*, 2021). A systematic analysis of community participation in developing countries reveals that constraints can be categorized into three main groups: operational (lack of access to information, lack of efficient decision-making structures, lack of knowledge), structural (weak community development, lack of budget, and unsuitable governance), and cultural (historical mistrust, power disparities, and unequal distribution of costs and benefits) (Reindrawati, 2023). In the Indonesian context specifically, limits to local community involvement stem from limited information availability, centralized tourism management, lack of coordination among stakeholders, and a limited number of trained human resources (Kia, 2021). Rural tourism development in Indonesia is further hampered by knowledge and skill barriers among local communities, difficulties in communicating with different stakeholders, and limited community awareness about maintaining resource sustainability (Utami, Dhewanto and Lestari, 2023). Multiple studies document persistent barriers in Indonesian rural tourism development including inadequate planning, weak leadership, lack of directional clarity, diverging aspirations among residents, and infrastructure deficits, all of which often lead to compromised landscape quality and unrealized economic benefits (Ariyani et al., 2025). Community participation is therefore shaped by an interaction between driving and restraining factors, including economic opportunities from coffee-based agro-tourism, environmental awareness among residents, and social support, as well as limitations in information access, managerial capacity, and tourism-supporting infrastructure. Limited community capacity and tourism management skills, poor marketing and infrastructure, weak institutional governance, and regulatory gaps are widely documented as threats to effective community-based tourism implementation (Bayoumy, 2025; Gayo, Katonge and Katonge, 2025). Research on green tourism practices in Indonesia has similarly identified poor infrastructure, inconsistent policy enforcement, and limited public knowledge as persistent challenges to sustainable community engagement (Islahuddin & Ismail, 2024).

Although previous studies have examined the ecological functions, coffee economy, and tourism potential of Kahayya, research addressing the social dynamics of community participation within an integrated green tourism framework remains limited. Literature reveals that local communities have frequently not been actively participating in planning and decision-making processes regarding ecotourism development, partly due to the adoption of Western-centric participation frameworks and a lack of necessary skills that may not suit local contexts (Gumede and Nzama, 2021). Centralized administrations in developing countries can further limit community participation, and the lack of local involvement in ecotourism development has in numerous cases hindered the industry's sustainability (Tiwari and

Marahatta, 2024). Local communities have shown a strong positive disposition toward contributing to ecotourism, motivated by expectations of employment, cultural promotion, and improved infrastructure, yet this readiness is frequently not matched by adequate governmental action in formulating participatory policies and building local capacities (Tiwari and Marahatta, 2024). Community-based ecotourism in developing countries is increasingly recognized as an environmentally sensitive initiative managed by destination communities with stakeholder support, yet incorporating a sustainable livelihood framework into such development remains analytically underexplored (Kunjuraman, 2024). Therefore, this study aims to examine the driving and restraining factors influencing community participation in the development of conservation-based green tourism in Kahayya Village, Indonesia.

2. Theoretical Background

2.1 Sustainable Tourism and Green Tourism

The concept of sustainable tourism originates from the broader framework of sustainable development introduced by the World Commission on Environment and Development, which defines sustainability as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (United Nations, 1987). In the tourism context, the United Nations World Tourism Organization defines sustainable tourism as tourism development that fully considers current and future economic, social, and environmental impacts while addressing the needs of visitors, the tourism industry, the environment, and host communities (UNWTO, 2013). This perspective positions sustainable tourism as a guiding paradigm that integrates environmental protection, social equity, and economic viability in tourism development (Butler, 1999; Sharpley, 2009).

Green tourism can be understood as a more operational dimension of sustainable tourism that emphasizes environmentally responsible practices at the destination level. According to Ralf Buckley and David Weaver, green tourism focuses on biodiversity conservation, efficient use of natural resources, responsible waste management, and the reduction of environmental impacts associated with tourism activities (Buckley, 2014; Weaver, 2006). While sustainable tourism incorporates environmental, social, and economic dimensions simultaneously, green tourism places stronger emphasis on environmental integrity as the foundation for long-term tourism sustainability.

In rural destinations where natural landscapes and ecological resources constitute the primary tourism attraction, the adoption of green tourism principles becomes particularly important. Environmental degradation would directly undermine the sustainability of tourism itself, making environmental conservation a fundamental requirement for long-term destination viability (Sharpley, 2009; Buckley, 2011).

2.2. Community-Based Tourism

Community participation is widely recognized as a fundamental component of sustainable tourism development. Participation refers to the involvement of local communities in decision-making processes, planning activities, and the management of tourism resources that directly affect their livelihoods and environment.

Jules Pretty classifies participation into several levels ranging from passive participation, where communities are merely informed about development initiatives, to self-mobilization, where communities independently initiate and manage development activities (Pretty, 1995). Higher levels of participation indicate greater community control and empowerment in development processes.

However, participation is often influenced by structural conditions that shape the ability of communities to engage in tourism governance. Cevat Tosun argues that community participation in tourism development is frequently constrained by factors such as unequal power relations, limited institutional capacity, and restricted access to information (Tosun, 2006). In many cases, communities are formally involved in tourism programs but possess limited influence over

actual decision-making processes. As a result, participation may become symbolic rather than substantive.

2.3. Community Participation in Tourism Development

Despite its normative centrality in sustainable tourism discourse, community participation is often constrained by a range of structural, institutional, and cultural factors that limit the ability of local actors to engage meaningfully in tourism development (Tosun, 2006; Puig-cabrera, 2025). Tosun (2006) conceptualises these constraints into three interrelated levels of participation barriers. At the operational level, barriers include inadequate infrastructure, limited financial resources, and restricted access to information and technology. At the structural level, constraints emerge from unequal power relations between local communities and external stakeholders, weak institutional arrangements, and the absence of supportive policy frameworks. At the cultural level, barriers are reflected in low levels of awareness and tourism-related knowledge, as well as social norms and attitudes that may discourage active involvement in formal development processes.

Building on this perspective, Pretty (1995) argues that community participation is further limited by structural inequalities in access to economic opportunities and decision-making power, particularly in developing and rural contexts. Local communities are often positioned at the periphery of tourism economies, with limited control over resources and benefits (Bayoumy, 2025). In rural destinations, these structural limitations may be intensified by contextual conditions such as geographical remoteness and limited economic diversification, which can indirectly constrain community capacity to engage in tourism activities.

Furthermore, Tosun (2006) cautions that in the absence of deliberate structural interventions, participation may remain largely symbolic rather than substantive—a condition referred to as *pseudo-participation*, where communities are formally involved in tourism initiatives but have little actual influence over decision-making processes and outcomes.

2.4. Driving and Restraining Factors of Community Participation

Building on the theoretical foundations above, this study applies Kurt Lewin's Force Field Analysis framework (Lewin, 1951) to examine the conditions shaping community participation in green tourism development in Kahayya Village. The framework views participation as a dynamic balance between driving forces that encourage participation and restraining forces that hinder it. The interaction between these forces determines the trajectory of green tourism development and highlights potential points for strategic intervention.

Four driving forces are identified: Natural Resources (coffee agroforestry, scenic landscapes, and biodiversity), Community Initiative (ecological awareness, entrepreneurship, and creative self-mobilization), Tourism Potential (government support, institutional partnerships, and local economic opportunities), and Social Cohesion (cultural heritage, gotong royong, and community identity reflected in events such as the Senandung Kopi Kahayya festival).

In contrast, four restraining forces are observed: Institutional Weakness (inactive BUMDes (Village Owned-Enterprise) and POKDARWIS (Tourism Awareness Group) and the absence of village tourism regulation), Knowledge Gaps (limited understanding of green tourism and lack of training), Infrastructure Limitations (road access, waste management, parking, internet connectivity, and capital), and Environmental Vulnerability (landslide risks, open waste burning, and unclear visitor carrying capacity).

The interaction of these forces results in varying levels of community participation, ranging from self-mobilization among innovative actors, consultative participation among most residents, to passive participation in institutionally dependent activities. This conceptual framework is illustrated in Figure 1 and serves as the analytical lens for interpreting the study's empirical findings.

