

**ABDIMAS TALENTA**
Jurnal Pengabdian Kepada MasyarakatJournal homepage: <https://talenta.usu.ac.id/abdimas>

ASTACITA as a Pentahelix Collaboration Model in Building Independent Tourism Villages: A Case Study of Kuta Gugung

Samerdanta Sinulingga^{*1}, Meutia Naully², Jonathan Liviera Marpaung³¹*Tourism Destination Department, Universitas Sumatera Utara, Medan 20155, Indonesia*²*Psychological Department, Universitas Sumatera Utara, Medan 20155, Indonesia*³*Mathematics Department, Universitas Sumatera Utara, Medan 20155, Indonesia**Corresponding Author: danta@usu.ac.id**ARTICLE INFO****Article history:**

Received : 27 October 2024

Revised : 30 October 2024

Accepted : 9 December 2024

Available online : 20 June 2025

E-ISSN: 2549-418X

P-ISSN: 2549-4341

How to cite:

Sinulingga,S., Naully, M., Marpaung, J.L., (2025). ASTACITA as a Pentahelix Collaboration Model in Building Independent Tourism Villages: A Case Study of Kuta Gugung, ABDIMAS TALENTA: Jurnal Pengabdian Kepada Masyarakat, 10(1), 78-84

ABSTRACT

This article explores the ASTACITA Summit 2025 as an initial model of pentahelix-based collaboration for rural development, focusing on the tourism village of Kuta Gugung in North Sumatra, Indonesia. The summit was conceived as a strategic platform to foster long-term partnerships among five key actors' government, academia, business, community, and media to empower rural communities in a participatory and sustainable manner. Unlike conventional aid-based programs, ASTACITA emphasizes knowledge transfer, network-building, and multi-sector synergy to promote self-reliance. Using a qualitative descriptive method with a case study approach, data were collected through participant observation, informal interviews, and documentation of summit activities. Results show that ASTACITA effectively enabled cross-sector dialogue, identified community needs and potentials, and catalyzed early-stage partnerships. The summit marked a shift in development discourse from charity-driven to strategy-oriented engagement positioning the village as a co-actor in shaping its own future. This article contributes to the discourse on rural innovation and participatory governance by offering a replicable framework for collaborative village development in Indonesia and beyond.

Keyword: ASTACITA, pentahelix collaboration, rural tourism, participatory development, village

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International.

<http://doi.org/10.32734/abdimastralenta.v10i1.22037>

1. Introduction

The development of emerging tourism villages in Indonesia presents both a strategic opportunity and a persistent challenge. These rural areas often possess unique natural, cultural, and social assets that are attractive for tourism-based economic transformation. However, they are frequently constrained by limited access to essential development drivers, including market linkages, technological infrastructure, financial resources, and institutional support systems. As a result, the potential for sustainable and inclusive growth remains largely untapped. Existing interventions aimed at empowering such villages tend to be fragmented and short-term in nature. Many rely on top-down, aid-based approaches that treat communities as passive recipients rather than as active stakeholders. These initiatives often lack integration, fail to address systemic governance issues, and are unable to create lasting impact. Consequently, despite an increasing policy emphasis on rural innovation and tourism, many village-based programs do not lead to genuine empowerment or self-reliance. The result is a cycle of dependency and stagnation, where villages remain disconnected from broader networks of knowledge, capital, and innovation. In response to these challenges, there is a growing need for collaborative and participatory models that prioritize local agency and cross-sector engagement. One such initiative is ASTACITA a summit that brings together actors from government, academia, business, civil society, and media in a structured dialogue. This case study explores how ASTACITA repositions villages not as peripheral beneficiaries, but as central actors in designing and driving their own development trajectory through tourism.

Several prior studies have explored the application of the pentahelix collaboration model across diverse development contexts, particularly in tourism and education. Pribadi and Setiawan (Pribadi I.T & Setiawan A.M, 2024) examined the implementation of pentahelix in Bonjeruk Tourism Village, Central Lombok, emphasizing its contribution to community-based tourism (CBT). Their study revealed that the involvement of five stakeholders government, academia, business, community, and media was effective in aspects of enabling, empowering, supporting, and protecting, but less optimal in fostering and monitoring. Similarly, Wilayati et al. (Wilayati et al., 2023) analyzed the pentahelix synergy in managing Bangsring Underwater Marine Ecotourism in Banyuwangi. Their findings highlighted how structured collaboration among pentahelix actors enhanced destination branding and economic benefits for local communities, though challenges remained in academic engagement and innovation sustainability. In another context, Nur Azmi et al. (Azmi et al., 2023) applied the pentahelix model to improve education quality in Sukabumi, concluding that although multiple actors were present, the collaboration lacked formal coordination and continuity. Their findings underscore the necessity of institutionalized partnerships among primary and secondary actors to enhance program effectiveness. These studies consistently demonstrate that the pentahelix model holds significant promise for inclusive development but must be operationalized with clear role distribution, sustained communication, and formalized cooperation mechanisms. Collectively, these works offer foundational insights for exploring ASTACITA as a potential framework for initiating integrated, multi-actor rural transformation in tourism villages. However, they also suggest that replication of such models must consider local dynamics, stakeholder readiness, and institutional capacity (Beatrice & Hertati, 2023; Yesayabela et al., 2024).

