

TOURISM VILLAGE DYNAMICS UNDER ADAPTIVE PLANNING: INSIGHTS FROM SIGANDO, INDONESIA

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ABSTRACT

The rapid expansion of tourism villages in Indonesia has positioned community-based tourism as an important strategy for rural development. However, many tourism villages experience fluctuating development trajectories due to changing socio-cultural conditions, institutional instability, and limited community participation. While previous studies mainly examined tourism village development through governance and stakeholder perspectives, limited attention has been given to these dynamics through an adaptive planning lens. This paper addresses that gap by examining the development dynamics of Sigando Religious and Cultural Tourism Village, West Sumatra, using an adaptive planning perspective grounded in complexity thinking. A qualitative case study approach was employed through field observations, interviews with twelve key stakeholders, and document analysis. Data were analyzed thematically based on four dimensions of adaptive planning: non-linear trajectories, responsiveness to dynamic environments, self-organization, and co-evolution among stakeholders. Findings reveal that Sigando's tourism development follows a non-linear trajectory marked by growth, stagnation, and decline, shaped by institutional capacity, community participation, and government intervention. Although communities show adaptive responses through cultural innovation and small-scale enterprises, weak institutional coordination constrains sustainable development. Theoretically, this study extends adaptive planning to religious-cultural tourism in rural contexts. Practically, it highlights the need to strengthen local institutions, foster participation, and adaptive governance.

Keywords: Adaptive Planning; Religious and Cultural Tourism; Tourism Village; Community Participation; Collaborative Governance

A. INTRODUCTION

Tourism villages have become one of the most prominent strategies for promoting rural development in Indonesia by integrating natural resources, cultural heritage, and community participation into sustainable economic activity (Nuryanti, 1993; Suansri, 2003). Despite considerable government support (Krisnawati, 2021), many tourism villages continue to experience uneven development, marked by fluctuating visitor numbers, unstable institutions, and limited community participation evidence that tourism development is a dynamic system rather than a linear process.

These complexities are especially visible in religious and cultural tourism villages, where development must simultaneously preserve cultural authenticity, uphold religious values, and generate economic benefit (Sharpley & Sundaram, 2005; Raj & Morpeth, 2007). Fixed master plans often struggle to accommodate such sensitive, shifting conditions, prompting scholars to view tourism destinations as complex adaptive systems (CAS) in which stakeholders continuously interact, learn, and reorganize (Farrell & Twining-Ward, 2004; Baggio, Scott, & Cooper, 2010). This has encouraged planning scholarship to shift from rational-comprehensive planning toward adaptive planning, which treats development as iterative and responsive to uncertainty rather than predictable and

controllable (Holling, 1978; Walker et al., 2004; Davoudi, 2012). Grounded in complexity theory, adaptive planning emphasizes four interrelated dimensions: non-linear development trajectories, responsiveness to dynamic environments, self-organization, and co-evolution among social, institutional, and physical systems (Gerrits & Teisman, 2012; De Roo et al., 2012).

Although adaptive planning is increasingly applied in spatial planning, environmental governance, and resilience studies, its use in tourism village research remains limited. Existing studies of tourism villages including prior research on Sigando itself have mainly examined governance arrangements and institutional power dynamics, revealing latent conflicts and unequal participation (Rahmatika et al., 2024), but offer limited insight into how such villages evolve through continuous adaptation over time. This represents an important research gap, since tourism village development is inherently dynamic and requires a framework capable of explaining how destinations respond to uncertainty and reorganize under changing conditions.

Sigando Tourism Village, in Padang Panjang City, West Sumatra, offers an apt case for examining these dynamics. Officially designated a Religious and Cultural Tourism Village (Mayor of Padang Panjang Decree No. 124 of 2021), Sigando holds significant assets the Asasi Mosque, the Thawalib Gunuang Islamic boarding school, and strong Minangkabau traditions and has organized successful cultural festivals. Yet recent years have seen declining tourism performance, weakening institutions, and reduced community participation, illustrating the adaptive challenges common to tourism villages.

