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Pikukuh as a Cultural Resistance Model of Baduy Community in Maintaining Identity Against Modernization

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Research Article

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Abstract

The Baduy indigenous community in Lebak Regency, Banten, Indonesia, represents one of the most resilient indigenous groups in maintaining cultural identity through their customary law system called *pikukuh*, despite intense modernization pressures. This study analyzes the role of *pikukuh* as a cultural resistance strategy among the Baduy community, examining its manifestations across socio-cultural, political, and educational dimensions. This qualitative research employed an instrumental case study design, with data collected through in-depth interviews, participant observation, and document analysis in the Baduy customary area of Kanekes Village, Lebak Regency, Banten. The findings revealed that *pikukuh* functions as a multi-layered resistance mechanism. In the sociocultural dimension, *pikukuh* constructs a collective identity based on ecological wisdom and spiritual adherence. Politically, *pikukuh* serves as the foundation for indigenous autonomy through hybrid governance that negotiates formal state systems. Knowledge transmission occurs through informal family based learning that integrates technical, moral, and spiritual knowledge. The study identifies selective modernization as the key strategy, wherein the Baduy community adopts certain modern elements without compromising fundamental *pikukuh* principles. *Pikukuh* represents a sophisticated and dynamic value system that enables the Baduy community to maintain identity and autonomy while negotiating modernity. This research contributes to understanding Indigenous resistance strategies and the relevance of local wisdom for sustainable development in the era of globalization.

Introduction

Pikukuh is one of God's provisions for humanity that cannot be changed. Humans are guided to maintain it so that the ecosystem of life can function well and sustainably. It is believed that the ecosystem of life will return to its predetermined state. No matter how powerful modernization is, it will not be strong enough to diminish pikukuh, let alone eliminate it. Pikukuh is a fundamental life principle for the Baduy people, as it is considered a sacred teaching. The *Baduy Dalam* adhere to Pikukuh as a sacred principle. For the Outer Baduy, Pikukuh is a mandatory practice, but modifications are permitted in certain circumstances, depending on its perceived usefulness.

Modernization has emerged as a global phenomenon reshaping social, cultural, economic, and political landscapes worldwide (1, 2). Characterized by technological penetration, urbanization, industrialization, and the transformation of traditional values toward pragmatic and materialistic orientations, modernization presents both opportunities and threats to indigenous communities. Amidst this massive wave of change, indigenous communities consistently maintain their cultural identity as a form of resistance against cultural homogenization (1).

The Baduy community in Kanekes Village, Leuwidamar District, Lebak Regency, Banten Province, Indonesia, represents one of the most intriguing cases of indigenous resilience. Despite geographical proximity to urban centers of Banten and Jakarta, the Baduy community particularly *Baduy Dalam* continues to practice simple living in harmony with nature, rejecting modern technology and adhering

firmly to *Sunda Wiwitan* teachings (3, 4). This phenomenon contradicts classical modernization theories that assume a linear progression from traditional to modern societies (5–7).

The strength of Baduy cultural resistance lies in their value system called *pikukuh*, a set of customary laws transmitted orally across generations, serving as life guidelines regulating all aspects of Baduy life (8–12). The fundamental philosophy of *pikukuh* is encapsulated in the expression "*lojor teu meunang dipotong, pondok teu meunang disambung*" (what is long must not be cut, what is short must not be extended), emphasizing immutability and preservation of tradition in its original form.

Existing research on the Baduy community has approached the topic from various perspectives including anthropology (13–16), ecology (17, 18), law (19, 20) and education (18, 21, 22). However, comprehensive analysis specifically examining *pikukuh* as a resistance strategy through multi-dimensional approaches (socio-cultural, political, and educational) remains limited.

This research addresses this gap by providing an integrative analytical framework that examines how *pikukuh* functions as a mechanism for defending Baduy identity against modernization pressures. The significance of this study extends beyond academic contribution to practical implications for indigenous rights advocacy, culturally-sensitive policy formulation, and sustainable development models based on indigenous wisdom.