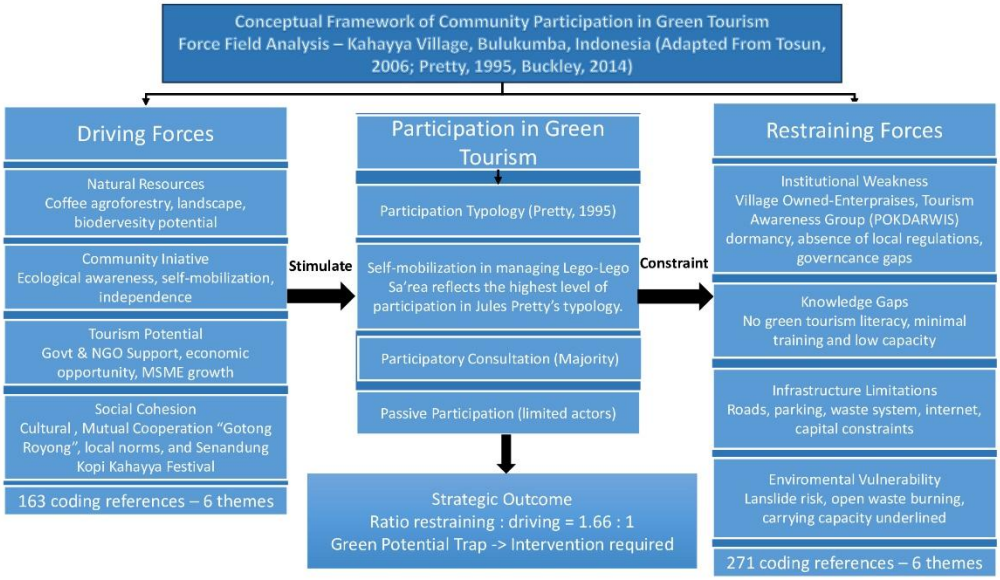


Figure 1 Conceptual Framework of Community Participation in Green Tourism, Kahayya Village. Adapted from (Tosun, 2006), (Pretty, 1995), (Lewin, 1951), and (Buckley, 2014).

Source 1 Author, 2026

2.5. Previous Studies and Research Gap

Previous studies on green tourism and community participation have primarily focused on identifying the forms or levels of participation and assessing the economic impacts generated by tourism development (Tasci et al., 2015; Scheyvens, 1999). While these studies provide important insights into the role of communities in tourism activities, relatively limited attention has been given to how structural conditions shape the degree and quality of participation in rural green tourism contexts.

In particular, the relationship between the distribution of tourism benefits and the level of community participation remains underexplored. Unequal access to tourism-related economic opportunities, resources, and decision-making processes may influence community motivation and willingness to participate in tourism development.

Furthermore, critical perspectives that examine participation through the lens of power relations and social justice are rarely applied empirically in village-level green tourism studies. Participation is often assumed to be inherently beneficial without sufficiently examining the structural inequalities that may constrain meaningful community involvement.

Therefore, this study aims to address this research gap by examining the driving and restraining factors influencing community participation in the development of green tourism in Kahayya Village. By integrating participation theory and community empowerment perspectives as the main analytical framework, this research explores the specific social and economic structures that determine how rural communities participate in green tourism.

3. Methods

3.1. Research Design and Location

This study adopts a descriptive qualitative approach to examine community participation in green tourism development in Kahayya Village, Bulukumba Regency, South Sulawesi, Indonesia. The qualitative design was selected for its capacity to explore community perceptions, motivations, and structural constraints in destination development (Creswell, 2018). NVivo 15 supported systematic analysis through open, axial, and selective coding, with word frequency queries and hierarchy charts used to map

thematic structures (Bazeley & Jackson, 2014). Field research was conducted from November 2025 to February 2026.

This is a research location map of Kahayya area, located in South Sulawesi, Indonesia (coordinates approximately 119°58'–120°3'E, 5°19'–5°23'S). The map displays a watershed boundary (light blue shaded area) with several research sample points marked in dark blue/olive colors, concentrated in the northern portion of the watershed. The road network includes arterial roads (red), other roads, local roads, and pathways, along with river systems shown in blue. See figure 2

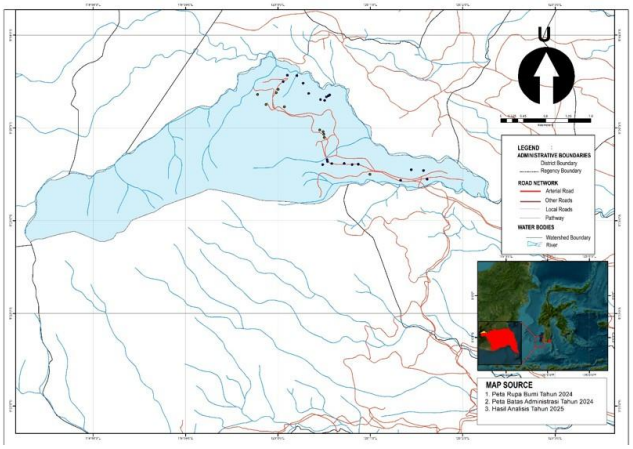


Figure 2 Research location map, Kahayya village, Bulukumba Regency, South Sulawesi

Source 2 Author, 2026

3.2. Data Collection and Informant Selection

Data were collected through three complementary techniques: in-depth interviews, direct field observation, and documentation. Informant selection was conducted using purposive sampling, complemented by snowball sampling terminated upon attainment of data saturation, yielding a total of 11 informants across eight categories: (1) Village Head; (2) Tourism Attraction Service Managers (Donggia and Lego-Lego Sa'rea); (3) Pokdarwis (Tourism Awareness Group) Chairperson; (4) Farmer Group representatives; (5) Homestay operators from Gamaccayya, Kahayya, and Tabbuakkang hamlets; (6) MSME operators; (7) BUMDes (Village-Owned Enterprise) Manager; and (8) Community figures. All informants provided informed consent for their identities and statements to be disclosed in academic publication. See Table 1 below.

Table 1 List of Key Informants

No	Informant Category	Code	Age	Education	Brief Description	Total
1.	Village Head	VH	57	Senior High School	Village head and primary policymaker overseeing tourism governance and POKDARWIS	1
2.	Tourism Attraction Service Managers	TASM-D (Donggia)	32	Bachelor of Agriculture	Manager of Donggia; nature-based tourism with limited green tourism training	2

No	Informant Category	Code	Age	Education	Brief Description	Total
1.	Village Head	VH	57	Senior High School	Village head and primary policymaker overseeing tourism governance and POKDARWIS	1
		TASM-L (Lego-Lego Sa'rea)	32	Bachelor of Education	Manager of Lego-Lego Sa'rea; community-based green entrepreneurship (eco-enzyme, English program)	
3.	POKDARWIS Chairperson (Tourism Awareness Group)	PK	28	Senior High School	Founder and chairperson since 2019; provides institutional memory	1
4.	Farmer Group Representatives	FG	42	Senior High School	Head of farmer group; 19 years experience; sustainable agriculture	1
5.	Homestay Operators	HO1 (Homestay Asmanda)	27	BSc Chemistry	Asmanda Homestay; near main attractions; commercially active	3
		HO2 (Homestay Lestari)	28	Bachelor of Social Science	Lestari Homestay; small–medium family-based operation	
		HO3 (Homestay Syurma)	25	Bachelor of Education	Syurma Homestay; peripheral location with limited visitor flow	
6.	MSME Operators	MSME	35	Senior High School	Micro-enterprise (crackers and camping rental) using local resources	1
7.	BUMDes Manager	BM	39	Senior High School	Director of village enterprise; revitalised after 7 years of inactivity	1

No	Informant Category	Code	Age	Education	Brief Description	Total
1.	Village Head	VH	57	Senior High School	Village head and primary policymaker overseeing tourism governance and POKDARWIS	1
8.	Community Figures	CF	70	Senior High School	Village imam; influences social values, norms, and community participation	1
Total						11

Interview Protocol: Semi-structured interviews lasting 45–90 minutes were conducted in Indonesian (Bahasa Indonesia) by the first author, a native speaker, ensuring natural and contextually accurate communication. The interview guide explored five thematic domains: (1) perceptions of tourism impacts on community welfare and the environment; (2) motivations for participation in green tourism development; (3) barriers and constraints encountered; (4) knowledge and practice of green tourism principles; and (5) suggestions for improvement. All interviews were audio-recorded with informant consent, then transcribed verbatim. All informants provided written informed consent for their identities and statements to be disclosed in academic publication.

