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Multistakeholder Collaboration in Green Open Space Policy Partnership Perspective Study in Sumenep

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Abstract

Jakarta, as a metropolitan city rich in history and culture, offers substantial potential for community-based tourism development through walking tours. The quality of tourist experiences is closely associated with the competence of tour guides, which is reflected in their education, certification, motivation, and professional performance. This study examines the relationships between education and certification with motivation and their associations with the performance of the Jakarta Good Guide walking tour community. Data were collected from 32 respondents and analysed using Partial Least Squares-Structural Equation Modelling (PLS-SEM). The results indicate that education is positively and significantly associated with motivation ($\beta = 0.803$; $p < 0.001$), whereas certification is not significantly associated with motivation ($\beta = 0.022$; $p = 0.870$). Motivation shows the strongest association with performance, as indicated by the largest path coefficient in the model ($\beta = 0.850$; $p < 0.001$). Furthermore, motivation mediates the relationship between education and performance within the tested model ($\beta = 0.683$; $p < 0.001$). In contrast, certification does not demonstrate significant direct or indirect associations with performance. These findings highlight the role of motivation as a key mechanism linking education and performance within this sample. From a practical perspective, the study suggests that community-based tourism development programs may benefit from prioritizing educational initiatives and motivational enhancement rather than relying solely on formal certification processes.

KEYWORDS

Education; certification; motivation; performance; tour guides; walking tour.

Introduction

Urban areas in Indonesia are increasingly vulnerable to environmental challenges such as climate change, declining air quality, and reduced ecological capacity. Green Open Space (RTH) plays a crucial role in mitigating these impacts by maintaining ecological balance, providing public space, and supporting urban resilience. National regulations require cities/regencies to maintain at least 30% RTH, consisting of 20% public and 10% private RTH. The ratio framework provided is not simply a numerical target, but rather an ecological and social control tool to maintain spatial balance, air quality, and social space (Adiansyah et al., 2024).

Sumenep Regency has experienced significant development pressure, resulting in potential reductions in green space quantity and quality (Phonphoton & Jirathananuwat, 2026). Although GIS-based assessments indicate that public RTH meets minimum thresholds in several urban districts, governance challenges persist. These include limited updated data, fragmented institutional roles, budget constraints, and weak collaborative mechanisms among stakeholders (Suswanto, 2026). To address these challenges aligned with its carrying capacity, sustainability to ensure the of natural and built environments. This finding is relevant as a basic benchmark before assessing the

quality of governance, especially because fulfilling the physical ratio does not automatically guarantee sustainability and fair access for the community (Darmawan et al., 2023). However, the dynamics of policy and governance present challenges in its implementation.

Green Open Space is a key element in urban planning (Valones & Jiinaedi, 2023). Essentially, green open space was created to mitigate the negative impacts of dense urban activity. Currently, green open space is diminishing due to the conversion of green open space to residential and office space. This can lead to various environmental problems such as flooding, pollution, and so on. (Aditama, 2024; Iqbal et al., 2023).

Recent spatial evidence in Sumenep Regency demonstrates a relatively strong quantitative foundation. A 2022 Geographic Information System (GIS) analysis identified and quantified the distribution of public green open space in the Sumenep City sub-districts, with results indicating that the minimum threshold for public green open space, as required by the policy, is met (Zaman & Khaq, 2023). (Darmawan et al., 2023) This finding is relevant as a basic benchmark before assessing the quality of governance, especially because fulfilling the physical ratio does not automatically guarantee sustainability and fair access for the community. (Darmawan et al., 2023) However, the dynamics of policy and governance present challenges in its implementation.

The fulfillment of green open space (RTH) in spatial planning requires thorough and measurable planning, so that the provision and utilization of green open space can be carried out optimally. Regulation of the Minister of ATR/BPN Number 14 of 2022 concerning the Provision and Utilization of Green Open Spaces outlines six planning processes: identification of existing green open space (RTH), identification of potential green open space (RTH), identification of regional categories, identification of funding sources, identification of stakeholders, and formulation of a green open space provision plan that produces substance related to green open space provision and utilization scenarios (Ministry of Agrarian Affairs & Agency, 2022).

At the administrative level, efforts to collect data on green open space in Sumenep Regency reportedly experienced budget constraints in 2023-2024 and were only planned to be carried out independently in 2025. The data gap has important implications for evidence-based decision-making, target monitoring, and information transparency to the public. (KM, 2025) On the other hand, the regional government stated that its green open space expansion agenda is being implemented through regional budget allocations and programs to increase green open space area, and that the target for green open space area will continue to increase throughout 2024. (Fajarisman, 2025) This is a policy signal that needs to be monitored for its effectiveness in the field. (SandigT, 2025) It is at this point that multistakeholder collaboration becomes crucial and crucial.