This paper therefore investigates Sigando's development dynamics through the lens of adaptive planning, analyzing how it reflects four dimensions: (1) non-linear development trajectories, (2) responsiveness to dynamic environments, (3) self-organization among local stakeholders, and (4) co-evolution among community, institutions, and government. Theoretically, the study extends adaptive planning and complexity theory to religious and cultural tourism, an underexplored area. Practically, it offers recommendations for local governments and community organizations on strengthening institutional flexibility, community empowerment, and adaptive governance for sustainable tourism development.

Tourism villages have increasingly become an important approach to rural development by integrating local natural resources, cultural heritage, and community participation into sustainable economic activities. Rather than functioning solely as tourism destinations, tourism villages represent socio-economic systems where environmental resources, cultural identity, local institutions, and market dynamics continuously interact (Nuryanti, 1993; Suansri, 2003). Their development therefore depends not only on physical infrastructure but also on the ability of communities and institutions to respond collectively to changing economic, social, and environmental conditions.

Previous studies have shown that successful tourism villages require active community participation, effective local governance, institutional collaboration, and continuous innovation (Tosun, 2006; Kontogeorgopoulos et al., 2014). However, tourism villages frequently experience fluctuations in visitor demand, policy changes, environmental pressures, and social conflicts that challenge conventional planning

approaches. Consequently, tourism development should be understood as a dynamic process rather than a linear sequence of planning interventions.

This perspective aligns with recent tourism studies that conceptualize destinations as complex adaptive systems (CAS), where multiple actors continuously interact, exchange information, and adapt their behavior in response to internal and external changes (Farrell & Twining-Ward, 2004; Baggio, Scott, & Cooper, 2010). From this viewpoint, sustainable tourism emerges not from centralized control but through continuous adaptation among governments, communities, businesses, and tourists.

Religious and cultural tourism constitutes a distinctive form of tourism that combines spiritual experiences, historical heritage, and cultural identity within a single destination. Unlike conventional tourism, religious and cultural tourism involves intangible values such as beliefs, traditions, rituals, and local identity that require careful preservation alongside economic development (Raj & Morpeth, 2007; Timothy & Olsen, 2006).

In Indonesia, religious and cultural tourism has become increasingly important because many regions possess strong historical and cultural traditions that can support community-based tourism development (Winoto et al., 2024; Lintong, 2025; Suryani & Kumala, 2021; Puspita & Malik, 2024). Nevertheless, commercialization often creates tensions between economic objectives and cultural preservation. Excessive tourism development may threaten authenticity, weaken traditional institutions, or reduce community participation in decision-making (Sharpley & Sundaram, 2005).

Several studies have emphasized collaborative governance and community participation as key determinants of successful religious tourism development (Moscardo, 2008; Okazaki, 2008). However, these studies primarily focus on governance structures without adequately explaining how tourism villages continuously adapt to changing social, institutional, and environmental conditions. Consequently, understanding religious tourism requires a theoretical perspective capable of explaining long-term developmental dynamics rather than static governance arrangements.

Increasing uncertainty, complexity, and rapid socio-environmental change. Traditional planning assumes that future conditions can be predicted and controlled through comprehensive plans, whereas adaptive planning recognizes uncertainty as an inherent characteristic of development processes (Holling, 1978; Walker et al., 2004).

The intellectual foundation of adaptive planning originates from Complex Adaptive Systems (CAS) theory. CAS views regions, cities, and communities as open systems composed of multiple interconnected actors whose interactions generate emergent patterns that cannot be predicted solely from individual behavior (Holland, 1995; Levin, 1998). Within planning studies, this perspective has been further developed by scholars including De Roo (2016), Gerrits and Teisman (2012), and Davoudi (2012), who argue that planning should facilitate learning, experimentation, and institutional flexibility rather than imposing rigid development pathways.