This study addresses the following research questions:

1. How does *pikukuh* function as a socio-cultural resistance strategy among the Baduy community in facing modernization?
2. How does the political dimension of *pikukuh* operate in negotiating indigenous autonomy with formal governance systems?
3. How does the *pikukuh*-based education system transmit traditional knowledge across generations?
4. What challenges and opportunities does the Baduy community face in maintaining *pikukuh* in the contemporary era?
5. What a Pikukuh as a Cultural Resistance Model of Baduy Community in Maintaining Identity Amid Modernization?
6. **Literature Review**

    1. **Modernization and Cultural Resistance Theory**

Modernization is classically understood as societal transformation from traditional to modern conditions, characterized by rationalization, secularization, structural differentiation, and increased social complexity (1, 2, 5, 7). However, critical perspectives challenge this linear and universal view, demonstrating that modernization is contextual and does not always produce positive impacts for all social groups (23–25).

In indigenous community contexts, modernization often presents dilemmas between material progress and cultural identity preservation. Cultural resistance emerges as a response to homogenization and

marginalization threats (26–28). Scott in "Weapons of the Weak" explains various forms of resistance by marginal groups, including everyday resistance not always in the form of open confrontation but through subtle yet persistent cultural practices (29, 30).

2.2. Cultural Resilience Theory

Cultural Resilience Theory examines the capacity of a cultural group to maintain, adapt, and revitalize its core values, practices, and identity systems in the face of external pressures, disruptions, or forces of change (31). Unlike approaches that frame indigenous communities as passive victims of modernization, Cultural Resilience Theory foregrounds the active agency of communities in negotiating between tradition and change. Resilience in this context is not synonymous with rigid preservation; rather, it denotes a dynamic capacity to absorb perturbations while retaining fundamental structures and self-organizing processes (32).

Kirmayer et al. (31) identify three core dimensions of cultural resilience: (1) collective identity, encompassing shared narratives, symbols, and practices that generate a sense of continuity and belonging; (2) cultural continuity, referring to the intergenerational transmission of values, knowledge, and traditions; and (3) community agency, understood as the collective capacity to make decisions, defend cultural boundaries, and negotiate with external institutions. These three dimensions operate interdependently — weakening any one of them threatens the integrity of the entire cultural system.

Applied to the Baduy case, Cultural Resilience Theory provides a lens through which the pikukuh system can be understood not merely as a conservative adherence to tradition but as an adaptive cultural mechanism sustaining collective identity amid accelerating modernization pressures. The community's selective engagement with modernity accepting economically pragmatic elements such as digital payment systems while firmly rejecting formal education and modern infrastructure within customary areas exemplifies what Ungar (32) describes as "culturally embedded resilience pathways." Furthermore, the hierarchical differentiation between Baduy Dalam and Baduy Luar represents a structural resilience mechanism: the outer community absorbs external influences, thereby shielding the *Baduy Dalam* community's cultural core. This buffering function is theoretically consistent with (31) argument that resilient cultures develop protective layers that regulate the pace and degree of external contact.

2.3. Indigenous Knowledge Systems

Indigenous knowledge refers to knowledge systems developed by local communities through long-term experiences interacting with their environments (33–36). These knowledge systems are holistic, integrated with spiritual belief systems, and transmitted orally across generations.

It demonstrates that indigenous knowledge makes significant contributions to ecological and evolutionary understanding, as well as sustainable environmental management (36–39). Indigenous knowledge systems often possess long-term sustainability perspectives that can complement modern scientific approaches (40, 41).

Zidny and Eilks (41)emphasize that indigenous knowledge can serve as a socio-cultural context for transformative education for sustainable development. Their research on the Baduy community shows that agricultural practices, knowledge systems, technology, and conservation practices contain wisdom relevant to addressing global environmental challenges.

2.4. Customary Law and Indigenous Autonomy

Customary law represents a rule system that grows and develops within indigenous communities, sourced from cultural values and beliefs (42, 43, 44). In Indonesia, recognition of indigenous legal communities is guaranteed in Article 18B paragraph (2) of the 1945 Constitution and further regulated in various laws, including Law Number 6 of 2014 on Villages (45).

However, implementing this recognition faces various challenges. Research by Ncube and Chotib (46, 47) shows that institutional transformation of indigenous communities into customary villages often creates tensions between formal governance systems and traditional indigenous leadership structures. In the Baduy case, there exists a hybrid form adopting both modern and customary village concepts simultaneously.