Green space management involves various actors, such as local governments, technical agencies, communities, academics, and the private sector, each with varying preferences and resources. Contemporary collaborative governance literature emphasizes that effective policy partnerships require prerequisites such as collaborative planning and preparation, clear rules, trust-building, transparent role allocation, and ongoing policy learning mechanisms to ensure that all actors share a shared understanding and are willing to adapt to new policies (Cairney & Toomey, 2024; Purbani, 2017). In the Indonesian context, studies of collaboration in policy show that success at the local level is largely determined by the ability to convert formal policies into real-world practices of coordination, information sharing, and conflict resolution. (Afandi et al., 2023).

One district that supports this argument is Lamongan Regency. Studies in Lamongan show that face-to-face dialogue, trust-building, and shared commitment are consistently maintained, and coordination between stakeholders improves, although challenges to substantive public participation still need to be addressed. (Nurnathagotra et al., 2023) Elsewhere, recent research highlights that the effectiveness of collaboration is also closely linked to institutional capacity to manage land conflicts, align economic and ecological interests, and open data and policy processes to citizens. These findings provide direction for Sumenep Regency to shift its focus from simply meeting ratios to strengthening the quality of policy partnerships. This includes ensuring regular collaboration forums, updated and easily accessible green open space data, coordinated private sector CSR roles, and involving communities and universities in evidence-based monitoring and co-design of green spaces. (Chowdhury & Panday, 2018; Hermawan et al., 2025).

Recent challenges in data collection and coordination are not merely technical issues, but rather indicators of the need for more mature collaborative governance based on clear regulations. Therefore, a policy partnership perspective is relevant for Sumenep Regency because it offers a framework for orchestrating synergy between actors: the government as regulator/facilitator, and the private sector as provider of evidence, evaluation, and policy learning. This perspective places greater emphasis on role allocation, clarity of institutional structure, and normative and social legitimacy.

Optimizing this policy partnership requires collaborative efforts with improved data governance to ensure that policies are not only legally valid but also publicly accepted. Furthermore, the Sumenep Regency Spatial Plan (RTRW) for 2023-2043, as an enabling condition, needs to be supported by forums, standard operating procedures (SOPs), and cross-actor policy learning mechanisms to ensure effectiveness at the implementation level. Therefore, this study aims to analyze the forms and patterns of collaboration, identify governance issues, evaluate and formulate strategies, and provide multistakeholder policy recommendations from a policy partnership perspective, focusing on identifying alternative solutions to problems, providing legitimacy, strengthening organizations, and implementing policies (Zahroh & Najicha, 2022).

Previous studies on green open space in Indonesia have generally focused on meeting quantitative area ratios or discussing the technical aspects of spatial planning, while limited attention has been paid to how the quality of multi-actor policy partnerships is built in contexts characterized by limited data availability and institutional capacity. Furthermore, research on collaborative governance has largely focused on other public service sectors or large metropolitan areas, leaving district-level areas such as Sumenep underexplored, which despite having a strong regulatory framework have weak green open space achievements and limited social legitimacy. To address this gap, this study offers novelty by integrating spatial evidence on green open space, data governance dynamics, and the performance of formal collaborative forums through a policy partnership perspective, and by formulating cross-actor policy recommendations that can be applied and replicated in other regions facing similar governance challenges (Dollah et al., 2023).

Methods

This study uses a descriptive qualitative approach that aims to describe and understand the dynamics of collaboration between stakeholders in green open space policy, particularly through the perspective of *policy partnership*. This research was

Table 1. Research Respondents

No	Institution	Respondent
1	Bappeda	Ibrahim
2	PUTR	Veru & Ines
3	DLH	Hasin
4	Perkimhub	Yayak & Novi
5	OISCA	Maryanto
6	Village Head Torbang	Muzanni
7	Local Media	Arif
8	Principal of SMA 3	Dewi
9	Universities	Wilda

Source: Researcher, 2025

conducted in Sumenep Regency focusing on spatial planning agencies, the environment, villages, and community groups. The research subjects included Bappeda, PUTR, DLH, Perkimhub, FPR, OISCA, Reng Paseser Community Group as coastal guards, Representatives of Educational Institutions, Village/Sub-district Representatives represented by Torbang village, BUMD (BPRS), Community, Universities (Wiraraja University), Local Media (Madura Indepth.com) (see Table 1).

The data collection techniques used were in-depth interviews with actors involved in the green open space policy collaboration, participatory observation by observing the planning process or community activities, and documentation in the form of Laws, Regional Regulations, and RTRW, RDTR, Collaborative MoU, and data from the Environmental Service.