The objectives of this study are threefold. First, it seeks to examine the design and execution of ASTACITA as a strategic, multi-stakeholder platform that brings together key actors from government, academia, business, community, and media. Second, it aims to evaluate the specific roles and contributions of each actor in facilitating the transformation of Kuta Gugung into an independent tourism village. Finally, the study endeavors to identify how the ASTACITA forum fosters long-term, inclusive development at the grassroots level by promoting participatory governance, collaborative planning, and sustainable rural innovation.

2. Method

3.1 Operationalizing the Pentahelix Model in Rural Tourism Development

To effectively translate the pentahelix concept into practice, it is essential to operationalize the distinct roles of each stakeholder while fostering sustained synergy among them. In rural tourism development, particularly in emerging villages like Kuta Gugung, collaboration cannot be merely symbolic it must be structured, functional, and inclusive. Each of the five actors in the pentahelix brings a unique capacity that, when properly aligned, forms a self-reinforcing system of innovation, implementation, and sustainability. Figure 1 illustrates this operational framework of the pentahelix model (Rochaeni et al., 2022). Within this model, the government acts as a catalyst by establishing enabling regulations and providing strategic direction. Academia plays the role of conceptualizer, offering research-based frameworks, diagnostic tools, and capacity-building interventions. The business sector enables economic activation through tourism investment, infrastructure, and entrepreneurial engagement. The community serves as the implementer, grounding all development efforts in local knowledge, ownership, and cultural authenticity (Alfan Hakim, 2022). Meanwhile, the media promotes the initiative, shaping narratives, increasing public awareness, and amplifying the village's tourism brand. These stakeholders are embedded in a circular structure, emphasizing interconnectedness and mutual accountability, with internal arrows denoting continuous exchange and co-evolution.

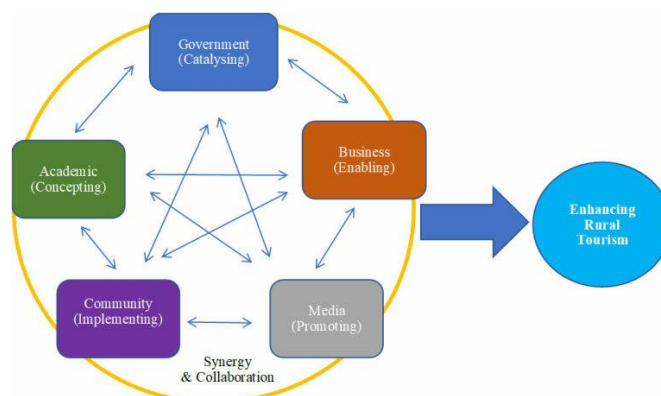


Figure 1. Pentahelix model

The value of this model lies in its emphasis on non-linear, cross-sectoral collaboration that adapts dynamically to evolving village contexts (Armidin et al., 2023; Herawati et al., 2023). By replacing fragmented, top-down interventions with integrated planning and shared action, the model supports a shift toward long-term development. This synergy-based approach encourages each actor not only to fulfill their primary function, but also to remain responsive to the changing needs of the others forming a collaborative ecosystem. In the case of ASTACITA, this model was introduced through the summit as a working prototype, providing a structure within which stakeholders could map local potentials, articulate shared goals, and formalize early-stage partnerships that align with the village's vision of sustainable tourism development.