2.5. Social-Ecological Resilience Theorys

Social-Ecological Resilience Theory, developed principally through the work of (48) and elaborated by Folke (49) within the Stockholm Resilience Centre framework, conceptualizes human communities and their natural environments as coupled, interdependent systems. This theory moves beyond traditional ecology by positioning human social systems including institutions, governance structures, knowledge systems, and cultural norms as co-constitutive components of ecological dynamics. The central proposition is that the resilience of a social-ecological system (SES) depends on the interactive capacity between social organization and ecological processes to absorb disturbances, self-organize, and adapt to change without losing fundamental functions and structures (50).

Folke et al. (49) identify four critical capacities that characterize a resilient SES: learning to live with change and uncertainty; nurturing diversity for reorganization and renewal; combining different types of knowledge for learning; and creating opportunity for self-organization toward social-ecological sustainability. Crucially, indigenous knowledge systems occupy a central position within this framework, as they encode long-term observations of ecological patterns and embed adaptive responses within culturally transmitted norms and practices (51). The panarchy concept the nested hierarchy of adaptive cycles operating at multiple scales offers a further theoretical tool for understanding how local cultural systems interact with regional and global dynamics (52).

Applied to the Baduy community, Social-Ecological Resilience Theory illuminates the pikukuh system as an institutionalized governance mechanism that maintains the functional integrity of the Baduy social-ecological system across multiple pressures. The three-zone forest classification (Leuweung Kolot, Leuweung Titipan, and Leuweung Cadangan) represents a spatially organized adaptive cycle in which distinct ecological zones are assigned differentiated levels of human interaction a structure that aligns

closely with what Berkes (51) calls “adaptive co-management” rooted in indigenous ecological knowledge. The buyut prohibitions against altering river flows, converting primary forest, or applying chemical inputs to agricultural land function as social-ecological feedbacks that preserve the community’s capacity to self-organize and absorb environmental disturbances. Moreover, the rejection of modern infrastructure such as paved roads and electricity grids within the core customary area can be interpreted not merely as cultural conservatism but as a deliberate strategy to minimize socio-technical disturbances that would otherwise accelerate ecological degradation and social fragmentation, thereby eroding the adaptive capacity of the entire system (49, 50).

Methodology

This qualitative research employed an instrumental case study design (53). The Baduy community in Kanekes Village, Lebak Regency, Banten served as the bounded instrumental case to understand broader phenomena of indigenous cultural resistance strategies against modernization. An interpretive paradigm guided data interpretation, emphasizing understanding socially constructed meanings within cultural contexts (54)

The research was conducted in the Baduy customary area (Kanekes Village, Leuwidamar District, Lebak Regency, Banten Province, Indonesia) from March to August 2024. The instrumental case study design was selected because the Baduy case illuminates broader issues of indigenous community resistance strategies in facing modernization.

3.1. Data Collection Methods

Data were collected through three primary methods. First, in-depth interviews were conducted with 18 purposively selected participants, including Jaro’ duabelas, Jaro Tangtu (customary leaders), Jaro Pamarentah, *Baduy Luar* community members, and local government officials. Interviews were conducted in Sundanese with Indonesian translation assistance, audio-recorded with participant consent, and lasted between 60 and 120 minutes. Second, participant observation was carried out over six months (March–August 2024), during which the researcher accompanied community members in daily agricultural, ritual, and social activities to observe how *pikukuh* manifests in lived practice. Detailed field notes were recorded daily. Third, document analysis was applied to relevant primary and secondary sources including village records, customary regulations, government policy documents, and existing academic literature on the Baduy community.

3.2. Data Analysis

Data were analyzed using three complementary and sequentially integrated techniques: thematic analysis, triangulation, and reflexive framework analysis.