The data analysis technique used in this study consists of four stages: data collection, data reduction, data presentation, and verification. The data was then refined and deepened by conducting *Focus Group Discussion* (FGD) involving the research team and all informants.

Result and Discussion

Identifying Alternative Problems

Findings reveal that challenges in RTH governance are not limited to physical land availability but relate primarily to governance issues: data gaps, funding limitations, and fragmented collaboration. The absence of updated spatial data since 2022 undermines transparency in accuracy planning. and Budget allocations prioritize physical construction over data verification.

The Sumenep Regency Government officially announced that the area of Green Open Space (RTH) will reach around 10,000 ha by the end of 2024, accompanied by an expansion program using a budget of IDR 199 million in 2025, although it has decreased from IDR 275 million in 2024. (Muhlis, 2025). Pragmatically, this reflects the sustainability of physical outcomes in the form of parks. However, there is a fundamental deficit in the data capacity that should support this policy. This situation creates conflict because, on the one hand, official figures show infrastructure growth, but on the other, the lack of updated data raises doubts about the accuracy, equity, and quality of green open space (Naing, 2025).

This demonstrates an imbalance between output- and evidence-based governance. The government appears to be placing greater emphasis on achieving physical scale that is easily communicated to the public, rather than building a data system that allows for comprehensive evaluation of ecological and social sustainability. Yet, collaborative governance literature emphasizes that evidence-based policy is a prerequisite for long-term legitimacy and effectiveness. The lack of data capacity is not merely a technical issue, but a factor that has the potential to erode the social legitimacy and public accountability of green open space policies in Sumenep.

The Green Open Space (RTH) governance policy in

Sumenep faces serious challenges in funding and planning. This situation indicates an imbalance in budget items, with verification components being relatively small in nominal terms, while physical park development projects continue to be implemented. To address this, a resource pooling strategy is needed that integrates funding sources from the regional budget (APBD), CSR, and community philanthropy, and then directly links them to collaborative indicators (Sullivan et al., 2025). Success is no longer measured solely by the number of parks built, but by the extent to which RTH improves the quality of life for communities and urban ecological resilience.

During the data collection process, it was found that each OPD has carried out its respective duties and functions in increasing the area of green open space, but these institutions are running independently without any collaboration with each other. Bappeda is responsible for planning Green Open Space, PUTR is responsible for providing technical recommendations regarding the suitability of space for the development of city parks, city forests, and green public spaces, DLH is responsible for implementing and directly handling recommendations from PUTR, while Disperkimhub is responsible for supervising the provision of green open space in housing/settlements and assessing the extent to which the private sector has contributed significantly to the 30% green open space target.

The lack of collaboration between stakeholders is one of the challenges in the green open space policy in Sumenep, so that community participation tends to be concentrated on implementing the policy only, such as planting trees and cleaning parks which do not yet reflect substantive collaboration, as presented in Figure 1.

The program was officially launched by the Head of the East Java Provincial Education Office, Dr. Aries Agung Paewai, S.STP., MM, at SMAN 3 Sumenep, along with officials from the Sumenep Regional Education Office Branch and the School Committee. The School-Based Food Security Program is part of the East Java Education Office's vision to create a healthy, clean, and productive school environment (Mahmoudi et al., 2026). By utilizing unused land in schools, students and teachers can be directly involved in the activities carried out.

The activities undertaken by the Department of Education are a significant step toward fostering collaboration. However, collaboration between the government and schools tends to revert to ad-hoc, project-based coordination patterns that are strong during the implementation phase but weak in ensuring long-term sustainability. This current pattern of participation results in low social legitimacy for green open space policies and limited opportunities for collaborative innovation in environmental management. The success of a policy lies in a shared governance process, where all actors share roles in planning, implementation, and evaluation, rather than

Figure 1. School-Based Food Security Program



Source: data processed by researchers

simply being present at the implementation stage. (Ansell & Torfing, 2021).

Granting Legitimacy

Legitimacy is a key aspect of collaborative governance because it determines whether a policy is accepted by the actors involved and the wider community. In Sumenep Regency, legitimacy is divided into two dimensions: normative legitimacy and social legitimacy.

Sumenep's RTH policy has strong normative legitimacy based on national regulations such as the ATR/BNP Regulation No. 14/2022 and Regional Regulation No. 8/2023 (RTRW). Programs like the Sumenep Green Development Program (P2SH) require developers to provide 20% RTH. This provision further elaborates on the mandate of Law No. 26 of 2007 concerning Spatial Planning, which regulates ecological balance and urban environmental quality. With this regulation, local governments have a clear and binding legal basis for formulating and implementing green open space policies.

