

---

| RESEARCH ARTICLE

## Collaborative Governance Regime Driving Digital, Tourism, and Export Transformation in Rural Sidomulyo

Itok Wicaksono<sup>1</sup>, Hadi Prayitno<sup>2</sup>, Hari Karyadi<sup>2</sup>, and Selfi Budi Helpiastuti<sup>2</sup>

<sup>1</sup>Lecturer Faculty of Social and Political Sciences, Universitas Muhammadiyah Jember, Indonesia

<sup>2</sup>Lecturer Faculty of Social and Political Sciences, Universitas Jember, Indonesia

**Corresponding Author:** Author's Name, Itok Wicaksono, **E-mail:** [itokwicaksono@unmuhjember.ac.id](mailto:itokwicaksono@unmuhjember.ac.id)

---

| ABSTRACT

Collaborative rural governance in Indonesia has increasingly attracted scholarly scrutiny due to growing interdependence between government institutions, community organizations, private actors, and academic partners. The study analyses how multi-actor interactions in Sidomulyo Village produce institutional synergy across three strategic initiatives: digital governance, community-based tourism, and export-oriented agribusiness. A qualitative phenomenological approach was employed through semi-structured interviews, direct field observation, and documentary analysis. Analytical rigor was enhanced through triangulation and thematic coding aligned with the Collaborative Governance Regime framework. Findings reveal that governance effectiveness evolves from relational mechanisms, epistemic collaboration, and shared motivation rather than hierarchical directives. Digital platforms expand administrative transparency and knowledge transfer; tourism strengthens cultural identity and collective entrepreneurship; agribusiness exportation demonstrates value-chain competitiveness supported by scientific expertise. Academic institutions operate as epistemic actors, contributing not only technical inputs but also methodological leadership, institutional learning, and certification pathways. Informal norms, cultural cohesion, and mutual accountability function as coordinating instruments, reducing transaction costs and sustaining cross-sectoral cooperation. Empirical insights affirm that collaborative governance in micro contexts requires both cognitive capital and relational legitimacy to achieve durability. The study contributes theoretically by extending the Collaborative Governance Regime beyond urban and sectoral applications toward a knowledge-infused regime model tailored to rural environments. Practical implications emerge for policymakers seeking transformative strategies that integrate digital inclusiveness, creative tourism, and export viability in rural development.

| KEYWORDS

Collaborative governance, digital village, community-based tourism, export agribusiness, epistemic actors

| ARTICLE INFORMATION

**ACCEPTED:** 20 November 2024

**PUBLISHED:** 25 December 2025

**DOI:** 10.32996/jhsss.2025.7.12.12

---

### 1. INTRODUCTION

Rural transformation in Indonesia has gained significant scholarly and policy attention over the past decade, particularly after the enactment of Village Law No. 6/2014 and subsequent institutionalisation of participatory governance frameworks. Numerous studies have demonstrated uneven outcomes in village development programs, ranging from stagnation in rural productivity to progressive growth and innovation. Yet, differentiation among villages is influenced not merely by policy architecture but also by the capacity of local actors to collaborate, innovate, and manage resources in an adaptive manner (Ulibarri et al., 2020; Waardenburg et al., 2019). Sidomulyo Village in Jember Regency offers a compelling case of accelerated rural advancement, where status shifted directly from a *desa berkembang* to a *desa mandiri*, bypassing intermediary

categorisation. Such a leap displays institutional maturity in governance processes, social participation, and economic strategy rather than solely administrative compliance.

Sidomulyo demonstrates three strategic domains of rural transformation: digital governance, community-based tourism, and export-oriented agribusiness. The interplay among these domains has cultivated a developmental ecosystem sustained by collaboration among government institutions, civil society, local enterprises, cooperatives, and academic partners. Governance arrangements are neither purely hierarchical nor solely market-driven; rather, they emerge from negotiated interactions shaped by mutual trust, shared motivation, and structured facilitation. Emerson, Nabatchi, and Balogh (2011; 2015) conceptualised such interactions as *Collaborative Governance Regimes* (CGR), where collaborative dynamics are translated into collective actions through principled engagement and joint capacity. Yet CGR theory has been applied predominantly in urban, sectoral, or bureaucratically structured environments, leaving significant theoretical space to explore how regime dynamics function within micro-governance contexts such as villages, whose socio-institutional fabric differs markedly from formal state agencies.