3.3. Data Analysis

Data analysis in this study was conducted systematically to process and interpret qualitative data obtained from in-depth interviews in order to understand community participation in tourism development in Kahayya Village, including the identification of factors that encourage and hinder such participation. NVivo software was used as a supporting tool to assist in organizing, coding, and managing qualitative data in a structured manner, while the interpretation of findings remained the responsibility of the researcher (Bazeley and Jackson, 2014).

In-depth interviews were conducted in a structured manner using an interview guide developed based on the sustainable tourism indicators of the World Tourism Organization (UNTWO, 2013), covering social, economic, cultural, environmental, governance, and community participation dimensions (Creswell, 2009). This approach ensures data consistency and facilitates cross-informant comparison. The interview themes, objectives, and questions are presented in Table

Table 2 Interview Themes, Objectives, and Questions

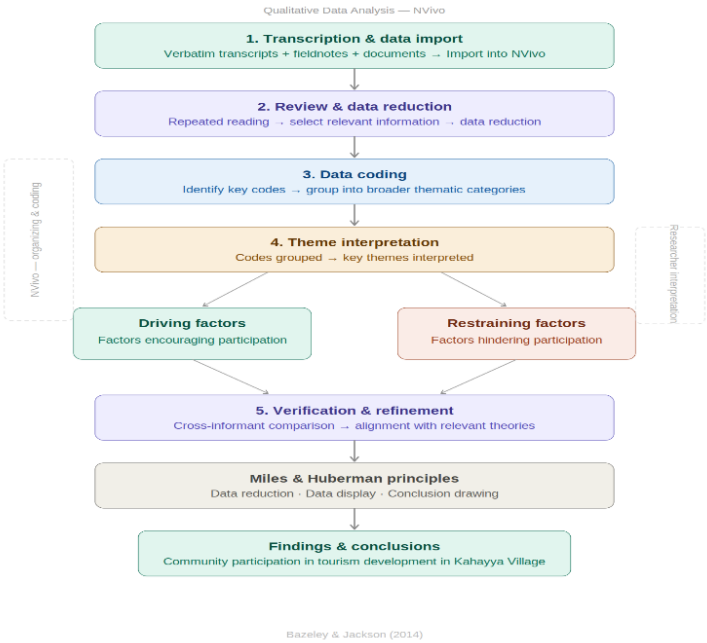
No	Theme	Objective	Interview Questions
1.	Understanding of Green Tourism	To identify community and stakeholder understanding of green tourism and its relevance to Kahayya Village	1. What do you understand by green tourism or sustainable tourism? 2. Has the Kahayya Village community understood the importance of environmental

No	Theme	Objective	Interview Questions
			conservation in tourism activities?
2.	Forms and Levels of Community Participation	To identify forms of community involvement in planning, implementation, and management of tourism activities	1. Since when have you been involved in village tourism development? 2. What contributions or activities have you undertaken in developing Kahayya Village tourism?
3.	Governance and Involvement in Decision-Making	To identify coordination mechanisms, collaboration, and community involvement in tourism-related decision-making	1. Are there meetings or deliberations discussing tourism development? 2. To what extent is the community involved in tourism-related decision-making?
4.	Green Tourism Practices and Utilization of Local Potential	To identify the application of environmentally friendly practices and use of local products in supporting green tourism	1. What activities are carried out to maintain cleanliness and environmental sustainability in the tourism area?
5.	Benefits and Impacts of Tourism	To identify social, economic, cultural, and environmental benefits and impacts felt by the community from tourism development	1. What local products have been or have the potential to be developed to support tourism activities?
6.	Driving and Inhibiting Factors of Community Participation	To identify factors that encourage or hinder community involvement in green tourism development	1. What is the current condition of infrastructure and tourism support facilities in Kahayya Village?
7.	Capacity, Support, and Development Needs	To identify human resource conditions, support received, and needs for strengthening community and institutional capacity	1. What form does the cooperation between your institution and other parties take in tourism development?
8.	Future Hopes and Development Strategies	To identify hopes, visions, and strategies needed to optimize community participation in green tourism development	1. What training or assistance is still needed to support green tourism development?

The data analysis followed several key stages as illustrated in Figure 3. The first stage involved transcription and data import, in which all in-depth interview data were transcribed verbatim to ensure accuracy, supplemented with fieldnotes, research documentation, and supporting

documents, before being imported into NVivo for structured management. The second stage comprised review and data reduction, where transcripts were reviewed repeatedly to select relevant information and reduce the data to what is analytically significant, consistent with the data reduction principle outlined by (Huberman et al., 2013). The third stage involved data coding, in which key codes were identified and grouped into broader thematic categories through the organizing and coding functions facilitated by NVivo. These codes were subsequently subjected to theme interpretation in the fourth stage, where grouped codes were interpreted to distinguish between driving factors, those encouraging community participation, and restraining factors, those hindering participation (Huberman et al., 2013). The fifth stage verified and refined findings through cross-informant comparison and theoretical alignment, following the interactive model proposed by (Huberman et al., 2013).

Figure 3 **Data Analysis Process**



3.4. Ethical Considerations

This study was conducted in compliance with the ethical standards of Hasanuddin University's Graduate School. Prior to fieldwork, formal institutional permission was obtained from Hasanuddin University through official letter No. 11329/UN4.1.27.1/PT.01.04/2025, addressed to the relevant government agencies in Bulukumba Regency. Subsequently, research permission was granted by the Investment and One-Stop Integrated Services Office (Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu/DPMPTSP) of Bulukumba Regency through letter No. 050/DPMPTSP/IP/I/2026, based on the technical recommendation of the National Unity and Politics Agency (Badan Kesatuan Bangsa dan Politik/Bakesbangpol) of Bulukumba Regency, No. 074/050/Bakesbangpol/I/2026. All informants were fully briefed on the purpose and scope of the research prior to participation. Written informed consent was obtained from all eleven informants, who voluntarily agreed to have their identities and statements disclosed in academic publication. No incentives were offered for participation, and informants were informed of their right to withdraw at any time without consequence.

3.5. Trustworthiness

The trustworthiness of this study was established through multiple strategies aligned with Creswell's (2018) four criteria of credibility, transferability, dependability, and confirmability. *Credibility* was ensured through triangulation of

data sources, drawing on eight distinct informant categories representing all major stakeholder groups, and triangulation of methods, combining in-depth interviews, direct field observation, and documentation review. Analytical credibility was further strengthened through systematic coding in NVivo 15, which produced independently verifiable coding trees, hierarchy charts, and word frequency analyses that served as a convergent validity check on thematic interpretations. Prolonged engagement with the research site throughout the data collection period additionally contributed to credibility. *Transferability* was supported through thick description of the research context, informant profiles, and site characteristics, enabling readers to assess the applicability of findings to comparable rural green tourism settings. *Dependability* was addressed through a transparent audit trail documented in NVivo 15, encompassing all coding decisions, node structures, and analytical outputs. *Confirmability* was maintained through reflexive awareness of the researcher's positionality as an external graduate researcher, ensuring that interpretations were grounded in informant data rather than prior assumptions. To further enhance credibility, informal member checking was conducted by sharing key interpretations and selected direct quotations with informant representatives, all of whom confirmed the accuracy of the reported statements (Mckim, 2023).

4. Findings / Results

4.1. Kahayya Tourism Village: Overview and Community Engagement

Kahayya Village is a highland destination characterised by coffee agroforestry, protected forests, and strong social solidarity. Tourism development has emerged predominantly from community initiatives rather than top-down intervention. Three main attractions; Puncak Donggia, Lego-Lego Sa'rea, and Danau Lurayya, were each developed through self-help community efforts, illustrating interactive participation (Pretty, 1995). Collaboration in infrastructure development through gotong royong practices and operational partnerships between attraction managers, BUMDes, and local MSMEs reinforces the role of social capital in sustaining tourism. Resource-based green entrepreneurship, including eco-enzyme production from organic waste at Lego-Lego Sa'rea and layered coffee agroforestry, further demonstrates circular economy principles at village scale.