First, thematic analysis was conducted following the six-phase framework of (55), recognized as a theoretically flexible and rigorous approach for identifying, analyzing, and reporting patterns within

qualitative data. The six phases were applied iteratively: (1) *Familiarization with the data*, active and repeated reading of all interview transcripts, field notes, and document extracts, noting initial observations; (2) *Generating initial codes*, meaningful segments were systematically labeled using open inductive coding without imposing predetermined categories (56); (3) *Searching for themes*, codes were sorted and collated into potential themes capturing broader patterns of shared meaning; (4) *Reviewing themes*, candidate themes were reviewed in relation to coded extracts and the full dataset to assess internal coherence and distinctiveness; (5) *Defining and naming themes*, each theme was refined with a precise definition and concise label capturing its analytical essence; and (6) *Producing the report*, findings were written up with rich analytic narrative supported by selected data extracts (55). Three primary themes emerged: the socio-cultural, political, and educational dimensions of pikukuh as a cultural resistance strategy. *Member checking* (57) was subsequently conducted by presenting thematic summaries to five key informants; a Pu'un representative, a *Jaro Pamarentah*, two senior *Baduy Luar* members, and a local educator to verify the interpretive accuracy and cultural fidelity of the emergent themes. Informants confirmed the central themes while offering refinements on terminology and contextual nuance, which were incorporated into the final analysis.

Second, triangulation was employed as the primary strategy for enhancing credibility and trustworthiness of findings, (57) typological elaboration. Three intersecting forms were applied. *Data source triangulation*, involved systematically cross-referencing findings across in-depth interviews, participant observation field notes, and documentary evidence to assess convergence, divergence, and complementarity (58): convergence strengthened a finding's robustness; divergence was treated as analytically generative. *Respondent triangulation*, compared accounts from participants with distinct social positions Pu'un representative, Jaro Tangtu, Jaro Pamarentah, Baduy Luar community members, and external government officials distinguishing shared cultural understandings from position-specific perspectives. *Theoretical triangulation* interpreted data through multiple theoretical lenses; Cultural Resistance Theory (29), Cultural Resilience Theory (31), and Social-Ecological Resilience Theory (49) confirming that findings remained analytically coherent across different conceptual frameworks (58). Peer debriefing (57) was conducted in three sessions with two colleagues specializing in cultural anthropology and indigenous education to challenge emerging interpretations and identify potential analytical blind spots.

Third, analytical dimensions were organized into three interconnected categories socio-cultural, political, and educational enabling systematic comparison across data sources. This framework drew on case study strategy of building a detailed description followed by theme-based analysis across multiple dimensions. The framework was applied reflexively throughout the analytical process: the researcher maintained a dedicated positionality journal in which analytical decisions, emerging interpretations, and potential researcher biases were documented at each stage, ensuring transparency and auditability of the analytical trail. Prolonged engagement in the field over six months (March–August 2024) further strengthened transferability and dependability as trustworthiness criteria (57).

Ethical considerations were carefully observed throughout the research. Informed consent was obtained from all participants, confidentiality was maintained by anonymizing personal information, and the research protocol received clearance from the institutional review board of Universitas Terbuka. The community was engaged as a partner throughout the research process, ensuring their cultural protocols and boundaries were respected.

Result and Discussion

4.1. Describing of Pikukuh

Pikukuh, as a set of customary laws within the Baduy community, plays a crucial role in shaping identity and strengthening social solidarity among its members. With its dualistic structure *Pikukuh sapuluh* and *karuhun* not only serves as a guideline for life but also provides a clear foundation for social interaction and conflict resolution.

Puryanto (59), states the Baduy community preserves its knowledge and experience by maintaining and upholding *Pikukuh*, which contains various teachings that provide strategies for conflict prevention and resolution. Understanding *Pikukuh* can be observed through the "10 *buyut*" in *Pikukuh*. See Table 2 below,

Table 1
10 (ten) Buyut of Baduy Community

10 *Pikukuh*	**Meaning**
Teu meunang binasa ka sasama	Prohibited harming others; Avoid harming fellow living beings
Teu meunang maling	Prohibited stealing
Teu meunang ingkar janji, ngabohong atawa nipu batur	Prohibited breaking promises, lie, or deceive others
Teu meunang nginum nu ngamabokeun	Prohibited consuming intoxicating drinks
Teu meunang ngaduakeun hate atawa nyandung	Prohibited having multiple spouses; Avoid polygamy
Teu meunang dahar tas panonpoe surup	Prohibited eating after sunset
Teu meunang dangdan, diwedak, sabun, atawa make seuseungitan	Prohibited using cosmetics, soaps, or perfumes
Teu meunang sare tibra teuing	Prohibited sleeping too soundly; Avoid sleeping too deeply.
Teu meunang ngawih lantaran senang	Prohibited singing for pleasure
Teu meunang make barang mahal atawa rarangken, kongkorong, suweng, ali jeung geulang	Prohibited wearing expensive items or jewelry such as necklaces, earrings, rings, and bracelets.
Sources (60); (61)	