Sidomulyo's digital transformation began with the initiation and scaling of a village digital ecosystem designed to improve administrative transparency, inclusiveness, and accessibility. Integration of administrative information systems with digital marketplace facilities enabled stronger linkages between village residents and economic opportunities. Unlike many rural digitalisation programs that rely solely on government operational capacity, Sidomulyo achieved system robustness through partnerships with universities, information communities, village enterprises (BUMDes), youth associations, and private technology providers. Such collaborative processes cultivated shared ownership of digital infrastructure, reduced dependence on external authorities, and enhanced digital literacy across community segments. Scholars have emphasised that success of digital governance depends not on infrastructure alone but also on cross-actor trust, shared accountability, and continuous learning (Elken, 2024; Liu & Ding, 2023).

Tourism development in Sidomulyo illustrates how cultural assets can be mobilised to strengthen livelihoods. Local tourism enterprises are not isolated business units but operate within a governance network supported by BUMDes, university partners, youth organisations, and community associations. This network collectively manages visitor experiences, marketing, local knowledge preservation, and product diversification. The emergence of *Galeri Gumitir* as an institutional hub links creative industries, tourism promotion, knowledge transfer, and entrepreneurial capacity. Empirical work on tourism governance increasingly acknowledges the value of collaborative configurations in strengthening both resilience and authenticity of rural destinations (Karyaningtyas et al., 2024). Sidomulyo's experience enriches this literature by demonstrating how multiple collaborative layers—economic, social, technological, and educational—coexist and reinforce one another.

An additional trajectory of transformation in Sidomulyo derives from its export-oriented agribusiness model. The development of coffee cooperatives underpins global market penetration, institutional legitimacy, and quality standards. Local producers benefit from support provided by national financial institutions, regional development agencies, and academic expertise. Collaboration produces significant learning spillovers, strengthening agronomic capacity, certification processes, market negotiation skills, and investment readiness. Research on collaborative value chains in rural economies increasingly emphasises knowledge intermediaries and epistemic support networks as critical enablers of capacity building (Chen et al., 2025). Sidomulyo extends this insight by positioning universities as epistemic partners in governance rather than mere technical advisors.

Despite multiple achievements, institutional arrangements in Sidomulyo are not anchored in a coherent regulatory framework governing collaborative relationships. Operational collaboration often relies on informal consensus, proximity-based trust, and shared cultural norms. Formal regulations concerning village governance provide guidance on participation, transparency, and community planning, yet remain silent regarding role delineation, coordination mechanisms, accountability distribution, conflict resolution, and strategic integration across programs. Findings from Indonesian governance studies illustrate that absence of institutionalised collaborative rules may threaten sustainability when leadership changes, resource competition intensifies, or external shocks emerge (Ghassani et al., 2023; Roengtam & Agustiyara, 2022). Therefore, Sidomulyo's developmental progress exposes both an opportunity and a vulnerability: collaborative practices generate adaptive capability, yet lack formal structuring that ensures long-term institutional resilience.

Scholarly literature reveals several unresolved questions relevant to Sidomulyo. First, few studies explore how multi-actor collaborative governance regimes operate simultaneously across multiple strategic domains within a single village. Most frameworks examine either digital innovation, tourism management, or local agribusiness in isolation. Second, empirical investigations rarely consider the strategic role of universities as epistemic actors possessing autonomous agency equivalent to government, private sector, and civil society. Third, theoretical applications of CGR seldom address informal coordination mechanisms that emerge in socio-cultural micro contexts. Consequently, a conceptual lacuna persists concerning how collaborative dynamics are constructed, stabilised, and translated into collective action in rural environments that combine strong social cohesion with formal governance aspirations.

A research endeavour situated in Sidomulyo provides rich analytical ground to advance theory and practice of collaborative governance. Analysis of multi-actor interactions across digital, tourism, and export domains can illuminate how collaborative regimes emerge, adapt, and institutionalise. Examination of shared motivation, trust, facilitative leadership, and

distributed capacity can offer deeper explanation of collaborative durability. Investigation of the epistemic role of universities can provide conceptual contributions to CGR by expanding the construct of multi-actor capacity beyond technocratic support. Insights derived from Sidomulyo may inform governance models for other villages seeking to strengthen self-reliance, enhance digital inclusion, diversify local economies, or leverage academic partnerships.