The Sumenep Regency Government responded to this through the Sumenep Green Development Program (P2SH), which requires every developer, such as hotels, shopping centers, and shophouses, to provide a minimum of 20% green open space (RTH) of the total area to be developed by the government. Through P2SH, the government seeks to address limited public land by encouraging contributions from private green open space (RTH) from the private sector and developers. Institutionally, P2SH is integrated into Regional Regulation No. 8 of 2023 concerning the Sumenep Regency Spatial Plan (RTRW) for 2023-2043 and the 2021-2026 Regional Medium-Term Development Plan (RPJMD). and the 2021-2026 Regional Medium-Term Development Plan (RPJMD), thus providing clear normative legitimacy. The local government even claims that green open space will reach approximately 10,000 hectares by the end of 2024.

The Sumenep Regency Government also needs to draft a Detailed Spatial Planning (RDTR) to provide more detailed and specific planning for land use and development within a region, particularly at the sub-district/city level. An RDTR can guide more structured and sustainable development and ensure that land use aligns with established spatial plans. This provides formal legitimacy for government action and serves as a starting point for encouraging collaboration with non-governmental actors.

Technical aspects have been regulated in (Ministry of Public Works, 2008) This document provides guidance on the form and function of green open space, ranging from city parks, urban forests, green roads, neighborhood parks, to river and coastal green corridors. These technical standards not only provide administrative legitimacy but also ensure that the provision of green open space aligns with the desired ecological, aesthetic, and social functions.

Normative legitimacy is further strengthened by a policy document from the Ministry of Environment and Forestry that emphasizes the role of green open space in climate change mitigation, air quality control, and as a means of social interaction and improving community well-being. This affirmation positions green open space not merely as a physical element of spatial planning but also as a strategic environmental policy instrument for urban and regional resilience.

Social legitimacy is more closely related to public acceptance, recognition, and support for a policy. Social legitimacy in Sumenep Regency will be achieved if government policies are not only in accordance with the law but also transparent, inclusive, and accountable to the public, media, academics, and the private sector.

Social legitimacy is strongly influenced by data and information transparency. The achievement of 10,000

hectares of green open space in Sumenep does indeed convey a positive normative image. However, without the support of spatial data, measurement methodologies, and ecological quality indicators, this figure is difficult to independently verify. The public, academics, and local media can only passively accept these figures, resulting in diminished trust in policies. By disclosing spatial data on green open space, the government can build public credibility and strengthen its social legitimacy.

Social legitimacy is built through substantive community participation, not just sectoral participation. To strengthen social legitimacy, communities need to be involved in selecting areas most in need of green open space, as well as monitoring its use, accessibility, and ecological quality. Such participation not only builds a sense of ownership but also ensures that policies truly reflect community needs.

Local media and universities play a strategic role in strengthening social legitimacy. The media serves as a channel for transparency, while academics can conduct independent research to verify achievements. If the government provides open data, these two actors will act as critical partners, increasing accountability and public trust.

Organizational Strengthening

In the governance of green open space policy in Sumenep Regency, the Environmental Agency holds a dominant position as both the leading actor and technical coordinator. The Environmental Agency (DLH) holds a dominant position because it holds the formal mandate for environmental management and green open space maintenance. However, this pattern has implications for the weak distribution of roles among actors, as universities, environmental communities, and the private sector are more often involved in planting activities and CSR programs without long-term integration into policy.

Sumenep Regency now has a cross-actor forum that serves as a communication and coordination platform for Green Open Space (RTH) policies. This forum is crucial for bringing together local governments, universities, environmental communities, and the private sector to discuss strategic issues related to the provision and utilization of green open space. The forum's existence marks a step forward in governance, as not all regions have the same institutional mechanisms.

The Spatial Planning Forum in Sumenep Regency was established through Decree of the Regent of Sumenep Number 188/143/KEP/435.031/2024, which generally stipulates the duties and functions of the FPR in three main aspects:

Spatial Planning

The Spatial Planning Forum has an important role in providing recommendations when a review of regional regulations regarding the Detailed Spatial Plan (RDTR) is needed due to national policies or new strategic regulations, providing considerations for the preparation of the Regency/City RTR, such as policy direction, long-term spatial planning, land use zones, as well as assessing and accommodating community involvement in the planning process through public opinion gathering, discussion forums, and public consultations that cover or represent the entire region.