3.2 Triangulation for Data Collection

To ensure the credibility and trustworthiness of qualitative data in this study, triangulation was employed as a core strategy during the data collection and validation process. Given the multi-actor and dynamic nature of the ASTACITA Summit, triangulation allowed the researcher to cross-verify findings through different angles of inquiry (Ismayadi et al., 2023; Sembiring et al., 2023). This approach is particularly suitable in studies involving complex stakeholder collaboration, such as in the pentahelix model, where perspectives vary across institutional, social, and operational boundaries. Figure 2 illustrates the triangulation framework used in this research, which incorporates three interconnected dimensions: methods, sources, and instruments. In the first dimension, multiple methods such as interviews, document reviews, and informal surveys were applied to capture both the structured and emergent elements of the ASTACITA Summit. The second dimension ensured diversity of data sources, involving government officials, community representatives, business actors, academics, and media participants each providing a different lens on the collaborative process. The third dimension relates to the instruments used, including semi-structured interview guides, summit protocols, and observational field notes. The convergence of these three elements strengthens the interpretive validity of the research and minimizes the bias of relying on a single method, source, or tool.

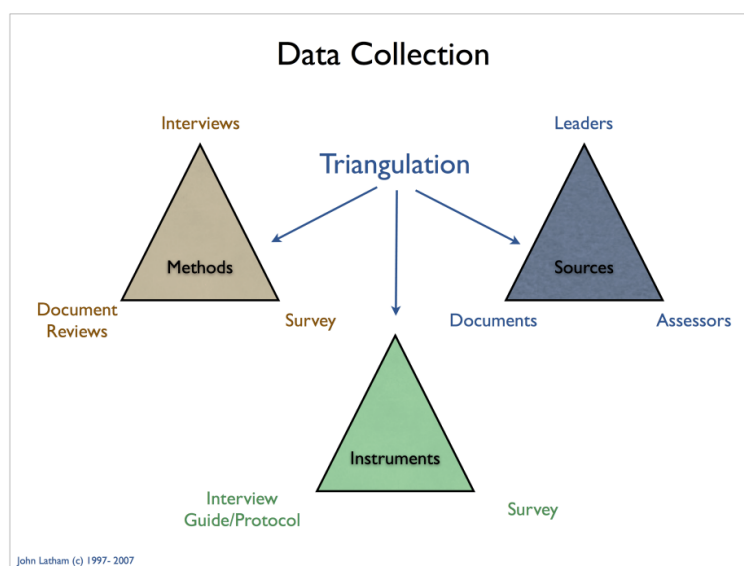


Figure 2. Triangulation Data Collection

In the context of ASTACITA, triangulation was essential not only for accuracy but also for capturing the nuanced interplay among stakeholders. For instance, the perception of collaboration expressed by a community leader could be contrasted with formal documentation or feedback from a government representative. Likewise, the informal nature of a marketplace dialogue could be validated through both field observation and photographic evidence. This multidimensional verification approach enabled the researcher to construct a more robust and holistic understanding of how the pentahelix actors interacted during the summit, and how their roles contributed to the early stages of sustainable tourism planning in Kuta Gugung.

3. Result and Discussion

3.1 ASTACITA Summit Design and Innovation

The ASTACITA Summit 2025 was conceived not as a ceremonial event, but as a functional platform designed to foster strategic, cross-sectoral collaboration at the grassroots level. Its structure reflected a deliberate sequencing of activities aimed at gradually building trust, sharing knowledge, and forging long-term partnerships. The summit began with keynote addresses from prominent figures representing government, academia, and civil society, which provided both policy framing and inspirational narratives to contextualize the urgency of collaborative rural transformation. This was followed by panel discussions involving representatives from the five pentahelix sectors, where each actor was given space to share insights, identify gaps, and express commitment toward supporting village development initiatives. One of the most innovative features of the summit was the “Marketplace of Ideas”, an interactive session that replaced traditional presentations with rotating roundtable dialogues. Here, community members, local entrepreneurs, educators, and institutional partners engaged in open-ended discussions to propose actionable programs and explore synergies in real time. The event concluded with a commitment-signing session, where letters of intent were exchanged between village representatives and potential partner institutions symbolizing the shift from talk to action. These structural elements designed to promote inclusiveness, informality, and mutual accountability position ASTACITA as a replicable model of participatory planning that moves beyond symbolic engagement toward structured collaboration for sustainable rural tourism development.