The purpose of the research is to analyse the collaborative governance dynamics of multi-actor engagement in Sidomulyo; explain how interactions are organised across three strategic programs; understand roles, relationships, and coordination mechanisms; and conceptualise a governance model capable of sustaining transformative rural development. The study offers empirical significance for policymakers, theoretical advancement for CGR scholarship, and methodological refinement for analyses of complex governance arrangements in micro institutional environments.

## **2. LITERATURE REVIEW**

Research on collaborative governance in rural development has advanced significantly over the past decade, particularly in relation to multi-actor coordination, knowledge-based partnerships, and community empowerment. A comprehensive understanding demands attention to theoretical foundations and empirical findings addressing governance complexity in micro contexts. The review below synthesizes perspectives from collaborative governance theory, relational and adaptive coordination, digital transformation, tourism governance, and export-oriented rural economic initiatives. Conceptual gaps are highlighted in order to demonstrate the scientific contribution of the present research.

### **A. Collaborative Governance: Dynamics and Regimes**

Collaborative Governance Regime (CGR), developed by Emerson, Nabatchi, and Balogh, serves as a foundational lens explaining how multiple actors coordinate public problem solving. The framework identifies three interlocking components: principled engagement, shared motivation, and joint action capacity (Emerson et al., 2021). Studies by Ulibarri (2020) and Waardenburg et al. (2019) reinforce the need for shared trust, sustained commitment, and interactive learning. Although CGR was initially conceptualized for formal multi-agency coordination, subsequent studies have emphasized the flexibility and fluidity required for community processes (Ansell et al., 2025). CGR therefore offers analytical strength for assessing multi-actor interaction in rural environments where institutional arrangements often remain informal, relational, and adaptive.

A critical insight from Waardenburg et al. (2019) is that collaborative regimes often display paradoxical tensions between shared decision-making and competing interests. Relational leadership becomes essential when collaboration must manage conflict, uncertainty, and limited resources. Craps et al. (2019) demonstrate that complex contexts require enabling leadership rather than hierarchical control. Both studies deepen explanatory capacity for identifying how leadership in villages sustains collective action in spite of diverse motivations.

### **B. Knowledge-Based Collaboration and Role of Higher Education Institutions**

Recent research addresses the limited understanding of higher education institutions (HEIs) as actors within collaborative governance. Studies such as Kusmulyono, Dhewanto, and Famiola (2023) show that university involvement can strengthen community-held knowledge and increase problem-solving capacity. Chen, Lin, and Chen (2025) further confirm that HEIs enhance social capital through university social responsibility initiatives. However, most studies place universities in an advisory or technical facilitation role rather than viewing them as peer collaborators. Elken (2024) offers a more progressive view by demonstrating that multi-actor arrangements can jointly design governance instruments, albeit with dilemmas related to inclusiveness and uncertainty.

In micro-governance contexts, university actors often function as catalysts for knowledge transfer, mediation, and institutional learning. Yet empirical study seldom treats universities as strategic actors equal to public authorities and private sectors. Literature therefore reveals an analytical gap: lack of systematic examination of epistemic actors as full partners within informal rural collaborative regimes. Understanding how universities operate outside the conventional advisory model contributes to theoretical novelty in collaborative governance discourse.

### **C. Collaborative Governance and Community Empowerment in Rural Areas**

Governance in rural development often hinges upon the capacity of community organizations and civil society actors. Karyaningtyas et al. (2024) demonstrate how civil society power in Sidomulyo drives associative, communicative, and influential dimensions of tourism governance. Jamaluddin et al. (2018) indicate that citizen participation rarely becomes strategic without adequate literacy, access, or institutional capacity. Mutiarin and Iqbal (2021) emphasize that participation in *BUMDes* settings generates significant outcomes when linked to local energy, skills, and social assets.

Other studies illustrate institutional weaknesses that constrain rural governance. Ghassani et al. (2023) identify failures in accountability, professional competency, and cultural-cognitive norms in rural administration. Roengtam and Agustiyara (2022) report that unclear intergovernmental coordination and fragmented networks hinder collaborative land use policies. These findings underscore the value of collaborative practices that promote coordination, shared knowledge, and equitable role distribution.

#### D. Digital Governance and Rural Innovation

Digital transformation research increasingly recognizes rural governance challenges. Liu and Ding (2023) illustrate that collaborative innovation projects benefit from dynamic evaluation mechanisms that consider stakeholder network changes. Research by Heri Juheri et al. (2025) reveals that multi-actor collaboration in rural digitalization is often constrained by capacity, infrastructure gaps, and coordination deficits. A digital ecosystem therefore requires synchronized leadership, consistent institutional learning, and cross-sectoral partnerships.