Utilization of Space

The Spatial Planning Forum has the task of providing considerations for handling and resolving problems in the implementation of spatial utilization programs and activities when necessary, synchronizing the main spatial utilization program with sectoral and regional programs, conducting technical studies to assess the Suitability of Spatial Utilization Activities (KKPR) for both business and non-business activities, and discussing the results of the studies and technical

COMPOSITION OF THE FORUM FOR GREEN OPEN SPACE MANAGEMENT OF SUMENEP REGENCY

NO.	POSITION IN THE FORUM	POSITION/ELEMENT REPRESENTED
I.	Chairperson	Regent of Sumenep
II.	Vice Chairperson	Regional Secretary of Sumenep Regency Head of the Regional Development Planning Agency
III.	Secretary	Head of the Public Works and Spatial Planning Office
IV.	Members	1. Head of the One-Stop Integrated Services and Investment Office 2. Head of the Environmental Office 3. Head of the Food Security and Agriculture Office 4. Head of the Land Office of Sumenep Regency 5. 1 (one) representative from the Indonesian Planners Association (IAP) 6. 1 (one) representative from the Indonesian School Planners Association (ASPI) 7. Ir. Soedarto, MM (Community Representative (Tokoh Masyarakat))
V.	Secretariat	
	a. Chairperson	Head of the Spatial Planning Division of the Public Works and Spatial Planning Office
	Vice Chairperson	Head of the Building Management Division of the Public Works and Spatial Planning Office
	b. Secretary	Coordinator of Planning and Regulation at the Public Works and Spatial Planning Office
	c. Members	7 (seven) implementing staff from the Public Works and Spatial Planning Office

Figure 2. Organizational Structure of the Green Open Space Management Forum in Sumenep Regency

Source: Decree of the Regent of Sumenep Number 188/143/KEP/435.031/2024

Table 2. CFP School Data in Sumenep

No	School name	Year
1	SMPN 1 DUNGKEK	2010
2	SMPN 6 SUMENEP	2013
3	PANGARANGAN 1 ELEMENTARY SCHOOL	2015
4	GAPURA 1 MIDDLE SCHOOL	2014
5	LENTENG 1 Middle School	2015
6	SMPN 2 KALIANGET	2016
7	DASUK 1 JUNIOR HIGH SCHOOL	2016
8	SMPN 5 SUMENEP	2016
9	SMAN 1 BATUAN	2017
10	SMPN 4 SUMENEP	2017
11	SMPN 1 TALANGO	2018
12	SDN 1 PABIAN	2018
13	SMAN 1 LENTENG	2018
14	SMPN 1 KALIANGET	2019
15	SMAN 1 GAPURA	2019
16	SARONGGI 2 MIDDLE SCHOOL	2008/14
17	SMPN 1 SUMENEP	2013/15

Source: data processed by researchers

considerations such as land aspects or other relevant matters, then submitting the results of the discussion to the Regent for further decisions.

Control of Space Utilization

In the field of Spatial Utilization Control, the FPR has the task of providing considerations on the form and mechanism of providing incentives and disincentives in the implementation of spatial utilization, resolving spatial planning disputes, especially if there are differences in policies between government agencies in one Regency/City, and providing considerations in determining sanctions for violations of spatial utilization and/or damage to environmental functions, such as the development of protected areas without permits, the transfer of land functions without procedures.

The following is a picture of the membership structure of the Sumenep Regency Spatial Planning Forum (see Figure 2).

However, field findings indicate that the forum's strategic function remains limited. The forum's agenda tends to be sector-specific, used for outreach activities such as mass

planting or green space inaugurations. These activities emphasize mere symbolism rather than serving as a platform for policy formulation, decision-making, or systematic evaluation.

These forums tend to be active when there's a sense of urgency, such as during large-scale permit discussions, spatial planning disputes, or priority local government programs. According to policy partnership theory, effective forums should operate regularly and serve as a forum for mutual coordination, preventing spatial planning forums from remaining reactive rather than proactive instruments in overseeing sustainable spatial planning policies.

Non-governmental (universities, private sector, actors media) participate sporadically and are not integrated into systematic planning or monitoring. Data protocols among agencies are not synchronized, making verification difficult.

Governments focused solely on their own objectives have resulted in the absence of shared data protocol standards, making it difficult to verify or hold accountable claims of policy achievements. The lack of open mechanisms and participatory monitoring has weakened social legitimacy, as neither the public nor collaborative organizations have adequate access to assess the accuracy of achievements. Evaluation of green open space (RTH) achievements has not yet been included in the forum's agenda (Sulistiyono, 2022). Although the forum exists institutionally, it has not yet functioned as a strategic arena for strengthening collaboration.

Policy Implementation

In implementing policies in Sumenep Regency, each agency has carried out its respective duties and functions. However, field findings indicate that each agency faces obstacles in expanding the area of green open space.