Adaptive planning therefore emphasizes continuous monitoring, iterative decision-making, institutional learning, and collaborative governance. Instead of attempting to eliminate uncertainty, adaptive planning seeks to increase the capacity of communities and

institutions to respond effectively to changing conditions (Walker et al., 2004; Brown, 2012). This perspective has been widely applied in environmental management, climate adaptation, disaster resilience, and regional planning, yet its application within tourism village development remains relatively limited. Following Gerrits and Teisman (2012), Brown (2012), and De Roo (2016), adaptive planning can be understood through four interrelated dimensions.

Development rarely follows a predictable or linear pathway (Hartman & De Roo, 2013). Instead, regions experience cycles of growth, decline, recovery, and transformation resulting from interactions among economic, social, political, and environmental factors. Adaptive planning therefore recognizes that unexpected events, institutional changes, and community responses continuously reshape development trajectories (Davoudi, 2012). Understanding these fluctuations is particularly important for tourism villages where visitor demand, government policies, and community participation frequently change over time.

Adaptive planning requires institutions and communities to respond quickly to changing internal and external conditions. Responsiveness includes institutional flexibility, policy adjustment, innovation, and learning from previous experiences (Walker et al., 2004; Rangwala, 2024). Rather than maintaining fixed development strategies, adaptive planning encourages continuous adjustment according to evolving opportunities and emerging challenges.

Self-organization refers to the capacity of communities and local institutions to coordinate collective actions without relying exclusively on centralized governmental intervention (Boonstra & Boelens, 2011; Holland, 1995; Ibad et al., 2025). Through local initiatives, informal collaboration, and community networks, new organizational structures and innovative practices may emerge spontaneously to address local problems. Strong self-organization enhances resilience by enabling communities to respond independently to changing circumstances while strengthening social capital and institutional capacity.

Co-evolution describes the reciprocal adaptation among communities, governments, institutions, infrastructure, and environmental systems over time (Gerrits & Teisman, 2012). Changes in one component influence the evolution of others, producing continuous feedback loops that shape regional development. Within tourism villages, co-evolution occurs when government policies influence community behavior, while community initiatives simultaneously reshape institutional arrangements and tourism governance.

Existing studies on tourism villages have predominantly emphasized governance, stakeholder participation, community empowerment, destination management, and tourism sustainability (Tosun, 2006; Moscardo, 2008; Kontogeorgopoulos et al., 2014). In the specific case of Sigando Tourism Village, previous research has primarily examined institutional relations and power dynamics, identifying latent conflicts, unequal participation, and governance challenges (Rahmatika et al., 2024). Although these studies contribute valuable insights into tourism governance, they provide limited explanation of how tourism villages evolve through continuous adaptation under changing socio-cultural and institutional conditions.

This paper addresses that limitation by employing adaptive planning as its analytical framework. Rather than evaluating tourism development solely in terms of governance effectiveness or tourism performance, the research examines how Sigando Tourism Village adapts through non-linear development trajectories, responsiveness to changing environments, self-organization among local actors, and co-evolution between institutional and physical systems.

B. METHOD

This study uses a qualitative case study approach to examine Sigando Religious and Cultural Tourism Village's development dynamics through an adaptive planning lens. A qualitative design is appropriate given the aim of understanding social processes, institutional interactions, and evolving stakeholder relationships rather than measuring causal relationships statistically (Creswell, 2009; Creswell & Poth, 2018; Yin, 2018).

Sigando was selected as a single instrumental case because, despite its official designation as a Religious and Cultural Tourism Village (Mayor of Padang Panjang Decree No. 124 of 2021), its development has shown alternating growth, stagnation, and decline an apt context for studying adaptive planning under institutional uncertainty. Located in Padang Panjang City, West Sumatra, the village holds distinctive religious and cultural assets, including the Asasi Mosque and the Thawalib Gunuang Islamic boarding school, alongside ongoing institutional and infrastructural challenges.