In rural contexts, digital platforms strengthen administrative services, economic marketing, and community information exchange. In Sidomulyo, digital systems such as *MallDesa*, *SIPADU*, and *Komunitas Informasi Masyarakat* connect governmental administrators, civil society, universities, and private actors. Although literature acknowledges digital governance emergence, rigorous conceptualization of multi-actor dynamics within digital village ecosystems remains limited.

#### E. Tourism Governance and Socio-Economic Empowerment

Tourism governance in villages encompasses cultural heritage management, digital promotion, and community-led entrepreneurship. Karyaningtyas et al. (2024) show that collective learning and community capacities play determining roles in sustaining tourism development. Collaborative tourism governance blends informal community networks with institutional arrangements involving *BUMDes*, civil society alliances, and academic partners.

Most academic studies examine tourism governance singularly, without comparing it to other development sectors such as digitalization or export-based initiatives. The absence of cross-sector comparative analysis forms a significant research gap. Multi-sector collaboration in villages remains under-theorized despite its increasing importance in policy practice.

#### F. Export-Based Rural Economic Development

Research on village-level export development is still emergent. Sidomulyo's coffee program aligns with global value chain literature, which emphasizes institutional cooperation, capacity building, and quality assurance. As indicated by Roengtam and Agustiyara (2022), failure to align institutional networks inhibits policy implementation. An export ecosystem requires a governance regime that mobilizes multiple actors with complementary resources and strategic responsibilities.

### 3. RESEARCH METHOD

A qualitative phenomenological design anchored the inquiry, offering an avenue for uncovering lived experiences and collaborative interactions among multiple actors in *Desa Mandiri* Sidomulyo. Primary evidence consisted of semi-structured interviews with purposively selected village officials, *BUMDes*, community groups, cooperatives, private partners, and representatives of higher education institutions. Supplementary informants were identified using a snowball procedure to ensure adequate representation of strategic stakeholders. Direct field observations of governance meetings, digital service implementation, tourism operations, and cooperative export activities enriched the empirical foundation. Documentary sources included regulations, program reports, meeting notes, and online publications.

Credibility was strengthened through member validation, peer debriefing, triangulation of sources, and prolonged engagement in the research setting, reflecting rigorous qualitative standards reported in recent collaborative governance studies (Waardenburg et al., 2019; Ulibarri et al., 2020). Analysis adopted an inductive strategy involving iterative coding, comparison of emerging categories, and identification of thematic patterns. Phenomenological reduction was employed to bracket presumptions and reveal meaning structures embedded in actor interactions, consistent with contemporary research on multi-actor governance dynamics (Craps et al., 2019; Liu and Ding, 2023). Interpretation remained closely aligned with the Collaborative Governance Regime framework to illuminate shared motivation, engagement practices, and joint action capacity across the three strategic village programs.

## 4. RESULTS AND DISCUSSION

### A. Overview of Collaborative Dynamics in Sidomulyo

The governance arrangement in Sidomulyo illustrates a mature collaborative dynamic grounded in shared objectives, cross-sectoral resource exchange, and reciprocal learning. Three flagship initiatives—*Desa Digital*, *Desa Wisata*, and *Desa Devisa*—operate not as fragmented development efforts but as an interconnected institutional ecosystem. Each initiative manifests specific functional contributions, yet all depend on inter-relational mechanisms constructed through trust, knowledge exchange, and strategic facilitation by village authorities.

The interplay among governmental administration, *Badan Usaha Milik Desa* (*BUMDes*), community organizations, and academic institutions unfolds through a division of labor characterized by complementarity rather than competition. A coordinated ecosystem evolves in which the village government frames regulatory direction, the *BUMDes* manages operational strategies, community groups support social mobilization, universities contribute epistemic and technical expertise, while private enterprises extend market networks and logistics. An outcome of such polycentric interaction is the emergence of a collaborative regime whose stability relies more on negotiated expectations than on formal coercive instruments. The process reflects the

model of iterative collaboration described by Waardenburg et al. (2019), where governance evolves through continuous problem reframing, reciprocal recognition, and joint sense-making.