4.2 Frequency Distribution: Driving and Restraining Forces

Thematic analysis using NVivo identified two main coding groups: driving factors (26 sub-codes; 163 references) and restraining factors (14 sub-codes; 271 references). The restraining-to-driving ratio of 1.66:1 is derived directly from the empirical data: 271 divided by 163 equals 1.66, indicating that inhibiting forces generated 66% more coding references than driving forces across all informant transcripts. In Force Field Analysis terms (Lewin, 1943), this ratio represents the quantitative disequilibrium between the two opposing force systems, a condition in which the current state of participation is held below its potential equilibrium point by the cumulative weight of unresolved structural barriers. This ratio should not be interpreted as evidence of community passivity or absence of motivation. Rather, it reflects the asymmetry between forces that are endogenous and self-sustaining, such as natural assets, social capital, and cultural identity, which require no external investment to persist, and forces that are structurally induced, including infrastructure deficits, governance gaps, and capacity limitations, which accumulate in the absence of deliberate intervention. The magnitude of the ratio further underscores the argument advanced by (Tosun, 2006) that in developing-country tourism contexts, structural and operational barriers tend to exhibit higher intensity and greater persistence than in developed-world settings, apnd that closing the participation gap requires systemic intervention rather than incremental adjustment. The distribution of driving forces is presented in Table 2 and restraining forces in Table 3.

Table 3 **Summary of Driving Forces (Total: 163 References)**

D#	Driving Factor	Ref.	Informant Sources	Top Sub-theme (Ref.)
D1	Government & External Support	39	11 of 11	Training & Technical Guidance (14)
D2	Economic Opportunities	24	10 of 11	Community Income Enhancement (9)
D3	Socio-Cultural Values & Motivation	22	9 of 11	Social Norms and Security (7)
D4	Natural & Agro-tourism Potential	22	11 of 11	Natural Beauty and Landscape (8)
D5	Collaboration & Partnerships	33	10 of 11	Networks with External Parties (8)
D6	Community Resilience	22	8 of 11	Environmental Conservation Awareness (9)
	Total	**163**		

Source 3 **NVivo 15 Analysis Output, 2026**

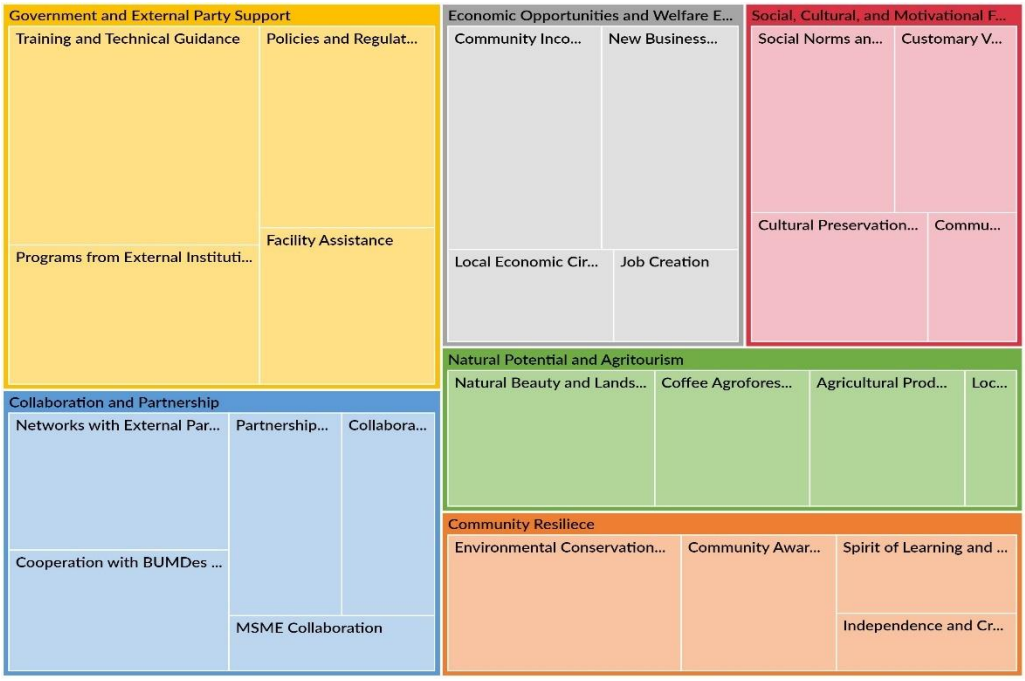


Figure 4 **NVivo 15 Hierarchy Chart: Distribution of Driving Forces by Coding References**

Source 4 **Authors, 2026**

Table 4 **Summary of Inhibiting Forces (Total: 271 References)**

I#	Inhibiting Factor	Ref.	Most Critical Sub-theme (Ref.)
I1	Resource Limitations	96	Infrastructure (54)
I2	Limited Participation & Capacity	96	Limited Community Participation (35)
I3	Environmental Vulnerability	34	Waste Management Issues (16)
I4	Institutional Capacity & Governance	31	POKDARWIS Dormancy (25)
I5	Inequitable Benefit Distribution	10	Geographic Inequality (6)
I6	Visitor Dynamics	4	Seasonality (4)
	Total	**271**	

Source 5 **NVivo 15 Analysis Output, 2026**

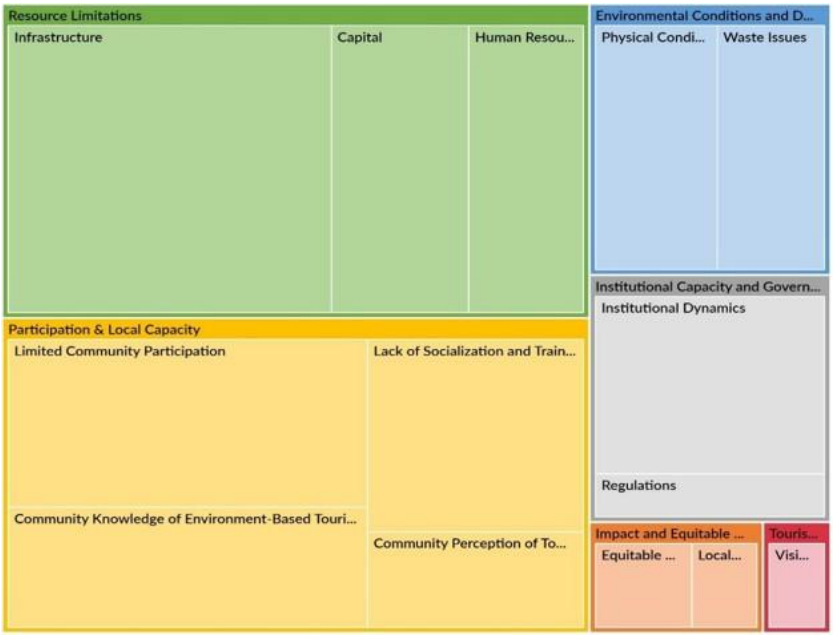


Figure 5 **NVivo 15 Hierarchy Chart: Distribution of Inhibiting Forces by Coding References**

Source 6 **Authors, 2026**

4.2.1. Word Frequency Analysis: Lexical Indicators of Dominant Themes

To supplement thematic coding, a Word Frequency Query was conducted in NVivo 15 on the full corpus of interview transcripts for each force category separately. The query was configured to extract the 1,000 highest-frequency terms with a minimum word length of 12 characters using exact-match criteria, filtering out common connective words and prioritising substantive, context-specific terminology. The resulting word clouds in which typographic size represents frequency, provide an independent lexical map of the discursive space occupied by

each concept, serving as a convergent validity check on the thematic coding outcomes.

Driving Forces — Word Frequency Profile

Figure 6 **Word Frequency Cloud — Driving Forces of Community Participation in Green Tourism, Kahayya Village**

Source 7 **Nvivo 15 Analysis, 2026**

The word frequency analysis of the driving forces corpus (Figure 6) reveals five terms with the highest occurrence, each appearing twice at a weighted percentage of 0.05%: *welfare*, *landscape*, *training*, *hospitality*, and *mentoring*. Although absolute frequencies are modest — a function of the exact-match parameter that treats each morphological variant as a distinct token — their co-occurrence across multiple independent informant accounts signals genuine thematic salience. The term *welfare* directly maps onto the Economic Opportunities theme (D2; 24 references), reflecting the pragmatic economic motivation that informants cited as a primary catalyst for participation. *Landscape* corresponds to the Natural and Agro-tourism Potential theme (D4; 22 references), confirming that the physical landscape and coffee agroforestry system are the most concretely recognised natural assets. *Training* and *mentoring* converge on the Government and External Support theme (D1; 39 references), the most dominant driving factor overall, and confirm that capacity-building is the primary modality through which external support is experienced by community members. Finally, *hospitality* maps onto the Socio-Cultural Values theme (D3; 22 references), reinforcing that community social capital, particularly the welcoming disposition toward visitors — functions as a structural competitive advantage that is difficult to replicate in other destinations. Collectively, the word frequency profile converges on three foundational axes of the driving force system: ecological assets, social capital, and institutionally mediated capacity development.