First, the Head of the Regional Development Planning Agency (Bappeda) responsible for green open space planning is still new, requiring coordination with relevant agencies to ensure that plans are tailored to field conditions. Second, PUTR's licensing and spatial planning oversight mechanisms remain weak. Many built-up areas do not meet green open space requirements due to the lack of strict oversight instruments for developers. Third, the Department of Public Works and Housing (Disperkimhub) lacks strict sanctions against developers, resulting in low levels of compliance. The Environmental Agency (DLH) faces a major challenge with its limited technical budget. Furthermore, maintenance is often more focused than new land expansion.

The Environmental Agency, as the leading actor with a technical mandate, plays a role in maintaining city parks, planting green belts, and coordinating across stakeholders. The Environmental Agency reported a green space area of approximately 10,000 hectares by the end of 2024 and the development of approximately 2 hectares of new green areas, although these contributions have not significantly increased the percentage of green space in the total urban area. In 2025, the policy focus will be more directed at maintaining and optimizing green belts, specifically tree planting on Saronggi, Guluk-Guluk, Ganding, and Gayam Streets.(Efendi, 2025).

Although this achievement demonstrates the consistency of the regional government's work, the proportion of green open space to the urban area has only reached 11%, far below the national standard of 30% as mandated in the Regulation of the Minister of ATR/BPN No. 14 of 2022. This fact indicates stagnation in achieving the target, because in recent years green open space growth has tended to be flat without a significant spike.(Damayanti, 2025).

There is an organization that collaborates with the Sumenep Regency government to carry out reforestation, namely OISCA (Organization for Industrial, Spiritual, and Cultural Advancement). OISCA is an international non-profit organization headquartered in Japan and has many branches spread across various countries, especially in the Asia Pacific

Table 3. List of Licensed Housing in Sumenep Regency

No	Developer Name	Company name	Address
1	Perumnas IV Housing Complex	BTN Giling National Housing Complex	Kebunan Village, Pamolokan Village, Bangkal Village
2	-	BTN Kolor Housing	Kolor Village, Sumenep City District
3	PT. Urip Utama Corp.	Permai Satellite Housing	Pabian Village, Sumenep City District
4	PT. Urip Utama Corp.	ASABRI Housing	Kolor Village, Sumenep City District
5	PT. Binatraya Puspantara	Pondok Marengan Indah Housing Complex	Etc. Marengan Daya, District. Sumenep City
6	PT. Mutiara Harum	Fragrant Pearl Cottage	Kalimook Village, Kalianget District
7	-	Pesona Satelit Housing	Kolor Village, Sumenep City District
8	CV. Wanda Jaya	Griya Alam Raya C1	Batuan Village, Batuan District
9	Official CV 28	Official Gems II (Phase 1)	Kolor Village, Sumenep City District
10	PT. Gota Mulya	Beautiful Marengan Gems	Etc. Marengan Daya, District. Sumenep City
11	PT. Metro Alam Sejati	Graha Raung Indah	Pabian Village, Sumenep City District
12	PT. Griya Agung Sumekar	Agung Residence Babbalan	Babbalan Village, Batuan District
13	PT. Sinar Mega Indah Persada	The Beautiful Land of Sumekar	Kolor Village, Sumenep City District
14	PT. Qilsanah Agung Pratama	Alam Permai Housing	Kolor Village, Sumenep City District
15	PT. Sukma Artha	Griya Mapan (Phase I)	Etc. Kacongan, District. Sumenep City
16	Indrawati	Graha Arya Wiraraja	Kolor Village, Sumenep City District
17	PT. Serbaguna Jaya Sentosa	Sunlight Building	Gedungan Village, Batuan District
18	PT. Sukma Artha	Griya Mapan (Phase II)	Etc. Kacongan, District. Sumenep City
19	PT. Puri Kencana Sakti	Golden Stone	Batuan Village, Batuan District
20	CV. Ridhota Dwipa	Graha HR Soemar'oem	Pajagalan Village, Sumenep City District
21	Muhammad Bani	Rampak Asri	Pangarangan Village, Sumenep City District
22	CV. Bimantara	Beautiful Bimantara Building	Kolor Village, Sumenep City District
23	CV. Amanah Jaya Sentosa	Emerald Hill Beautiful Rocks	Batuan Village, Batuan District
24	PT. Esa Giat Perkasa	Apernas Esa Residence	Kalimook Village, Kalianget District
25	CV. Amanah Jaya Sentosa	Bukit Intan Marengan Asri Regency	Etc. Marengan Daya, District. Sumenep City
26	CV. Sinar Arum	Griya Berkat Regency	Batuan Village, Batuan District
27	PT. Sumekar Indah Jaya Abadi	Kalianget Paradise	West Kalianget Village, Kalianget District
28	CV. Dali Makmur	East Circle Rainbow	Kolor Village, Sumenep City District
29	CV. Arta Samudera	Griya Arta Samudera	West Campor Village, Ambunten District
30	PT. Jekatama Indonesia	Griya Mitra Land	Etc. Gunggung, District. Sumenep City
31	Fatih Qadlalfi Daeq Aszar	Beautiful Randu	Etc. Marengan Daya, District. Sumenep City
32	PT. Randu Putra Perkasa Nusantara	Randu Permai 2	Babbalan Village, Batuan District
33	CV. Sumenep Green Land	Green Land	Pabian Village, Sumenep City District
34	CV. Suka Karya Universal	Ecogreen Residence	Pabian Village, Sumenep City District
35	CV. Riverside Property	Cempaka House	Kebunan Village, Sumenep City District
36	PT. Agung Sentosa Property	Grand Villa Batuan	Batuan Village, Batuan District
37	PT. Realty Prisma Agung Intiland	Realty Prisma Agung Intiland 1	Kolor Village, Sumenep City District
38	Official CV 28	Official Gems II (Phase 2)	Kolor Village, Sumenep City District
39	CV. Ahsani Taqwim	Griya Bukit Mas Satu	Kebunagung Village, Sumenep City District
40	CV. Agung Perkasa	Kebunagung Residence	Kebunagung Village, Sumenep City District
41	CV. Surya Mas	Pandawa House	Parsanga Village, Sumenep City District
42	PT. Soemar'oem Cipta Sumekar	Graha HR Soemar'oem Kalianget	West Kalianget Village, Kalianget District
43	CV. Agung Perkasa	Jokotole	Batuan Village, Batuan District
44	PT. Tri Marta Nusa Perkasa	Bukit Intan Marengan Asri Regency 2	Etc. Marengan Daya, District. Sumenep City
45	PT. Thamrinland Agung Mandiri	Thamrin Residence	Pabian Village, Sumenep City District
46	CV. Gemstone	Gemstone Rock	Batuan Village, Batuan District