Based on the table, it can be explained that the Baduy community does not manage conflict through formal or modern institutional mechanisms. Instead, conflict management is rooted in the preservation of inherited normative values. *Pikukuh* functions as a moral, ethical, and social guideline that regulates behavior, prevents conflict, and governs conflict resolution practices. *Second*, the 10 *buyut* reflect preventive principles of conflict resolution. Prohibitions such as *teu meunang binasa ka sasama* (prohibited from harming others), *teu meunang maling* (prohibited from stealing), and *teu meunang ingkar janji, ngabohong atawa nipu batur* (prohibited from breaking promises, lying, or deceiving others) directly suppress the potential for social conflict arising from violence, injustice, and violations of trust. Trustworthiness and honesty are positioned as fundamental elements of social harmony. *Third*, several buyut aim to control personal desires and interests in order to prevent jealousy, competition, and social inequality. The prohibitions against polygamy, the use of luxurious goods and jewelry, and the consumption of intoxicating drinks demonstrate an effort to maintain simplicity, equality, and self-restraint. These values play a significant role in preventing both structural conflicts and conflicts based on social status. Fourth, but regulating daily life practices—such as eating, sleeping, personal adornment, and entertainment (e.g., *teu meunang ngawih lantaran senang*, prohibited from singing for pleasure)—reflect an emphasis on self-discipline and emotional stability. Such discipline contributes to individual

emotional control, which in turn reduces the likelihood of interpersonal conflict. So, the data indicate that conflict resolution within the Baduy *Pikukuh* is holistic, encompassing moral, social, spiritual, and behavioral dimensions of everyday life. Conflict is not addressed reactively after it occurs but is prevented proactively through the internalization of life values emphasizing harmony, simplicity, honesty, and self-control. This perspective strengthens the argument that *Pikukuh* can be understood as a local wisdom–based model of conflict resolution that is highly relevant for integration into contemporary conflict resolution education.

4.2. Profile of Baduy Community and *Pikukuh* System

Pikukuh derives from the Sundanese word "*pukuh*".*Pikukuh* represents a set of customary rules based on *Sunda Wiwitan* teachings, the indigenous Sundanese belief emphasizing ancestral worship and harmony with nature. *Pikukuh* functions as law regulating all aspects of Baduy life, from social relations, economics, to spirituality.

The fundamental philosophy of *pikukuh* is embodied in the expression "*lojor teu meunang dipotong, pondok teu meunang disambung*" (what is long must not be cut, what is short must not be extended). This expression contains philosophical meaning that everything must remain in its original form without any change. This principle reflects the Baduy cosmological worldview about universal order that must be maintained in balance.

Sujana (9) explains that *pikukuh* has three fundamental dimensions:

- *Vertical Dimension*: Regulates human relationships with *Batara Tunggal* (The Supreme Creator) through rituals, worship, and spiritual obedience
- *Horizontal Dimension*: Regulates inter-human relationships within the community, including social structure, leadership systems, and social interaction norms
- *Ecological Dimension*: Regulates human relationships with nature, including agricultural practices, forest conservation, and natural resource utilization

The research was conducted in the Baduy customary area (Kanekes village, Leuwidamar District, Lebak Regency, Banten Province, Indonesia) from March to August 2024. See Fig. 1

The Baduy territory encompasses approximately 5,101.85 hectares divided into two main zones: Baduy Dalam (*DalamBaduy*), consisting of three main villages (Cikeusik, Cikartawana, and Cibeo) with approximately 1,200 inhabitants who maintain strict adherence to pikukuh, and Baduy Luar, comprising 56 villages with approximately 10,000 inhabitants who practice more flexible interpretations while still respecting core principles (19). This geographic and cultural division provided an opportunity to examine variation in conflict resolution practices across different levels of traditionalism.