3.2 Role of Each Pentahelix Actor

A central feature of the ASTACITA Summit was the deliberate engagement of all five pentahelix actors: government, academia, business, community, and media, each contributing distinct yet interdependent roles in shaping the vision of an independent tourism village. The government, represented by both local and regional agencies, functioned as the regulatory and enabling authority, offering institutional support, clarifying development priorities, and committing to integrate community-based tourism into local policy frameworks. Academia played a pivotal role in facilitating knowledge-based dialogue by offering tools for village mapping, presenting models of sustainable tourism, and proposing mechanisms for inclusive planning. Scholars also acted as neutral moderators in multi-actor sessions, ensuring that grassroots voices were methodically included in the discourse. The business sector, including microenterprises and social entrepreneurs, contributed insights on product development, tourism packaging, and potential value chain integration. Their presence helped bridge the gap between local aspirations and market realities, while also signaling readiness for future investment partnerships. The community, including traditional leaders, youth groups, and farmer associations, served not only as informants but as co-creators of the village’s tourism agenda. Their contextual understanding of cultural assets, land use, and social dynamics grounded the summit’s planning in lived realities. Finally, the media sector played a dual role: documenting the summit and amplifying its outcomes through digital storytelling and public advocacy. Their narratives helped shape the perception of the village as an emerging model of sustainable tourism and governance innovation. The synergy among these actors demonstrated the potential of pentahelix collaboration to catalyze both visioning and action at the rural level.



Figure 3. Pentahelix collaboration

The effectiveness of the ASTACITA Summit in fostering multi-stakeholder collaboration was not only conceptual but also demonstrated through active participation and symbolic affirmation among the five key actors. Throughout the event, structured sessions such as roundtable discussions, thematic panels, and interactive dialogues enabled government representatives, academics, business leaders, community stakeholders, and media practitioners to engage in direct, reciprocal conversations. These interactions were further solidified by visual and ceremonial moments that captured the shared commitment to transforming Kuta Gugung into an independent and sustainable tourism village. Figure 3 shows a collective moment of unity among the pentahelix actors during the summit. Each individual in the image represents a sectoral stakeholder involved in the ASTACITA process, wearing a red woven scarf as a cultural symbol of respect and local identity. The visual encapsulates not only participation but also mutual acknowledgment and solidarity key principles in collaborative governance. This public affirmation of unity reflects the deeper ethos of ASTACITA: that development cannot be achieved in isolation, but must be co-created through trust, shared purpose, and visible commitment. The image also served as a catalyst for further momentum, encouraging participants to formalize their involvement in post-summit action plans. It became a symbolic anchor of the summit's success visually reinforcing the values of inclusion, respect, and cross-sector synergy that are central to the pentahelix approach in rural tourism development.

3.3 Initial Outcomes and Commitments

The ASTACITA Summit 2025 generated a series of concrete early-stage outcomes that reflect both the strategic intent and collaborative potential of the pentahelix model in practice. One of the key achievements was the articulation of a shared vision among stakeholders to position Kuta Gugung as a model of independent, sustainable rural tourism. This vision was co-developed through dialogue sessions in the “Marketplace of Ideas,” where representatives from government, academia, community groups, and local businesses jointly identified priority areas for collaboration. These included capacity-building programs for local tour guides and homestay operators, the conceptualization of digital tourism tools, support for eco-tourism product development, and the establishment of a community-led tourism information center.