No	Developer Name	Company name	Address
47	PT. Pendopo Agung Sumekar	Pendopo Agung Residence	Batuan Village, Batuan District
48	PT. Metro Alam Sejati	Keraton Residence	Batuan Village, Batuan District
49	PT. Farmasi Utama	Sejahtera Jatiland Regency Housing	Kebunan Village, Sumenep City District
50	El Bahreisy	Puri Cendana Indah Housing Complex	Saronggi Village, Saronggi District
51	PT. Sumekar Indah Jaya Abadi	Trunojoyo Regency	Etc. Marengan Daya, District. Sumenep City
52	CV. Putri Sembilan	Graha Raung Indah 2	Pabian Village, Sumenep City District
53	Official CV 28	Official Gems II (Stage 3)	Kolor Village, Sumenep City District
54	Carto	Indah Marengan Cottage (Phase 2)	Marengan Village, Sumenep City District
55	PT. Linggarjati Indah	Trijaya Bukit Damai B21 (Phase 1)	Batuan Village, Batuan District
56	PT. Linggarjati Indah	Trijaya Bukit Damai B21 (Phase 2)	Batuan Village, Batuan District
57	PT. Ontong Enterprises	Onggu Grand Symphony	Paberasan Village, Sumenep City District
58	PT. Bromo Residence	Agung Grand Zam Zam	Pabian Village, Sumenep City District
59	CV. Pabian Cahaya Timur	Fabiano's House	Pabian Village, Sumenep City District
60	Abd Ghani	Rahman Residence	Kolor Village, Sumenep City District
61	CV. Your Solution	North Lingkar Hill Park Housing Complex	North Ring Road, Kebunan Village
62	CV. Madura Mas Property	Cendana Mulya Housing Complex	Paberasan Village, Sumenep City District
63	H. Moh. Safiudin	Musdalifah Residence	Kolor Village, Sumenep City District
64	PT. Gasa Utama	Beautiful Songsong Nature	Etc. Pasongsongan District. Pasongsongan
65	PT. Mulya Sumekar	Anugerah Mulya Haqiqi Residence	Lojikantang Hamlet, RT 05 RW 01, Kalianget Village, Kalianget District
66	PT. Pendopo Sumekar	Agung Rato Agung Residence	Jl Raya Lenteng Ds. Batuan District. Rock
67		Trunojoyo Permai Housing Complex	Kalianget By Pass Highway
68	PT. Bukit Pandian Asri	Pandian Hill Villa	Jl. Garuda, Pandian Village, Sumenep City District
69	PT. Patraland Madani Development	Griya Anjangsana Hills	Gelugur Village, Batuan District
70	PT. Sedarah Indonesia	Corp Vasa Residence	Jl. Pamolokan Village Water Channel, District. Sumenep City
71	Elmy Atika	Marengan Asri Natural Housing Complex	Marengan Daya Village, Sumenep City District
72	Perumnas IV Complex	Housing BTN Giling National Housing Complex	Kebunan Village, Pamolokan Village, Bangkal Village