Restraining Forces — Word Frequency Profile

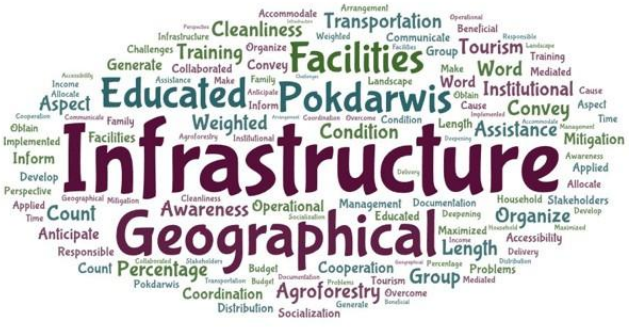


Figure 7 **Word Frequency Cloud — Restraining Forces of Community Participation in Green Tourism, Kahayya**

Source 8 **Nvivo 15 Analysis, 2026**

The word frequency analysis of the restraining forces corpus (Figure 7) yields a markedly more concentrated distribution than the driving forces profile. The term *infrastructure* dominates the entire corpus with 22 occurrences (0.19%) — a frequency more than three times higher than any other term — providing independent lexical confirmation that infrastructure deficit is not merely one barrier among many but the primary binding constraint experienced universally across all stakeholder categories. This lexical finding directly corroborates the highest coding reference count in the study: the Infrastructure sub-code under Resource Limitations (I1; 54 references; 10 of 11 informant sources). *Facilities* 7 occurrences; 0.06% extends the infrastructure concern to the operational layer of tourism amenities — parking, waste collection points, sanitation, and digital connectivity. *Educated* 4 occurrences; 0.04% indicates that human resource limitations are framed by informants primarily in terms of educational capacity and green tourism literacy, consistent with the Limited Participation and Capacity theme (I2; 96 references). *Pokdarwis* 4 occurrences; 0.04% reflects the prominence of institutional weakness in informant discourse, mapping directly onto the Institutional Capacity and Governance theme (I4; 31 references) and specifically the POKDARWIS dormancy sub-code (25 references). *Cleanliness* 3 occurrences; 0.03% points to waste management as a recurring environmental concern, aligning with the Environmental Vulnerability theme (I3; 34 references). Finally, *geographical* 2 occurrences; 0.02% and *transportation* 2 occurrences; 0.02% jointly capture the spatial dimension of participatory inequality experienced by residents of peripheral hamlets, linking to the Inequitable Benefit Distribution theme (I5; 10 references). The concentration of the restraining word frequency profile around a single dominant term — and its near-perfect alignment with the thematic coding hierarchy — provides robust convergent evidence that infrastructure constitutes the apex constraint requiring priority intervention.

4.3. Analysis of Driving Factors

4.3.1. Government and External Support (39 references)

This is the most dominant driving factor. Training from the Tourism Office changed concrete behaviours among homestay operators and managers. The Sulawesi Community Foundation (SCF) facilitated POKDARWIS formation and masterplan development, widely acknowledged as a turning point. Facility assistance such as waste bins and homestay equipment reinforced operational capacity. The village head confirmed plans for green tourism regulation, which would institutionalise these gains.

"It improved, right. In the early days, there were often trainings from the tourism office about homestay management. So after participating in the training, there was an improvement." (Interview, HO1, 2025)

"The homestay here [started] in 2022, ever since the tourism office established it and also held training about homestays at that time." (Interview, HO3, 2025)

"SCF bridged the village [and external parties], the formation of the tourism awareness group at that time, that is when I first realized that a tourism awareness group could be said to be the spearhead of a tourism village." (Interview, PK, 2025)

Nevertheless, the existing training has not yet touched upon the dimensions of green tourism. All informants who are homestay providers admitted that they have never received specific training on sustainable tourism, waste management, or energy efficiency.

"Yeah, regarding green tourism, it is not there yet, like how to manage waste, and other environmental aspects. So I think that is important." (Interview, HO1, 2025)

4.3.2. Economic Opportunities and Improved Welfare (24 references)

Economic motivation is the most pragmatic and universal driver. The village head noted tourism has "broadened the economic horizon" of the community. MSME actors organically developed their businesses through tourist interaction, with one operator successfully entering modern retail channels. BUMDes established a rotational agricultural procurement system, purchasing local produce equitably and managing a kiosk for MSME product display.

> "Previously, it was very difficult for the people of Kahayya to earn money. After their horizons broadened and they managed their land into a tourist attraction, thank God, there has been economic development for the community." (Interview, VH, 2025)

> "Since tourism started here, the impact has been extraordinary, especially for us here, as we are also one of the MSME actors; we also sell here. Meaning, with tourism here, our sales have increased significantly." (Interview, CF, 2025)

> "Thank God, it is connected. Because if there are visitors entering Donggia, and then the stock of goods there is sold out, the Donggia management contacts me again to supply my goods." (Interview, MSME, 2025)

4.3.3. Socio-Cultural Values and Motivational Factors (22 references)

The Songkabala tradition is a post-harvest community ritual expressing gratitude and solidarity, held annually as part of the Senandung Kopi Kahayya (SKK) event, which celebrates the community's coffee heritage and reinforces collective identity.

> "Here, we have an annual celebration called "*Songkabala*". This celebration is often held every year as part of a cultural performance for outsiders who come to visit here." (Interview, CF, 2025)

> "The local wisdom here, the traditions are still strong, like "*Barasanji*", which is showcased at Senandung Kopi Kahayya and Songkabala. So, outsiders who come are truly curious because this is indeed part of the community's life here." (Interview, HO1, 2025)

> "When the Tourism Office visited here, they said Kahayya has beautiful natural scenery. In their terms, if Gowa has Malino, Bulukumba has Kahayya." (Interview, HO3, 2025)

4.3.4. Natural Potential and Agrotourism (22 references)

Kahayya's coffee agroforestry system is recognized across informants as an authentic and ecological tourism asset. The Head of BUMDes explained the unique three-layer structure of the coffee forest, different from monoculture plantations as an agrotourism potential. The head of the farmer group supports transforming farming patterns to make the village worthy of being a comparative study destination.

> "Coffee has its advantages. Coffee can have up to three forest layers because there are protective plants, intercrops, and then the coffee plants. As a coffee-producing village with an agroforestry system, it is still interwoven, not just intercropping. We can organize and develop it." (Interview, BM, 2025)

> "Now, for example, it could become educational tourism. Actually, if we really want to take care of it, it is possible, like the place I visited recently in Malang. Even there, it is a coffee education site. So people go there for tourism, there are packages. Coffee tourism can cover pre-harvest and even post-harvest activities." (Interview, FG, 2025)

> "The agrotourism concept has been running since the inception of Kahayya coffee itself, ever since Kahayya coffee

first became known outside. Because the coffee farmers here, besides planting coffee, also plant protective trees." (Interview, PK, 2025)

4.3.5. Collaboration and Partnerships (33 references)

A collaborative ecosystem is beginning to form organically. Lego-Lego Sa'rea has built partnerships with the eco-enzyme community, integrated local agricultural products, and established an English class to prepare the next generation of local guides. The Pillow Crackers MSME has established a simple yet functional value chain with the Donggia management and BUMDes.

> "We have cooperation with eco-enzyme in Bulukumba; there's also a community there. It focuses more on waste recycling methods. There is something called an English class, so for children around Kahayya who want to learn English, we provide a tutor. Our hope is to prepare these children so that in the future they can become tourist guides." (Interview, TASM-L, 2025)

> "We have a culinary package. Our culinary package focuses on local food — produce we buy from residents. Even a pumpkin worth IDR 5,000, we still buy it." (Interview, TASM-L, 2025)

> So, for example, if I sell it for IDR 13,000, they (BUMDes) sell it for IDR 15,000 so there is a simple profit-sharing system we run together (Interview, MSME, 2025)

4.3.6. Community Resilience (22 references)

The community's ecological awareness has formed organically from the real need to face geographical vulnerabilities. POKDARWIS actively plants trees in landslide-prone areas. Farmer groups maintain organic farming practices that indirectly meet Starbucks' C.A.F.E. Practices standards. The manager of Lego-Lego Sa'rea implements an independent eco-enzyme system without support from government programs.