Primary data were collected through in-depth semi-structured interviews and field observations conducted between January and April 2025. Twelve informants were purposively selected (Patton, 2015), representing government institutions (Tourism Office, Subdistrict Office), village administration, the Tourism Awareness Group (Pokdarwis), traditional and religious leaders, entrepreneurs, and residents. Interviews explored four themes drawn from adaptive planning theory: development patterns over time, responses to changing conditions, self-organization and institutional capacity, and stakeholder collaboration. Field observations documented infrastructure, facilities, and stakeholder interactions to support triangulation. Secondary data included village profiles, planning documents, government regulations, and prior academic studies on Sigando.

Data were analyzed using thematic analysis (Braun & Clarke, 2006), beginning with transcription and repeated reading for familiarization, followed by inductive coding informed by adaptive planning concepts (Miles, Huberman, & Saldaña, 2014). Codes were grouped into four analytical themes corresponding to the study's dimensions non-linear development trajectories, responsiveness to dynamic environments, self-organization, and co-evolution interpreting how observed dynamics reflect adaptive planning principles and the characteristics of Complex Adaptive Systems.

C. RESULT

The findings of this research are presented according to the four dimensions of adaptive planning: non-linear trajectories, responsiveness, self-organization, and co-evolution.

1. Non-linear Development Trajectories

The findings indicate that the development of Sigando Religious and Cultural Tourism Village (Figure 1) follows a non-linear trajectory characterized by periods of emergence, growth, stagnation, and decline rather than predictable progress. Consistent with adaptive planning, these dynamics result from interactions among institutional, social, cultural, and environmental factors instead of fixed planning interventions (De Roo, 2016; Gerrits & Teisman, 2012). Tourism development has therefore been shaped by changing institutional capacity, community participation, government support, and the adaptive capacity of local actors.

Sigando possesses strong endogenous resources that support tourism development, including extensive rice fields, green hills, a cool mountain climate, and a predominantly agricultural landscape. Rather than limiting development, these characteristics reinforce the village's authenticity and rural identity, illustrating how local physical resources have gradually adapted to both community needs and tourism activities.

A key tourism asset is the Asasi Mosque, which functions not only as a place of worship but also as the symbolic center of Sigando's religious and cultural identity. According to a Pokdarwis member:

"The Asasi Mosque is unique because its three-tiered structure symbolizes the integration of adat, religion, and leadership." (Muhammad Arif Budiman, Interview, 2025).

This finding indicates that the mosque represents more than an architectural attraction; it serves as a cultural and institutional anchor that preserves local identity while supporting tourism development. In line with adaptive planning theory, stable cultural institutions enhance place resilience by maintaining continuity despite changing external conditions (Davoudi, 2012). In Sigando, cultural heritage remains relatively resilient, although the broader tourism system continues to face institutional and managerial challenges.



Source: Author (2025)

Figure 1. Sigando Tourist Village

Sigando's development has not progressed steadily, but rather with acceleration, stagnation, and decline. In 2021, Sigando was designated as a tourism village, followed by

the Asasi and Soko Guru Festivals (2022–2023), which boosted tourist visits. However, since 2024, tourism quality has declined due to weakened local institutions (Pokdarwis) and reduced community participation. Supporting facilities such as toilets, information centers, and signage have deteriorated, indicating inconsistent development patterns.

Table 1. Development of Sigando Tourism Village

Years	Development
2021	The Mayor of Padang Panjang issued Decree Number 124 of 2021 concerning the Establishment of Tourism Villages in Padang Panjang City, which makes Sigando Village a Religious and Cultural Tourism Village.
2022	- Holding a major event, the Asasi 1 Festival - Attracting many international tourists - Holding tourism activities with cities from other regions.
2023	- Holding the Soko Guru Festival - Holding a follow-up event, the Asasi 2 Festival
2024 –now	There has been a decline in the quality of tourism, so that tourist visits are no longer as many as in previous years.

Source: Author (2025)

The temporal development of Sigando Tourism Village demonstrates a distinctly non-linear trajectory (Table 1). The designation of Sigando as a Religious and Cultural Tourism Village through Mayor Decree No. 124 of 2021 marked the initial institutional trigger for tourism development. This was followed by the successful implementation of the Asasi Festival (2022), Soko Guru Festival, and the second Asasi Festival (2023), which increased tourist arrivals and strengthened collaboration with external institutions. These initiatives enhanced Sigando's recognition as a religious and cultural tourism destination.