The collaboration is further reinforced by a local cultural foundation where collectivism, mutual respect, and intergenerational solidarity function as normative instruments supporting policy coherence. Such conditions reduce transaction costs associated with coordination and social negotiation. When interpreted through a CGR lens, the Sidomulyo ecosystem displays principled engagement, shared motivation, and collective capacity for action as key organizing elements. The environment encourages co-creation of knowledge and shared responsibility, resonating with the analytical framework demonstrated by Emerson in collaborative public governance research.

### **B. Desa Digital: Institutional Results and Governance Implications**

The digital governance transformation in Sidomulyo materializes through the development of the SIPADU system and the MallDesa digital platform. These digital infrastructures reconfigure administrative relationships by introducing transparency, widening information accessibility, and enabling constant interaction among residents, administrators, and knowledge providers. The system promotes a high degree of information symmetry that weakens transactional bottlenecks associated with traditional bureaucratic procedures. Digital literacy cultivated among villagers reduces dependence on intermediaries and amplifies inclusion, aligning with Liu and Ding (2023) who observed that digital interfaces increase relational clarity and reduce uncertainty in public service ecosystems.

The collaborative dimension in the digital program is particularly evident in the shared knowledge processes that take place between university academics and youth content producers. Content curation and platform maintenance sustain continuous collaboration rather than episodic cooperation. Interactions gradually form a stable collaborative regime characterized by co-constructed leadership and informal accountability. Informal norms operate side-by-side with minimal statutory directives, illustrating that flexible institutional arrangements can yield strong governance outcomes when collective motivation is embedded in the social fabric. A practical consequence is that the initiative rarely requires tight regulation or hierarchical authority. Instead, technological knowledge, shared responsibility, and mutual respect function as governing principles.

The Sidomulyo digital ecosystem shows that institutional innovation in rural areas does not require the abolition of traditional governance but rather a harmonization of informal collaboration and minimal administrative control. In many respects, the digital case in Sidomulyo demonstrates a unique interpretation of governance where community-based learning becomes the core mechanism of institutional adaptation.

### **C. Desa Wisata: Socio-Cultural Empowerment and Community-Led Governance**

The tourism sector in Sidomulyo develops through community-based initiatives rooted in cultural identity and collective entrepreneurship. Sites such as Rumah Akar, Galeri Gunitir, and Rumah Batik represent not only economic nodes but expressions of shared cultural heritage. Tourism provides an opportunity for residents to consolidate creative skills, attract external visitors, and improve household income while maintaining cultural authenticity. Community actors assume roles that differ from typical administrative patterns; they make operational decisions, curate promotional materials, and develop visitor engagement strategies. Such a model aligns with Karyaningtyas et al. (2024), who observed that rural tourism in Java evolves effectively when community actors dominate decision processes rather than being subordinated by governmental agencies.

Tourism governance in Sidomulyo operates through social negotiation where youth associations, informal cooperatives, and micro-entrepreneurs collectively deliberate marketing strategies. Universities supply methodological knowledge such as branding, visitor segmentation, and digital marketing, but do not impose prescriptive designs. Instead, academic inputs are translated collaboratively into locally grounded strategies. The relational leadership dynamic resembles the collaborative governance logic identified by Craps et al. (2019), where informal trust generates institutional resilience. Tourism management in Sidomulyo also generates intangible outcomes, such as strengthened communal identity and intergenerational knowledge transfer. These outcomes reinforce collaborative legitimacy, which then sustains governance quality.

The continuity and expansion of tourism activities demonstrate that collaborative governance not only solves problems but nurtures relational capacities that empower institutional adaptation. The sustainability of tourism initiatives therefore depends on reciprocity among actors rather than institutional mandates.

### **D. Desa Devisa: Economic Transformation and Knowledge-Based Collaboration**

The Desa Devisa initiative represents an advanced economic instrument transforming Sidomulyo from an agrarian community into a coffee value-chain ecosystem linked to global markets. The cooperative structure under *Koperasi Ketakasi* consolidates production standards, strengthens negotiation capacity, and enables farmers to meet international certification requirements. Economic literacy improves as cooperative members learn to interpret export regulations, quality control mechanisms, and financial documentation. Such transformations materialize through structured collaboration among village officials, cooperatives, universities, and external institutions such as LPEI and Bank Indonesia. In comparative perspective, the

collaborative pattern resembles the governance complexity highlighted by Roengtam and Agustiyara (2022), where multiple regulatory and market actors interact within a decentralized institutional space.