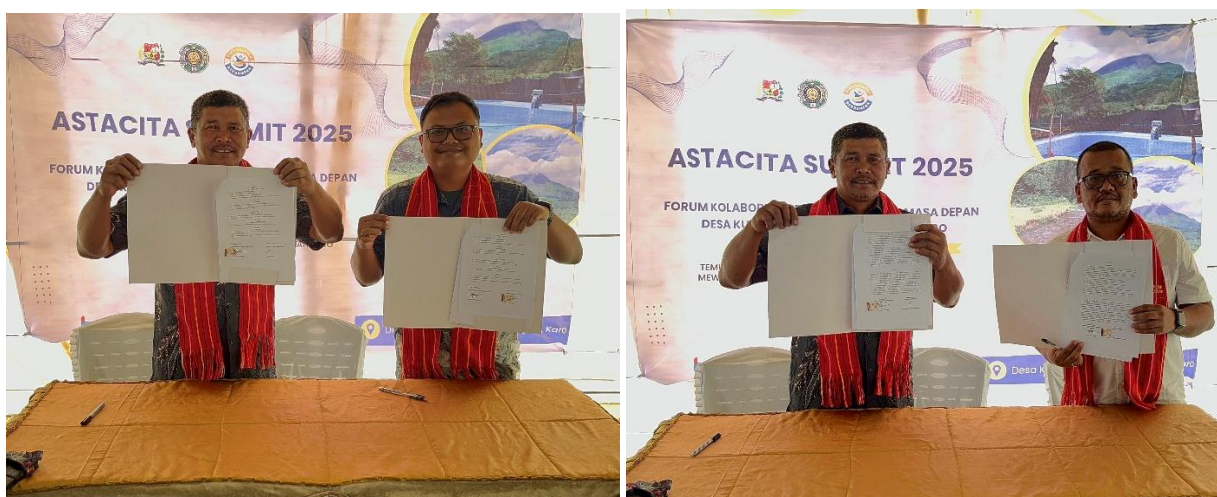


Figure 4. Signing the Implementation Arrangement of stakeholder

A pivotal moment during the ASTACITA Summit 2025 was the formalization of stakeholder commitments through the signing of implementation arrangements. These agreements symbolized a transition from dialogue to tangible collaboration, reinforcing ASTACITA's aim to move beyond ceremonial discourse toward actionable partnerships. Figure 4 captures this moment, featuring the village head of Kuta Gugung officially signing Letters of Intent with two key institutional partners: Ruman BUMN Kabanjahe and Juma Bakal, a local social enterprise. On the left side of the figure, the village head is seen alongside a representative of Ruman BUMN Kabanjahe, an institution under the state-owned enterprises network that focuses on rural capacity-building and economic empowerment. The agreement highlights their intention to support entrepreneurship training and facilitate access to BUMN-aligned tourism programs. On the right, the village leader is pictured with a representative from Juma Bakal, an agro-ecotourism initiative rooted in local values. This collaboration is directed at co-developing sustainable tourism experiences based on indigenous knowledge, land stewardship, and community-based accommodation. The ceremonial signing not only

formalized mutual intentions but also acted as a public declaration of accountability and shared ownership in the village's development journey. As such, these implementation arrangements are instrumental in institutionalizing the summit's outcomes and ensuring that each actor's contribution is followed by structured coordination, monitoring, and long-term engagement aligned with the village's vision for sustainable tourism.

3.4 ASTACITA as a Strategic Model

ASTACITA emerges not merely as an event, but as a strategic model for multi-stakeholder rural development that integrates vision, participation, and structured collaboration. Unlike conventional top-down development programs that often marginalize local agency, ASTACITA positions the village as an active co-designer of its own future. By embedding the pentahelix framework which brings together government, academia, business, community, and media into a single, action-oriented forum, ASTACITA creates a shared space for negotiation, co-creation, and commitment. Its design intentionally fosters real-time interaction, relationship building, and cross-sector alignment, allowing stakeholders to explore common interests and formalize partnerships grounded in mutual benefit. One of the model's key strengths lies in its ability to shift the paradigm from aid-based dependency to strategic collaboration. By facilitating processes such as village asset mapping, opportunity identification, and institutional matchmaking, ASTACITA enables communities to articulate their development priorities while accessing technical and financial support through established networks. The forum also introduces an adaptable structure that can be replicated in other emerging tourism villages, with contextual modifications based on local socio-cultural and ecological characteristics. Moreover, its emphasis on symbolic gestures such as traditional attire, shared meals, and cultural expression contributes to trust-building and a sense of shared ownership among participants. As a strategic model, ASTACITA combines conceptual clarity with operational pragmatism. It functions as both a catalyst and container: catalyzing collaboration and containing diverse interests within a structured, inclusive platform. In doing so, it lays the foundation for long-term, participatory rural development that is not only sustainable but also democratically grounded in local voices and aspirations.

4. Conclusions

The ASTACITA Summit 2025 presents a compelling case for how structured, cross-sector collaboration can be harnessed to empower rural communities in a participatory and sustainable manner. By operationalizing the pentahelix framework bringing together government, academia, business, community, and media ASTACITA redefines village development as a co-created process rather than a top-down intervention. It offers an inclusive platform where stakeholders jointly identify priorities, align resources, and formalize commitments toward long-term transformation. More than just a forum, ASTACITA initiates a shift in development thinking: one that is rooted in local agency, values sustainability, and emphasizes shared ownership. It challenges the conventional paradigm of rural assistance by emphasizing empowerment over charity, collaboration over fragmentation, and dialogue over prescription. The summit's participatory design, symbolic unity, and early-stage outcomes demonstrate that inclusive governance models can be both strategic and practical when guided by mutual respect and clearly defined roles. As a case study, the experience of ASTACITA in Kuta Gugung offers valuable insight into the feasibility of replicating such a model across other rural and tourism-focused regions in Indonesia. Its flexibility, community-centered orientation, and emphasis on stakeholder synergy make it a scalable and adaptable tool in the broader agenda of rural transformation. Continued follow-up, institutional support, and participatory monitoring will be essential to sustaining its momentum but the foundational model has already proven to be a promising step toward integrated, grassroots-led development.