However, this growth was not sustained. Since 2024, tourism activities have declined, as reflected in decreasing visitor numbers, weakening Pokdarwis performance, reduced community participation, and deteriorating tourism facilities, including public toilets, visitor information systems, and directional signage. These findings indicate that early tourism achievements were not accompanied by sufficient institutional strengthening, resulting in declining performance once external promotional support diminished.

This pattern confirms that tourism development in Sigando follows a non-linear trajectory characterized by cycles of growth, stagnation, and decline rather than a linear progression. Consistent with the Complex Adaptive Systems (CAS) perspective, tourism outcomes emerge from interactions among interconnected social and institutional actors rather than centralized planning alone (Holland, 1995; Farrell & Twining-Ward, 2004). Small institutional changes, such as declining community participation and weakened organizational coordination, have produced significant impacts on tourism performance.

The observed dynamics are shaped by both internal and external factors. Internally, Sigando benefits from strong cultural and social capital rooted in Minangkabau traditions, religious leadership, and the Thawalib Gunuang Islamic boarding school, which reinforce the village's cultural identity. Nevertheless, community participation remains limited because many residents prioritize agriculture, while weak managerial capacity, limited

leadership regeneration, and conflicts within Pokdarwis reduce institutional effectiveness. Externally, government policies, financial support, and cultural tourism programs initially stimulated tourism growth, but these interventions proved insufficient to sustain development without continuous local institutional strengthening.

These findings suggest that adaptive planning requires not only responsiveness to external change but also continuous institutional learning, organizational flexibility, and collaborative governance. Although Sigando has successfully preserved its cultural identity, institutional resilience remains comparatively weak, explaining the gap between strong cultural assets and declining tourism performance. Unlike previous studies that primarily emphasize governance and stakeholder participation (Tosun, 2006; Moscardo, 2008), this study shows that tourism village development is better understood as an adaptive process in which cultural resources, institutions, infrastructure, and community participation continuously interact. Therefore, strengthening institutional capacity, community participation, and continuous learning is essential to improve the long-term resilience and sustainability of Sigando as a religious and cultural tourism destination.

2. Responsiveness to Dynamic Environments

One of the defining characteristics of adaptive planning is the capacity of communities and institutions to respond effectively to changing social, economic, cultural, environmental, and institutional conditions. Rather than pursuing predetermined development pathways, adaptive planning emphasizes continuous learning, flexibility, and adjustment in response to uncertainty (Walker et al., 2004; Brown, 2012; De Roo, 2016). The findings indicate that Sigando Tourism Village demonstrates varying degrees of responsiveness across different dimensions of tourism development. While local communities have shown considerable adaptive capacity in cultural preservation and economic innovation, institutional responsiveness and infrastructure management remain relatively weak, limiting the village's long-term resilience.



Source: Author (2025)

Figure 2. Aguang Art Studio Activities



Source: Author (2025)

Figure 3. Cantiang Asasi Batik SME

From a cultural perspective, Sigando demonstrates strong adaptive capacity through community-based initiatives that preserve and develop its cultural heritage. The Aguang Art Studio plays a central role in maintaining traditional Minangkabau performing arts while transforming them into interactive tourism attractions that enhance visitors' cultural experiences (Figure 2). This reflects adaptive planning, where cultural heritage functions

as a dynamic resource that evolves with changing tourism demands rather than remaining a static historical asset (Davoudi, 2012). However, performances are still organized mainly during festivals or special events, limiting their contribution as year-round tourism products.

Economic responsiveness is reflected in the emergence of Batik Cantiang Asasi, an SME that transforms the architectural identity of the Asasi Mosque into distinctive batik motifs (Figure 3). Through product innovation, festival participation, and improved marketing, the enterprise has expanded into domestic and international markets while creating local employment. Tourism has also stimulated the growth of homestays, culinary businesses, souvenir production, and community-based guiding services. As one resident explained:

"With the arrival of tourists to Sigando, the local economy has improved through the establishment of homestays, the adaptive reuse of Rumah Gadang, and the growth of local SMEs." (Local Resident, Interview, 2025).