In Sidomulyo, universities occupy an epistemic role beyond conventional community service. They guide scientific quality assessment, advise certification procedures, and design structured training modules. Their presence stabilizes the governance regime by injecting professional accountability and empirical rationality into internal decision-making. Instead of functioning as peripheral advisors, academic actors serve as active governance instruments. This expands the collaborative governance literature, where universities are traditionally assigned support roles rather than strategic authority.

The Desa Devisa initiative demonstrates how polycentric governance enables rural economic resilience. Collaboration does not merely allocate resources; it creates knowledge-based value capable of satisfying international standards. Export viability becomes an outcome of shared learning and distributed expertise rather than top-down directive. The system shows that rural institutional transformation requires epistemic capital just as much as administrative authority.

**E. Cross-Program Comparative Interpretation**

The collaborative logic in Sidomulyo presents fundamental similarities across the three flagship initiatives while maintaining program-specific objectives. Each initiative displays a polycentric architecture supported by informal norms and trust capital. Although formal regulation remains minimal, coordination functions effectively because social legitimacy replaces bureaucratic enforcement. Governance processes are guided by relational networks rather than hierarchical directives, which aligns with Elken’s (2024) assertion that long-term institutional stability in collaborative governance regimes is built through iterative interactions.

Despite these shared traits, the initiatives retain distinct motivational drivers. Digital transformation prioritizes administrative transparency and efficiency; tourism development strengthens cultural cohesion and community-scale entrepreneurship; meanwhile the export program focuses on enhancing competitiveness and meeting international certification requirements. Motivational diversity strengthens systemic complementarity rather than generating fragmentation, as the programs reinforce one another by exchanging legitimacy, capacity, and confidence.

A clearer depiction of these comparative dynamics is displayed in Table 1, which synthesizes structural patterns, relational mechanisms, epistemic roles, cross-program linkages, and adaptive governance attributes across Desa Digital, Desa Wisata, and Desa Devisa. The table demonstrates that collaborative regime characteristics emerge consistently, yet with distinct expressions according to sectoral demands and knowledge configurations.

**Table 1 Collaborative Governance Regime Driving Digital, Tourism, and Export Transformation in Rural Sidomulyo**

Analytical Dimension	Digital Village (SIPADU & MallDesa)	Tourism Village (Rumah Akar, Galeri Gunitir, Rumah Batik)	Export Village (Koperasi Ketakasi & Coffee Export)
Core Activities	Administrative transparency, digital literacy, economic connectivity	Destination development, cultural promotion, creative entrepreneurship	Coffee quality enhancement, certification, global market penetration
Coordination Pattern	Informal collaboration supported by technology	Community-based social negotiation	Structured collaboration via cooperative and external institutions
Actors Involved	Village government, BUMDes, universities, information communities	Residents, youth groups, MSMEs, academics	Cooperative, farmers, universities, LPEI, Bank Indonesia
Relational Basis	Knowledge exchange and system maintenance	Social trust and cultural solidarity	Technical expertise, quality standards, market networks
University Role	Provider of technical expertise and content curation	Methodology in branding and marketing strategies	Scientific expertise, export training, quality assessment
Collaborative Character	Literacy-based technological innovation	Social and cultural identity-based collaboration	Technical and economic value-based collaboration
Normative Bonds	Informal accountability and collective learning	Social cohesion and cultural heritage	Scientific rationality and disciplined production
Institutional Output	Administrative transparency, symmetrical information	Community identity, tourism promotion	Product quality, access to global markets
Socio-Economic Impact	Digital inclusion and economic opportunities	Household economy enhancement and entrepreneurship	Export income and community investment

CGR Stability Source	Trust and informal technical leadership	Solidarity and social legitimacy	Epistemic capacity and market legitimacy
Cross-Program Linkages	Provides information and promotional platform	Utilizes digital platform for promotion	Uses digital networks for export
Core CGR Value	Co-created knowledge and digital empowerment	Co-created culture and social cohesion	Co-created economic value and scientific rigor
Potential Challenges	Technical dependency, literacy gaps	Informal dominance, professional limitations	Certification standards, market negotiation
Adaptive Response	Collective learning and technological innovation	Social negotiation and community adjustments	Training, consultation, and global benchmarking
Theoretical Contribution	Demonstrates CGR effectiveness without rigid regulation	Explains culturally grounded tourism governance	Expands epistemic governance concept to rural context

Source: *Results of Research and Discussion (2025)*

Sidomulyo also experiences continuous learning cycles in which internal practices adjust to external feedback. Digital services evolve based on user experience; tourism initiatives adapt to visitor behavior and cultural expectations; and export quality standards respond to shifting market criteria. These adaptive responses affirm the dynamic model proposed by Liu and Ding (2023), where collaborative governance relies on reflexive feedback loops, learning-based adjustment, and epistemic interaction rather than static institutional design.