> "We in the tourism awareness group have carried out greening activities several times along landslide-prone areas. We have very often carried out tree planting activities like that." (Interview, PK, 2025)

> "90% [of farmers] do not use chemicals, for example pesticides, herbicides. Now prevention is more manual, so it's essentially natural agriculture here... because Starbucks wouldn't buy coffee in Kahayya if it didn't meet those criteria." (Interview, FG, 2025)

> "For organic waste, she has developed it into eco-enzyme. So there is a fermentation container, the fermentation product is later used as liquid fertilizer. Besides that, eco-enzyme can also be used as an air freshener in toilets." (Interview, TASM-L, 2025)

> "The more visitors come, the more they also take the initiative in tourism businesses, the more open their initiative becomes to start a business." (Interview, CF, 2025)

4.4. Analysis of Inhibiting Forces

4.4.1. Resource Limitations: Infrastructure (54 ref.), Capital (23 ref.), Human Resources (19 ref.)

Infrastructure is the highest-frequency code across all codes (54 references; 10 sources), indicating a barrier perceived universally by all stakeholder categories. Issues include inadequate parking, absence of waste transport vehicles, unstable internet connectivity, and uneven inter-hamlet road access. A washed-out bridge isolating Dusun Gamaccayya from primary attractions exemplifies how geographic barriers structurally reproduce participatory inequality. Capital constraints prevent MSME operators from acquiring specialised equipment and homestay operators from upgrading facilities. Human

resource limitations are qualitative, centred on absence of green tourism competencies rather than formal education levels alone.

> "I have three hopes: a production house, stable cellular network, and a nearby place for packaging orders — currently we get packaging from Bandung. (MSME, 2025)"

> "Even if training is held 1,000 times, without field facilities it is essentially a lie. (VH, 2025)"

4.4.2. Participation and Local Capacity (96 references)

This theme recorded the second-highest aggregate frequency. Limited participation (35 references) reflects systemic barriers: POKDARWIS socialisation is informal and incidental; community knowledge of environment-based tourism is confused regarding the terminology "green tourism" among almost all non-academic informants, even as they practise many of its principles. Lack of training (24 references; 10 sources) is the most widely distributed barrier across actors. Participatory inequality is geographically structured: homestays near primary attractions receive far more visitors than those in peripheral hamlets.

> "As for training, not yet, sir. Overall, members do not yet understand what green tourism is. Actually, no one has ever invited us for specific training on green tourism." (Interview, TASM-D, 2025)

> "Oh yes, maybe we don't understand the terminology, but indirectly we are already implementing it. But for the formal term, we do not really understand it." (Interview, TASM-L, 2025)

> "In terms of forums, we rarely hold them in formal forums. So, it is more like when we have time, we can discuss — our socialization is still unstructured." (Interview, PK, 2025)

> "POKDARWIS has been inactive for a long time now." (Interview, HO3, 2025)

> "" (Interview, HO1, 2025)

4.4.3. Environmental Vulnerability and Waste Management (34 references)

Ecological vulnerability of the mountainous area (18 references) is widely acknowledged as a long-term risk, particularly landslide threats along primary access routes. Waste problems (16 references) are nearly universal across transcripts: open burning remains the only disposal method in the absence of a waste transportation system, a condition that directly contradicts the village's green tourism aspirations.

> "Imagine if nature is not managed properly; it could be like in Aceh and Sumatra, an ecological disaster occurs. We are in the upstream area, the coast and upstream are interdependent when this upstream area is damaged, the impact on the coast could certainly be very large." (Interview, FG, 2025)

> "Regarding waste itself, it is still a constraint here because most residents still burn their waste. How can we not burn waste when there is no waste transport vehicle coming in?" (Interview, CF, 2025)

> "Road access also needs further improvement, as well as waste processing here. Previously, TAGANA (Disaster Response Team) used to bring waste to the city, but not anymore; the transportation is probably broken now." (Interview, HO2, 2025)

> "For plastic waste, most residents here just throw it away. At most, they throw it in the backyard and let it pile up. That is why socialization from the government regarding waste management is very important." (Interview, TASM-D, 2025)

4.4.4. Institutional Capacity and Governance (31 references)

BUMDes was dormant for seven years (2019–2024) due to human resource limitations. POKDARWIS weakened post-COVID as members focused on household and primary livelihoods, with no cadre regeneration system in place. The absence of a green tourism Village Regulation (Perdes) leaves existing sustainability practices without a legal foundation or accountability mechanism.

> "BUMDes was established in 2017, but it was dormant due to lack of human resources until 2024 when revitalization finally took place. Meanwhile, POKDARWIS has been moribund, so to speak—active POKDARWIS and inactive BUMDes, that was the dynamic." (Interview, BM, 2025)

> "After COVID, many of the management members got married. The institution is not very active because the members are also busy with their households, their families, and some are focused on their main jobs." (Interview, PK, 2025)

> "Until now, I have not created the regulation. Matters like this should be bound by a village regulation, but I have already thought about it and, God willing, I will discuss it with the BPD (Village Consultative Body). We must not, as the government, demand a share without having contributed beforehand." (Interview, VH, 2025)

4.4.5. Inequitable Benefit Distribution (10 references)

There is no formalised revenue-sharing mechanism. Benefit distribution depends on informal proximity networks. Homestay Syurma in Dusun Gamaccayya receives two or three groups per year, all from government training, not independent visitors — due to its distance from attractions and poor road access.

> "So far, we only feel registered as homestay managers; in fact, the same homestays are always visited. (HO1, 2025)"

4.4.6. Tourist Visit Dynamics (4 references)

All homestay providers experience extreme seasonality — busy only during the SKK event and New Year period, with many months of zero occupancy. The absence of a systematic destination marketing strategy exacerbates this structural fragility.

> "Usually there are guests during New Year's and the SKK event. Not every month — just during those times. (HO1, 2025)"

5. Discussion

5.1. Integrative Analysis: Interaction of Driving and Restraining Forces

The restraining-to-driving ratio of 1.66:1, derived from 271 restraining references divided by 163 driving references, provides a quantitative index of the current force field equilibrium in (Lewin, 1943) sense. This ratio does not imply that community participation is absent or that driving forces are ineffective; rather, it signals that the aggregate discursive weight assigned by informants to barriers is substantially greater than that assigned to enabling conditions. Interpreted through (Tosun, 2006) framework, the ratio is consistent with the pattern observed across developing-country tourism destinations, where structural and operational constraints tend to generate disproportionately higher salience in community discourse precisely because they are experienced as immediately binding on daily participation decisions. In contrast, driving forces such as natural beauty, coffee agroforestry, social capital, and cultural identity, though genuine and resilient, are background conditions that informants take for granted rather than actively problematise, which systematically suppresses their coding frequency relative to their actual enabling power. This methodological asymmetry is an inherent property of barrier-focused qualitative inquiry and should be considered when interpreting the ratio. Nonetheless, the 1.66:1 figure retains analytical value as a diagnostic indicator: it establishes that Kahayya

has crossed the threshold from early development optimism into a consolidation phase characterised by accumulated unresolved constraints, and that restoring equilibrium requires targeted reduction of the restraining forces rather than amplification of drivers that are already operative. Several driving forces, namely natural beauty, coffee agroforestry, social capital, and cultural identity, are permanent endogenous assets requiring no additional investment to maintain. Many major barriers, by contrast, are tractable through targeted policy interventions.

Three strategic tensions define the current equilibrium. Training as driver versus absence of green-specific training as barrier: Tourism Office training effectively changed homestay management behaviour (14 references) yet has never addressed sustainability dimensions (24 references across 10 sources). External networks as driver versus institutional dependency as barrier: SCF and NGO partnerships catalysed POKDARWIS formation and masterplan development (8 references), yet when support concluded, institutional capacity collapsed (25 references), revealing unrealised self-reliance. Natural potential as driver versus environmental vulnerability as barrier: coffee agroforestry and natural landscapes are the core attraction (22 references), yet waste management failures and landslide risks slowly erode the same appeal (34 references).

5.2. Driving Forces in Theoretical Perspective

The six driving forces identified in this study, namely Government and External Support (D1; 39 references), Collaboration and Partnerships (D5; 33 references), Economic Opportunities (D2; 24 references), Socio-Cultural Values and Motivation (D3; 22 references), Natural and Agro-tourism Potential (D4; 22 references), and Community Resilience (D6; 22 references), map coherently onto the theoretical frameworks of (Andereck *et al.*, 2005), (Okazaki, 2008), (Lee, 2013), and (Pretty, 1995), while also extending and qualifying those frameworks in contextually important ways.