These initiatives illustrate how communities adapt existing cultural assets to generate new economic value rather than relying on external investment (Dewi *et al.*, 2022; Junaid, 2023; Budiatiningsih *et al.*, 2024; Anugrah *et al.*, 2021; Chulwa *et al.*, 2022). Nevertheless, local businesses remain highly dependent on visitor numbers. Since 2024, declining tourist arrivals have reduced the income of homestay operators, food vendors, and tourism-related SMEs, indicating that economic resilience remains constrained by weak tourism management and unstable institutional support.

Environmental responsiveness remains relatively limited despite Sigando's abundant natural resources, including rice fields, green hills, and Bulaan Spring. As noted by a subdistrict representative:

"The greatest natural resource in Sigando is water. Ideally, it could be developed into a tourist attraction." (Head of Social Affairs, Padang Panjang East Subdistrict, Interview, 2025).

Although these resources have strong potential for nature-based tourism, they are still primarily used for domestic and agricultural purposes. Their limited integration into tourism represents a missed opportunity to diversify attractions and strengthen destination resilience through a broader tourism portfolio.

Despite possessing abundant natural assets such as rice fields and springs, their utilization within Sigando's tourism attraction portfolio remains suboptimal. Integrating these natural resources into tourism planning is essential to diversify attractions and enhance destination competitiveness.

Infrastructure responsiveness shows a similar pattern. Basic infrastructure is generally adequate, and government support has provided several tourism facilities. However, inadequate maintenance of public toilets, visitor information centers, signage, and public spaces reduces visitor satisfaction. These findings indicate that adaptive planning requires continuous maintenance and institutional learning rather than one-time infrastructure investment (Ibad *et al.*, 2022).

Institutional responsiveness represents the weakest dimension. Although Pokdarwis

was established as the main tourism coordinator, interviews reveal declining organizational performance due to internal conflicts, weak participation, and limited managerial capacity, reducing collaboration among stakeholders. This finding supports adaptive governance literature, which emphasizes that resilience depends on institutional flexibility, continuous learning, and effective stakeholder coordination (Folke et al., 2005; Armitage et al., 2009).

Despite these constraints, adaptive responses remain evident through community initiatives such as the Asasi Festival, Soko Guru Festival, religious education programs, and pesantren-based cultural activities. Strengthening collaboration with Thawalib Gunuang Islamic Boarding School could further diversify tourism through educational packages such as A Day as a Santri, providing more consistent year-round tourism opportunities. Overall, Sigando demonstrates considerable cultural and community adaptability, although stronger institutional capacity is required to sustain long-term tourism resilience.

3. Self-Organization and Institutional Capacity

Self-organization the capacity of communities to coordinate collective action without relying solely on government is a central adaptive planning principle (Holland, 1995; Gerrits & Teisman, 2012). Sigando has important foundations for self-organization, including social capital and cultural institutions, but these have not translated into sustained resilience, remaining dependent on individual leadership and fluctuating participation.

Pokdarwis, established in 2016 by eight local youths to coordinate tourism development, has followed a similarly non-linear path: early success, decline during COVID-19, recovery after the 2021 tourism village designation, then renewed inactivity after the festivals ended reflecting weak member commitment, internal conflict, and time constraints, since most members are farmers. This has halted digital promotion and facility maintenance, illustrating that, unlike resilient adaptive organizations, Pokdarwis has struggled to institutionalize learning and regeneration (De Roo, 2016).

Community participation is similarly constrained by social rather than purely technical factors. As one Pokdarwis member explained:

“The main challenge comes from the community itself, they are resistant to change”
(Pokdarwis, Interview, 2025)

Suggesting that institutional adaptation depends on shared vision and trust, not just formal structures (Healey, 2007). Collaboration does re-emerge for major events like the Asasi and Soko Guru Festivals, showing that social capital exists but has not matured into permanent institutional capacity.