Implementation of *pikukuh* is manifested in *buyut* (prohibitions or taboos) that are sacred and binding. *Buyut* is not codified in written form but transmitted orally and practiced in daily life.

4.3. Socio-Cultural Dimension: *Pikukuh* as Collective Identity

The collective identity of Baduy community is constructed through internalization and practice of *pikukuh* in daily life. Unlike identities based on material attributes or modern achievements, Baduy identity centers on adherence to ancestral teachings and harmony with nature.

Silalahi & Purwanti (15) Iskandan (62) found that Baduy community possesses strong psychological resilience in facing external threats due to *pikukuh* value system internalized from early childhood. This resilience is not defensive-reactive but proactive in asserting their identity as "tradition keepers."

(63) analyzed how the prohibition against wearing footwear (particularly in Baduy Dalam) is not merely a physical rule but represents a symbol of cultural resistance and spirituality. This prohibition symbolizes land sanctity and closeness to nature. For Baduy community, walking barefoot is a spiritual practice connecting them to earth's energy and reminding them of life's simplicity.

4.4. Conceptual Framework of Pikukuh as Multi-Dimensional Resistance

Figure 2. **Conceptual Framework of Pikukuh as Multi-Dimensional Resistance**

The diagram represents a conceptual model that positions *pikukuh* as the core value within the life system of the Baduy community. At the top, it states “Pikukuh as Core Value,” accompanied by the traditional expression, “Lojor teu meunang dipotong, pondok teu meunang disambung,” which literally means “What is long must not be cut, what is short must not be extended.” Philosophically, this expression emphasizes the obligation to preserve ancestral heritage exactly as it is—without reduction or addition. Conceptually, its placement at the top of the diagram signifies that *pikukuh* serves as the normative foundation and ultimate source of legitimacy for all rules, practices, and life orientations within the community. In other words, *pikukuh* functions as the guiding principle that structures the entire system of relationships.

From this core value, the diagram branches into two primary relational dimensions: vertical (spiritual) relations and horizontal (social) relations. Vertical relations refer to the connection between humans and God, ancestors, and cosmic forces believed to sustain universal balance. In this dimension, adherence to customary law is not merely a social obligation but a sacred commitment. Violating *pikukuh* is understood not only as a social offense but also as a spiritual transgression. Horizontal relations, on the other hand, concern interpersonal relationships within the community, including social norms, kinship systems, customary leadership, and collective solidarity. This dimension ensures social harmony and stability in accordance with ancestral prescriptions.

These two relational dimensions converge into ecological relations. This indicates that spiritual and social values shape the community’s worldview toward nature. Nature is not perceived as an object of

exploitation but as an integral and sacred component of the cosmic order. Consequently, everyday practices—such as agricultural methods, forest management, and resource utilization—are strictly regulated by customary values. Ecological relations thus represent the practical manifestation of *pikukuh* in material and environmental life.

From ecological relations, the diagram further branches into three forms of customary prohibitions known as *buyut*: technological prohibitions, social prohibitions, and ecological prohibitions. Technological prohibitions restrict the use of modern tools and innovations that could disrupt social and cultural balance. Social prohibitions regulate interactions with outsiders, behavioral norms, marriage rules, and community structure. Ecological prohibitions forbid actions that could damage the environment, such as excessive forest exploitation or altering natural landscapes. Together, these three forms of *buyut* function as normative control mechanisms that maintain consistency between values, relationships, and lived practices.

Ultimately, the entire structure culminates in a cultural resistance strategy. This strategy does not manifest as open confrontation but rather as a systematic and structured form of cultural resilience. Through *pikukuh*, strong spiritual and social relations, ecological ethics, and a firmly maintained system of prohibitions, the community is able to preserve its identity and cultural continuity amid modernization pressures. Therefore, the diagram illustrates that the Baduy community's cultural endurance is not merely a rejection of change, but the outcome of an integrated value system that unites spiritual, social, and ecological dimensions into a coherent and sustainable whole.