The dominance of Government and External Support (D1) as the single most cited driving factor aligns with (Okazaki, 2008) community-based tourism model, which positions institutional scaffolding, particularly government training, technical guidance, and NGO facilitation, as a prerequisite for the transition from passive to active participation. The finding that all 11 informants cited this theme confirms its role as a universal enabling condition rather than a context-specific advantage. The SCF's facilitation of POKDARWIS formation and masterplan development represents what Scheyvens, (1999) terms "empowerment from above", and Bayoumy, (2025)corroborates that social capital from external partnerships predicts CBT performance — SCF-brokered networks became the primary channel for community access to green tourism knowledge.

Collaboration and Partnerships (D5; 33 references) emerged as the second most prominent driving force, encompassing networks with external parties (8 references), cooperation with BUMDes (7 references), and private sector linkages (6 references). This finding resonates with Yan et al., (2025), who link multi-stakeholder synergies and social capital density to ecotourism sustainability outcomes, and with Ativetin, (2025), who identifies knowledge-oriented leadership as a critical mediator of CBT performance. In Kahayya, the manager of Lego-Lego Sa'rea, who independently established eco-enzyme partnerships, university linkages, and an English class for prospective guides, exemplifies this self-mobilising leadership. The co-presence of self-mobilisation at Lego-Lego Sa'rea and consultative participation among the majority of residents extends Pretty's, (1995) typology, showing that participation levels are actor-specific rather than community-wide.

Economic Opportunities (D2; 24 references) aligns closely with Andereck et al., (2005) finding that perceived economic benefits are the primary determinant of residents positive attitudes toward tourism and their willingness to participate in its development. The pragmatic motivational frame of Kahayya informants, encapsulated in the village head's observation that tourism has

broadened the economic horizon, is consistent with Lee, (2013) argument that economic motivation operates as a threshold condition. Once a community perceives a credible pathway to income improvement through tourism, other driving forces become more potent and other barriers more tolerable. The BUMDes rotational procurement system, which purchases local agricultural produce at equitable prices and provides a kiosk for MSME products, operationalises the benefit circulation mechanism that Scheyvens, (1999) associates with genuine economic empowerment in ecotourism contexts.

Socio-Cultural Values and Motivation (D3; 22 references) and Natural and Agro-tourism Potential (D4; 22 references) represent the endogenous asset base that Buckley, (2014) and Weaver, (2006) identify as foundational to green tourism viability. The SKK (Senandung Kopi Kahayya) Festival and the Songkabala ritual function as what Lee, (2013) terms cultural anchors, meaning events that simultaneously reinforce community identity, attract visitor interest, and sustain social cohesion. Customary values including gotong royong cooperative labour and land-stewardship rituals nurture what Pretty, (1995) calls organic social capital, referring to trust networks that reduce coordination costs and enable collective action in tourism management without requiring formal institutional structures. The three-tier coffee agroforestry system, functioning simultaneously as ecological buffer, educational attraction, and Starbucks C.A.F.E. Practices-certified production landscape, embodies Buckley, (2011) concept of conservation as a structural necessity. The asset base is the product itself, making its protection intrinsically aligned with community economic interest.

Community Resilience (D6; 22 references) is the driving theme with the fewest informant sources, 8 of 11, yet it encompasses the most forward-looking behaviours observed in the study, including eco-enzyme production, organic farming retention, tree planting in landslide-prone areas, and the English language class for village children. These practices collectively exemplify what Dündar and Karacaer, (2024) describe as bottom-up sustainability transitions, meaning communities independently internalising conservation norms and adaptive practices in response to experienced environmental vulnerability without awaiting top-down regulatory mandates. The lower informant coverage of this theme, 8 compared to 11 for D1 and D4, suggests that resilience-oriented participation remains concentrated among more entrepreneurially active actors, notably the Lego-Lego Sa'rea management, rather than distributed across the full community, which has implications for scaling these behaviours.

5.3. Restraining Forces in Theoretical Perspective

The six restraining forces, namely Resource Limitations (I1; 96 references), Limited Participation and Capacity (I2; 96 references), Environmental Vulnerability (I3; 34 references), Institutional Capacity and Governance (I4; 31 references), Inequitable Benefit Distribution (I5; 10 references), and Visitor Dynamics (I6; 4 references), can be systematically interpreted through (Tosun, 2006) three-level barrier framework, which classifies participation constraints as operational, structural, or cultural. The present findings both confirm and refine this framework in the context of a highland Indonesian agritourism village.

Resource Limitations (I1), encompassing infrastructure (54 references; 10 sources), capital (23 references), and human resources (19 references), corresponds directly to Tosun, (2006) operational barriers, namely the tangible and immediately experienced constraints that prevent communities from translating willingness into action. The infrastructure sub-code's position as the single highest-frequency code in the entire study, appearing in 10 of 11 informant transcripts and generating more than double the references of the next highest sub-code, surpasses even Tosun, (2006) characterisation of infrastructure as a "common" operational barrier. The village head's statement that "even if training is held 1,000 times, without field facilities it is essentially a lie" encapsulates the theoretical point

that operational barriers are binding in a way that renders other interventions ineffective until they are addressed. This finding aligns with Tiwari and Nguyen, (2024) systematic review identifying infrastructure as the most frequently reported barrier across CBT studies in developing countries. The capital constraint (23 references) similarly reflects what Scheyvens, (1999) identifies as a structural disadvantage, namely that local communities lack the financial resources to invest in tourism infrastructure at the scale required to attract and retain visitors, thereby reproducing a dependency on external investment that undermines genuine community ownership.

Limited Participation and Capacity (I2; 96 references), the second most prominent restraining force, straddles Tosun, (2006) operational and cultural barrier categories. The Limited Community Participation sub-code (35 references) reflects structural exclusion, whether geographic, informational, or institutional, consistent with Tosun, (2006) structural barriers. However, the Community Knowledge of Environment-Based Tourism sub-code (25 references) and Lack of Socialization and Training sub-code (24 references; 10 sources) fall within the cultural barrier category. Informants across all stakeholder groups reported confusion about the term "green tourism" even while practising many of its principles. This gap between practice and conceptual literacy is precisely what Tosun, (2006) describes as the cultural dimension of participation barriers, namely a condition in which communities possess the behavioural prerequisites for sustainable tourism without the discursive framing that would enable them to claim green credentials, access premium markets, or advocate for supportive policy. Pretty, (1995) participation typology further illuminates this dynamic. Most community members operate at the consultative or induced participation levels, where they respond to externally initiated programmes rather than independently defining and pursuing green tourism agendas. Elevating participation toward Pretty's interactive and self-mobilisation tiers requires precisely the literacy-building interventions that the Lack of Socialization sub-code identifies as absent.

Environmental Vulnerability (I3; 34 references), comprising physical conditions and regional vulnerability (18 references) and waste issues (16 references), reflects what Buckley, (2011) terms the resource dependency paradox. The same ecological conditions that constitute the primary tourism attraction also constitute the primary source of risk. Landslide threats along access routes, open waste burning as the only available disposal method, and the absence of a waste transport system directly contradict the green tourism positioning Kahayya aspires to, creating a credibility gap between tourism product claims and on-the-ground reality. Dündar and Karacaer, (2024) identify this gap as a key determinant of visitor dissatisfaction and long-term destination decline, making environmental vulnerability not merely an ecological concern but a strategic tourism threat. The waste issue is particularly significant. At 16 references across nearly all transcripts, it is not perceived as a peripheral problem but as a systemic failure with immediate and visible consequences for the tourist experience.

Institutional Capacity and Governance (I4; 31 references) corresponds most directly to Tosun, (2006) structural barriers, which he identifies as the deepest and most persistent constraints in developing-country tourism. These include the absence of enabling regulations, elite domination of decision-making, and the centralisation of authority that prevents community-level agency from developing. POKDARWIS dormancy (25 references), namely the organisation's post-COVID collapse due to the absence of cadre regeneration mechanisms and operational funding, illustrates Tosun's argument that pseudo-participatory structures can emerge when formal organisational forms exist without substantive empowerment. The absence of a Village Regulation (Perdes) on green tourism leaves existing sustainability practices without legal foundation, preventing the transition from voluntary and personality-dependent initiatives to institutionalised and rule-based governance. Arnstein, (2007) ladder of participation provides

a complementary lens. The current institutional condition places Kahayya between "informing" and
"consultation" on the ladder, well below the "partnership" and "delegated power" levels at which communities exercise genuine influence over tourism outcomes.