Source: data processed by researchers

and Latin America. This organization was formed to increase the spirit and culture of work in the global community, especially in developing countries. Activities carried out by OISCA in Sumenep Regency include conducting reforestation collaborations with several educational institutions at the elementary, middle, high, and vocational levels. The following is data on CFP (Children's Forest Program) schools in Sumenep (see Table 2).

In addition, the Department of Public Works and Housing (Perkimhub) plays a crucial role in providing private green open space through the Sumenep Green Development Program (P2SH). This program requires every developer of housing, hotels, shopping centers, and shophouses to provide at least 20% of their total land area as green open space. However, field findings indicate that the housing sector's contribution remains limited, reaching only around 3% of the 30% green open space required by national regulations. Despite these progressive regulations, developer compliance and local government oversight have not been optimal. The following is data on licensed housing in Sumenep Regency

(see Table 3).

Of the many housing developments with permits, only the Permai Satellite Housing Complex contributes 3% to the green open space (GTH) area. This demonstrates that developers are ignoring regulations regarding the amount of green open space required for housing. Furthermore, the government is not imposing sanctions on developers who fail to meet the green open space requirements. The reason developers fail to meet these requirements is due to insufficient funding for green open space development, and the standard size of the housing being built is mostly small, resulting in low marketability.

On the other hand, the Public Works and Spatial Planning Agency (PUPR) plays a role in spatial planning control, including ensuring consistency between regional spatial plans and open space allocations. Data integration mechanisms between OPDs have not yet been fully established, making claims of green open space achievement difficult to verify collaboratively. (Sumenep, 2023).

Without an effective collaboration forum and shared data protocols, green open space policies tend to be sector-specific.

This limits public participation in the decision-making process. Experience with spatial planning policies in various regions demonstrates that multi-stakeholder collaboration involving government, the private sector, academics, and communities can strengthen social legitimacy by enabling communities to participate in the planning process, fostering greater private sector involvement, and accelerating the achievement of the 30% national green open space target, as each actor has a clear, measurable, and integrated contribution.

The presence of the Spatial Planning Forum will not only strengthen governance, but will also ensure that green open space policies do not stop at administrative achievements, but actually provide sustainable ecological, social, and economic benefits to the community.

Conclusion

Sumenep Regency has a strong regulatory foundation for RTH policy, yet achievement remains far below national targets. Collaboration among stakeholders is still sectoral, with limited involvement of non-government actors. The Spatial Planning Forum exists institutionally but has not functioned as an effective mechanism for joint planning, monitoring, or policy learning. Collaborative forums should adopt regular agendas and co design mechanisms to ensure that collaboration goes beyond sectoral boundaries.

Strengthening collaborative forums can be enhanced by implementing a regular agenda and policy co-design mechanisms to ensure multi-stakeholder collaboration is not merely sectoral. Data transparency is also necessary to

strengthen the social legitimacy of policies. Furthermore, increasing the role of local governments in providing green open space, the private sector through CSR programs, universities in research and monitoring green open space achievements can be achieved by developing resource pooling schemes from the regional budget (APBD), CSR programs that focus on collaborative indicators, not just physical project outputs, and making green open space achievement evaluations a regular agenda of multi-stakeholder forums so that policies can be evidence-based and sustainable.

Sumenep Regency, as an urban area and a center of economic, social, and cultural activities, requires integrated planning and implementation of green open spaces (RTH). This can be achieved through several strategic steps. First, it is essential to strengthen data governance by conducting periodic updates of RTH spatial data and ensuring transparency for public access. Second, the Spatial Planning Forum should be activated through regular quarterly meetings, supported by clear agendas and structured evaluation mechanisms. Third, the development of private sector incentives, such as tax reductions or fast-track permit processes, can encourage developers to comply with RTH standards. Fourth, community participation needs to be enhanced through participatory planning approaches, village-based greening initiatives, and continuous monitoring. Fifth, education and public communication should be improved through campaigns, competitions, and school-based environmental programs. Finally, efforts should focus on developing thematic and ecological parks, strengthening riverbank and coastal buffer zones, and expanding urban green belts to support sustainable urban environments.

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