External support partly compensates for these internal weaknesses. The Tourism Office provides training and infrastructure, while the Village Community Empowerment Institution (LPM) supports both physical development and capacity-building, as its head noted: LPM

“Provides space and opportunities for the community, aligned with the vision and mission of Padang Panjang City” (LPM, Interview, 2025).

Broader partnerships with government, educational institutions, NGOs, and migrant associations supply funding (via APBD, community contributions, and Musrenbang-based

planning) and expertise, reflecting decentralized resource mobilization though its effectiveness remains limited by Pokdarwis's weak coordinating capacity. Promotional activity likewise peaked during 2022–2023 alongside active Pokdarwis leadership, then declined as organizational participation weakened, showing that marketing remains tied to organizational continuity rather than institutionalized systems.

4. Co-evolution and Stakeholder Interaction

Co-evolution refers to the reciprocal, continuous adaptation among actors, institutions, policy, and environment (Gerrits & Teisman, 2012; De Roo, 2016), in contrast to conventional planning's one-way view of intervention and outcome. In Sigando, tourism demand, cultural preservation, entrepreneurship, government policy, infrastructure, and institutional capacity continuously shape one another: rising interest in religious tourism encouraged cultural preservation and new enterprises, prompting government investment in promotion and infrastructure, which in turn created economic opportunity that reinforced community interest a feedback pattern consistent with Complex Adaptive Systems (Holland, 1995; Levin, 1998).

Stakeholder roles are complementary yet interdependent. The Padang Panjang City Government sets policy, allocates funding, and builds infrastructure, but these interventions alone cannot sustain development without community participation. At village level, LPM and the village administration translate municipal policy into local initiatives, connecting multiple levels of governance. Pokdarwis and community members directly implement tourism activities cultural performances, homestays, SMEs, and promotion though this relationship remains unstable, alternating between active collaboration and organizational decline. Traditional and religious leaders preserve Minangkabau authenticity while allowing selective adaptation to tourism demand, while external actors (migrant associations, donors, educational institutions) supply financial and technical resources that broaden the village's institutional network.

These interactions have produced clear positive outcomes the Asasi and Soko Guru Festivals strengthened Sigando's destination image and stimulated SMEs, homestays, and cultural industriesdemonstrating that development is most effective when stakeholders adapt collectively. However, co-evolution can also reinforce weakness: differing priorities among government, Pokdarwis, and community have generated conflict, and declining Pokdarwis performance has reduced coordination, promotion, and infrastructure maintenance alike. This reflects both reinforcing and balancing feedback: successful festivals build momentum, while institutional decline triggers stagnation supporting the view that resilience emerges from a system's capacity to reorganize after disturbance, not from stability itself (Walker et al., 2004; Folke et al., 2005).

D. CONCLUSION

This paper has examined the development dynamics of Sigando Religious and Cultural Tourism Village through an adaptive planning lens, showing that tourism village development unfolds as a dynamic, non-linear process shaped by the continuous interaction of cultural heritage, institutions, community participation, infrastructure, and public policy

rather than by linear governance interventions. Applying the four dimensions of adaptive planning non-linear trajectories, responsiveness, self-organization, and co-evolution reveals a persistent gap between Sigando's strong cultural resilience, anchored in the Asasi Mosque, Minangkabau traditions, and community enterprises such as Batik Cantiang Asasi, and its comparatively fragile institutional resilience, marked by weak leadership regeneration, inconsistent participation, and fragmented coordination among Pokdarwis, government, and community actors. Theoretically, the study extends adaptive planning and complexity theory to religious and cultural tourism villages by demonstrating that sustainable destination development depends less on isolated governance arrangements than on the capacity of institutions to learn, adapt, and co-evolve alongside cultural and economic change; practically, it underscores that without systematic institutional regeneration and a participatory, long-term strategic framework, Sigando's cultural strengths and short-term festival successes will not translate into lasting destination sustainability.

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