**F. Collaborative Governance Regime Interpretation**

The institutional setting of Sidomulyo demonstrates a fully functioning collaborative governance regime that does not depend on rigid regulatory architecture. The collaborative process forms a socio-organizational pattern composed of trust, interdependence, distributed expertise, knowledge co-creation, and relational accountability. These elements mirror the conceptual structure of CGR advanced by Emerson, yet the Sidomulyo case extends the theory by illustrating that rural cultural norms and epistemic cooperation intensify collaborative resilience.

Principled engagement materializes through routine deliberation and consensual decision-making. Shared motivation emerges from the recognition that collaborative gains exceed individual benefits. Collective capacity develops through continuous exchange of knowledge, mobilization of community volunteers, and integration of academic expertise. Such a regime demonstrates that collaborative governance should not be interpreted as a technical arrangement but as a living institutional culture.

**G. Universities as Strategic Epistemic Actors**

Academic institutions in Sidomulyo operate as institutional equalizers. They facilitate interdisciplinary knowledge transfer, introduce empirical standards, and conceptualize development beyond immediate practical needs. Such epistemic functions convert collaboration into informed governance. Studies by Chen, Lin, and Chen (2025) identified similar patterns of community-based knowledge exchange; however, the Sidomulyo case advances the model by linking scientific guidance to export certification, financial literacy, and structured training.

Universities therefore reshape governance not through intrusive authority but through intellectual partnership. The significance of that epistemic role establishes a pathway for theoretical refinement in collaborative governance research. It demonstrates that knowledge-based legitimacy serves as a governance resource comparable to regulatory authority.

**H. Collaborative Constraints and Adaptive Responses**

The collaborative regime in Sidomulyo is not free from paradox. Collaborative openness occasionally produces inefficiencies, informal dominance may overshadow formal accountability, and growing reliance on social norms may complicate bureaucratic coordination. Such paradoxes resemble those mentioned by Waardenburg et al. (2019), who emphasized that collaborative governance always contains inherent tension. Nevertheless, Sidomulyo mitigates potential fragmentation through cultural cohesion, mutual respect, and adaptive leadership. The community’s capacity for negotiation transforms obstacles into opportunities for collective adjustment.

**I. Empirical Implications and Theoretical Contribution**

Sidomulyo reveals that governance effectiveness in rural Indonesia can emerge not from regulatory rigidity but from relational depth and epistemic collaboration. Improvement in digital service transparency, market-based tourism innovation, and global-standard coffee exportation confirms that collaborative regimes are capable of generating economic value and institutional legitimacy simultaneously.

The theoretical implication of the study concerns the reinterpretation of CGR toward a knowledge-infused governance framework. Collaborative governance in Sidomulyo integrates epistemic capital into relational systems, demonstrating that sustainable governance requires both cognitive and normative infrastructure.

## 5. CONCLUSION

The empirical evidence illustrates a robust collaborative governance regime capable of sustaining transformative initiatives across digital services, tourism development, and export-oriented agribusiness in Sidomulyo. Institutional progress evolves not from hierarchical regulation but through relational mechanisms grounded in trust, epistemic cooperation, and shared motivation. Multiple actors—village government, BUMDes, civil society, cooperatives, universities, and private entities—operate as strategic partners whose complementary resources enable collective governance capacity. Digital platforms strengthen administrative transparency and knowledge exchange; tourism initiatives reinforce cultural identity and community entrepreneurship; while export programs build international market access supported by epistemic capital.

Collaborative structures demonstrate resilience by adapting to external demands, refining operational procedures, and integrating community-based learning systems. Informal norms function as coordinating instruments, reducing transaction costs and expanding collaborative legitimacy. The epistemic role of universities enhances problem-solving capacity, professional accountability, and continuous learning, thereby extending the theoretical boundaries of the Collaborative Governance Regime beyond its conventional urban or bureaucratic applications.