Inequitable Benefit Distribution (I5; 10 references) and Visitor Dynamics (I6; 4 references), while the least frequently cited restraining forces, are theoretically significant because they reveal the internal differentiation of participation outcomes within the village. The geographic concentration of tourist visits at attractions near the village centre, and the corresponding invisibility of peripheral hamlet operators such as Homestay Syurma in Gamaccayya Hamlet, instantiates what Scheyvens, (1999) calls the elite capture problem. Even within a relatively small community, spatial and social proximity to tourism infrastructure determines who benefits, thereby reproducing inequality at the micro-scale. This finding extends Tosun, (2006) structural barrier framework by demonstrating that intra-community inequality, not only inequality between community and external actors, can operate as a participation barrier. Visitor Dynamics (I6), manifest as extreme seasonality around the SKK Festival and New Year period, reflects the destination marketing gap identified by Fong and Lo, (2022): absent systematic promotion prevents year-round demand distribution, leaving homestay operators unable to invest in service quality.

5.4. The Green Potential Trap: A Conceptual Synthesis

The findings collectively support the concept of the green potential trap, introduced in this study to describe a specific developmental condition, namely a community that possesses substantial and verifiable ecological and cultural assets for green tourism, confirmed by Starbucks C.A.F.E. Practices certification, NVivo-documented community resilience behaviours, and organic agricultural traditions dating back generations, yet remains institutionally and infrastructurally constrained from converting those assets into a functioning green tourism economy. This concept differs from Tosun, (2006) general barrier framework in one important respect. Tosun's framework addresses communities that are prevented from participating in tourism development broadly, whereas the green potential trap addresses communities that have already crossed the threshold of tourism initiation and have demonstrated self-mobilisation capacity, but are prevented from making the qualitative transition from conventional rural tourism to certified and premium green tourism due to the compounding weight of operational and structural constraints.

The green potential trap operates through three mutually reinforcing mechanisms identified in the data. First, an asset-investment asymmetry: green assets (ecological systems, social capital, cultural practices) are self-reproducing, while the infrastructure and institutions required to monetise them demand capital that the community cannot independently finance. Second, a literacy-credentialling gap: community members practise green behaviours (organic farming, eco-enzyme production, tree planting) but lack the conceptual vocabulary and certification needed to claim green tourism status or access premium markets. Third, an institutional fragility cycle: externally catalysed capacity (POKDARWIS formation, BUMDes revitalisation, masterplan development) collapses when support is withdrawn because internal regeneration mechanisms were never established during the supported period. The net effect is that Kahayya's green potential is preserved but remains unrealised, characterised by ecological integrity, social cohesion, institutional fragility, and economic underperformance relative to its asset base.

This analysis extends the existing literature in three directions. First, it confirms Tosun, (2006) three-level barrier typology as applicable in rural Indonesian agritourism contexts, while demonstrating that operational barriers, particularly infrastructure and capital, are more salient than structural or cultural barriers in absolute frequency terms. This finding is consistent with Tiwari and Nguyen, (2024) meta-

review but contrasts with the theoretical expectation that structural barriers are the most intractable. Second, it extends Pretty, (1995) participation typology by showing that self-mobilisation and consultative participation coexist not across different destinations but within the same village, mediated by individual leadership capacity and access to external networks. This suggests that participation level is actor-specific rather than community-specific. Third, it introduces the green potential trap as a concept with potential broader applicability to other highland agroforestry villages in Eastern Indonesia and comparable developing-country contexts where ecological assets outpace institutional and infrastructural readiness, thereby inviting comparative empirical testing in future research.

5.5. Implications for Tourism Service Providers

The findings carry direct implications for tourism service providers operating in or seeking to develop Kahayya and comparable highland rural destinations.

First, digital service design must accommodate infrastructure constraints. Tour operators and accommodation platforms should develop offline-compatible navigation tools and pre-downloadable destination materials, given that internet connectivity is limited to isolated spots. Partnerships with satellite internet providers could prioritise shared access points serving clusters of homestays rather than individual households, thereby maximising coverage efficiency under limited resources.

Second, a formal homestay rotation and referral system would directly address geographic participatory inequality. Service providers should coordinate with POKDARWIS and BUMDes to implement a structured guest referral mechanism, analogous to a taxi dispatch system, that distributes bookings equitably across all registered homestays regardless of proximity to primary attractions. This approach not only improves fairness but also stabilises income distribution across the community.

Third, waste management partnerships present a market opportunity. Tour operators can design zero-waste tour packages in which tourist participation in eco-enzyme production and waste sorting becomes an experiential activity, thereby monetising ecological education while simultaneously addressing the waste infrastructure deficit. Investment in a shared organic waste processing facility would create co-benefits for both residents and visitors, improving environmental quality while enhancing the destination's sustainability credentials.

Fourth, sustainability certification as a marketing asset is currently under-leveraged. The Starbucks C.A.F.E. Practices certification held by all farmer groups is a verifiable third-party environmental credential that positions Kahayya coffee agro-tourism favourably in premium and sustainable tourism market segments. Service providers should integrate this certification narrative into destination branding and communicate it consistently across marketing channels, ensuring that it is clearly linked to the broader green tourism value proposition.

6. Limitations

Several limitations of this study should be acknowledged, although they do not undermine its core contributions. First, the sample consists of eleven purposively selected informants from a single village, limiting statistical generalisability. However, consistent with a qualitative case study approach, the aim is analytical rather than statistical generalisation (Yin, 2018). Maximum variation sampling across key stakeholder groups and the convergence of themes across informants support the adequacy of the sample Patton, (2002).

Second, the cross-sectional design captures participation dynamics at one point in time and does not allow analysis of temporal change or causality. Nevertheless, this aligns with the diagnostic purpose of Force Field Analysis, which is designed to map the equilibrium of forces rather than predict causal relationships Lewin, (1951).

Third, reliance on self-reported interview data may introduce bias. This was mitigated through triangulation across informants, as well as member checking and peer debriefing, with NVivo 15 coding helping to enhance consistency and reduce subjectivity Meriam & Tisdell, (2016).

Fourth, the absence of longitudinal data prevents empirical assessment of future interventions. However, the study provides a clear baseline for subsequent research to evaluate change over time.

Despite these limitations, the study offers a methodologically grounded and context-specific contribution by applying Force Field Analysis to community participation in green tourism in a highland agroforestry village in Eastern Indonesia, while also generating theoretical insights and practical recommendations applicable to similar rural contexts.

7. Conclusion

This study analysed six driving forces (163 references) and six inhibiting forces (271 references) shaping community participation in green tourism development in Kahayya Village, Bulukumba Regency, Indonesia, using NVivo 15 thematic coding. The restraining-to-driving ratio of 1.66:1 indicates that while Kahayya possesses strong endogenous assets, including gotong royong culture, ecological awareness, self-mobilisation in tourism development, and Starbucks-certified sustainable agriculture, these remain structurally under-supported.

Three priority intervention areas emerge. First, infrastructure improvement, particularly digital connectivity, inter-hamlet road access, and integrated waste management, as the most critical barrier cluster. Second, institutional revitalisation through POKDARWIS regeneration, supported by operational funding and a Village Regulation on green tourism, to transform structural constraints into governance drivers. Third, equitable benefit distribution through formal homestay referral rotation and transparent revenue-sharing mechanisms to reduce geographic inequality.

The study contributes three key theoretical insights. It confirms Tosun, (2006) three-level participation barrier framework in a rural Indonesian agritourism context. It introduces the concept of the green potential trap, referring to communities with strong ecological and cultural assets that remain institutionally constrained from realising green tourism potential. It also extends Pretty, (1995) participation typology by showing that self-mobilisation and consultative participation can coexist within a single village, shaped by leadership capacity and access to networks.

7.1. Future Research Agenda

Future research should pursue four directions. Comparative studies across three to five highland agroforestry tourism villages in Eastern Indonesia would test the generalisability of the green potential trap concept. Longitudinal action research on POKDARWIS revitalisation would track institutional change and evaluate the effectiveness of cadre regeneration interventions. Quantitative validation of a barrier cascade model would test causal relationships among identified factors. Finally, a perception gap analysis comparing community and tourist views on green tourism quality would surface unmet expectations on both sides and inform product development.

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