Acknowledgement

This study funded by Universitas Sumatera Utara under Lembaga Pengabdian Pada Masyarakat scheme Desa Binaan USU 2025 (Grant No: 1830/UN5.1.R/SK/PM.01.02/2025)

References

- Alfan Hakim, M. (2022). Strategi Pentahelix Pada Perencanaan Pariwisata di Desa Hegarmukti, Cikarang, Kabupaten Bekasi, Jawa Barat. *Destinesia : Jurnal Hospitaliti Dan Pariwisata*, 4(1), 33–41. <https://doi.org/10.31334/jd.v4i1.2561>
- Armidin, R. P., Marpaung, T. J., & Satria, A. (2023). *Increasing Productivity and Local Product Branding Optimization and Food Security in Desa Perkebunan Tanjung Kasau*. 8(2), 1318–1331.

- Azmi, M. R. N., Yuniningsih, T., & Larasati, E. (2023). Model Pentahelix Dalam Peningkatan Kualitas Pendidikan Di Kabupaten Sukabumi. *E-Journal 3 Universitas Diponegoro*, null(23), 1–14.
- Beatrice, C., & Hertati, D. (2023). Model Pentahelix dalam Pengembangan Usaha Mikro, Kecil dan Menengah (UMKM) Manggarsari. *Jurnal Ilmiah Manajemen Publik Dan Kebijakan Sosial*, 7(2), 107–123. <https://doi.org/10.25139/jmnegara.v7i2.6261>
- Herawati, E., Mahyuddin, Sutarman, Sawaluddin, Erwin, & Marpaung, J. L. (2023). Optimizing Digital Learning Based Learning as a Learning Media of Today with Enhanced Microsoft Office Softskill at SMAS Husni Thamrin. *ABDIMAS TALENTA: Jurnal Pengabdian Kepada Masyarakat*, 8(2), 1078–1084. <https://doi.org/10.32734/abdimastalenta.v8i2.15421>
- Ismayadi, Zulfan, Putra Armidin, R., Herianto, T., Satria Lubis, A., Marpaung, J. L., Gunaika, R., Hayatunnufus, Siringoringo, Y. B., Azhari, & Munzaimah. (2023). The Effectiveness of Digital Literacy in Improving Community Skills in the Tanjung Kasau Plantation Village. *ABDIMAS TALENTA: Jurnal Pengabdian Kepada Masyarakat*, 8(2), 931–936. <https://doi.org/10.32734/abdimastalenta.v8i2.11314>
- Pribadi I.T, & Setiawan A.M. (2024). Jurnal Penelitian dan Pengkajian Ilmiah <https://manggalajournal.org/index.php/cendekia> Peran Pentahelix dalam Pengembangan Pariwisata Berbasis Masyarakat di Desa Wisata Bonjeruk, Kabupaten Lombok Tengah INFO ARTIKEL. *Jurnal Penelitian Dan Pengkajian Ilmiah*, 1(7), 305–316. <https://manggalajournal.org/index.php/cendekia>
- Rochaeni, A., Yamardi, & Noer Apptika Fujilestari. (2022). Model Pentahelix dalam Pengembangan Pariwisata di Kecamatan Rongga Kabupaten Bandung Barat. *NeoRespublica: Jurnal Ilmu Pemerintahan*, 4(1), 124–134. <https://doi.org/10.52423/neores.v4i1.38>
- Sembiring, P., Suyanto, & Marpaung, J. L. (2023). Hydroponic Provisions for Food Production During the Covid-19 Pandemic Necessitated Restricted Land Use. *ABDIMAS TALENTA: Jurnal Pengabdian Kepada Masyarakat*, 8(2), 822–834. <https://doi.org/10.32734/abdimastalenta.v8i2.15074>
- Wilayati, Tamrin, M. H., & Arieffiani, D. (2023). Sinergi Pentahelix Sebagai Upaya Pengelolaan Wisata Banyuwangi Under Water. *Reformasi*, 13(2), 311.
- Yesayabela, T. M., Satyas, F. R., Musleh, M., & Rianto, B. (2024). Kolaborasi Model Pentahelix dalam Pengembangan Desa Wisata Pandean Kecamatan Gondang Kabupaten Trenggalek. *Kolaborasi : Jurnal Administrasi Publik*, 9(3), 327–346. <https://doi.org/10.26618/kjap.v9i3.11736>