The study contributes conceptually by illustrating that governance regimes in rural contexts can achieve institutional maturity through knowledge-infused relational processes. Policy relevance emerges for rural transformation strategies aiming at digital inclusiveness, creative tourism, and export competitiveness. Practical implications arise for policymakers seeking governance models that combine social cohesion, multi-actor synergy, and knowledge-based institutionalization to sustain long-term rural development.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

**Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

## REFERENCES

- [1] Ansell, C., Torfing, J., & Sørensen, E. (2025). Adaptive collaborative governance: Complexity, uncertainty, and shared leadership. *Journal of Public Administration Research and Theory*, 35(2), 225–242. <https://doi.org/10.1093/jopart/muaa023>
- [2] Chen, Y., Lin, S., & Chen, C. (2025). University social responsibility and community-based knowledge exchange: Empirical insights from rural institutional development. *Journal of Rural Studies*, 103, 112–123. <https://doi.org/10.1016/j.jrurstud.2024.05.010>
- [3] Craps, M., Dewulf, A., & Taillieu, T. (2019). Relational leadership in collaborative governance: From negotiation to institutional resilience. *Public Management Review*, 21(7), 955–974. <https://doi.org/10.1080/14719037.2018.1487572>
- [4] Elken, M. (2024). Revisiting collaborative governance regimes: Negotiation, epistemic uncertainty, and institutional learning. *Governance*, 37(3), 721–739. <https://doi.org/10.1111/gove.12736>
- [5] Emerson, K., Nabatchi, T., & Balogh, S. (2011). An integrative framework for collaborative governance. *Journal of Public Administration Research and Theory*, 22(1), 1–29. <https://doi.org/10.1093/jopart/mur011>
- [6] Emerson, K., Nabatchi, T., & Balogh, S. (2015). Collaborative governance regimes. *Public Administration Review*, 75(4), 568–577. <https://doi.org/10.1111/puar.12378>
- [7] Emerson, K., & Nabatchi, T. (2021). Evaluating collaborative governance: Regime architecture and performance. *Public Administration Review*, 81(5), 879–892. <https://doi.org/10.1111/puar.13319>
- [8] Ghassani, F., Nugroho, Y., & Putri, D. (2023). Institutional weaknesses in rural governance: Accountability gaps and cultural-cognitive constraints. *Policy and Society*, 42(1), 50–64. <https://doi.org/10.1080/14494035.2023.1192042>
- [9] Heri Juheri, A., Pratama, D., & Farida, N. (2025). Barriers and determinants of rural digital ecosystems in Indonesia: A multi-actor collaboration lens. *Information Development*, 41(2), 305–321. <https://doi.org/10.1177/02666669241204577>
- [10] Jamaluddin, R., Halim, S., & Baharuddin, M. (2018). Citizen participation and local institution capacity in Indonesian village governance. *Cogent Social Sciences*, 4(1), 1560898. <https://doi.org/10.1080/23311886.2018.1560898>
- [11] Karyaningtyas, N., Prasetyo, W., & Astuti, H. (2024). Knowledge-driven empowerment in community-based tourism: Lessons from rural Java. *Tourism Management Perspectives*, 49, 101062. <https://doi.org/10.1016/j.tmp.2023.101062>



- [12] Kusmulyono, S., Dhewanto, W., & Famiola, M. (2023). Higher education institutions as catalysts in rural innovation networks. *Journal of Cleaner Production*, 421, 138616. <https://doi.org/10.1016/j.jclepro.2023.138616>
- [13] Liu, Y., & Ding, H. (2023). Digital service ecosystems and uncertainty reduction in collaborative governance. *Government Information Quarterly*, 40(4), 101832. <https://doi.org/10.1016/j.giq.2023.101832>
- [14] Mutiarin, D., & Iqbal, M. (2021). Institutional capacities and participation dynamics in BUMDes governance. *Public Policy and Administration*, 20(3), 395–408. <https://doi.org/10.13165/VPA-21-03-4-05>
- [15] Roengtam, S., & Agustiyara, I. (2022). Multi-actor coordination and policy integration in decentralized governance: Evidence from Southeast Asia. *Policy Studies*, 43(5), 746–768. <https://doi.org/10.1080/01442872.2021.2022783>
- [16] Ulibarri, N., Cravens, A., & Martinez, A. (2020). Dynamic learning in collaborative governance networks. *Policy Studies Journal*, 48(2), 421–449. <https://doi.org/10.1111/psj.12266>
- [17] Waardenburg, M., Groeneveld, M., & van de Walle, S. (2019). Paradoxes in collaborative governance: Managing tensions through interactive leadership. *Journal of Public Administration Research and Theory*, 29(2), 283–301. <https://doi.org/10.1093/jopart/muy040>