The *pikukuh* system creates internal stratification within Baduy society based on adherence levels to teachings. Ba*duy Dal*am (*Tangtu*) occupying three core villages Cibeo, Cikartawana, and Cikeusik—represents the strictest group in practicing *pikukuh*. They are regarded as custodians of sacred objects and bearers of spiritual responsibility for maintaining universal balance.

Meanwhile, *Baduy Luar* (*Panamping*) functions as a "protective layer" shielding *Baduy Dalam* from external influences. They are more flexible in interacting with the outside world and selectively adopting certain elements of modernity, such as communication technology, vehicles (outside customary area), and more diverse clothing.

This differentiation does not constitute class hierarchy in modern understanding but represents functional role division within the cultural ecosystem. *Baduy Luar* has relative autonomy in determining interaction levels with modernity, as long as fundamental *pikukuh* principles are not violated. If *Baduy Dalam* member violates *buyut*, they will be "demoted" to *Baduy Luar*, and if violations continue, they may be completely expelled from the community.

Baduy community resistance to modernization is not total and rigid but selective and strategic. They do not reject all forms of change but filter based on *pikukuh* principles. In anthropological terminology, this constitutes "**selective modernization.**"

Fatchurrochman, et.al. (64) in research on QRIS digital payment system adoption by *Baduy Luar* demonstrates that Baduy community can accommodate modern technology for economic purposes (tourism and trade) without sacrificing fundamental *pikukuh* values. They accept digital transaction convenience as a tool, not as a value replacing simplicity and honesty principles in trade.

However, their resistance to formal education, modern infrastructure (electricity, paved roads), and communication technology in customary areas remains consistent. This reflects critical awareness that some forms of modernization have destructive potential toward social structures and communal values.

Praptika et.al. (65) on tourism communication and local wisdom shows that Baduy community develops unique communication strategies in interacting with tourists: they open themselves to sharing knowledge about their culture but maintain privacy and sanctity of certain areas, especially *Sasaka Domas* (sacred place only accessible to *Pu'un* and customary stakeholders).

One of the most significant dimensions of *pikukuh* is its ecological orientation. Waluya et al. (18) in research on cultural ecology and environmental education concluded that *pikukuh* positions humans as integral parts of ecosystems, not as rulers or exploiters of nature.

The Baduy community forest zonation system exemplifies this ecological wisdom. They divide forests into three zones:

- *Leuweung Kolot* (Old Forest/Forbidden Forest): Primary forest fully protected and prohibited from entry or utilization. This zone functions as conservation area and water source
- *Leuweung Titipan* (Entrusted Forest): Secondary forest that may be utilized limitedly for subsistence needs, such as taking wood for house construction or equipment, with special permission from customary stakeholders
- *Leuweung Cadangan* (Reserve Forest): Area opened for shifting cultivation and allowed to revert to forest (fallowing system)

Baduy community agricultural practices use *huma* (shifting cultivation) system with rotation allowing soil regeneration. They do not use chemical fertilizers or pesticides but rely on traditional ecological knowledge about planting cycles, natural pest control, and selection of adaptive local rice varieties.

Research by Iskandar (62) (2000) shows that the contribution of *Paraserianthes* (Albizia) *falcataria* species in Baduy community shifting cultivation practices helps soil fertility restoration through nitrogen fixation. This exemplifies how traditional ecological knowledge aligns with modern ecological principles. Iskandar (66) analyzed prohibitions in *Baduy Dalam* community from soil and water conservation perspectives. They found that prohibitions against altering river flows, creating ponds, or leveling land have important ecological functions in preventing erosion, maintaining hydrological cycles, and preserving biodiversity.

Table 2
Conceptual Analysis Table: Pikukuh as a Cultural Resistance Strategy Model

No	Component in the Diagram	Conceptual Description (Purpose)	Substantive Meaning in the Baduy Cultural System
1	Pikukuh as Core Value	The core value that serves as the foundation of the entire life system.	An absolute principle that must not be altered; the source of legitimacy for norms, rules, and customary life order.
2	"Lojor teu meunang dipotong, pondok teu meunang disambung"	A philosophical expression emphasizing the preservation of ancestral heritage.	Symbolizes consistency and cultural conservatism; rejecting both addition and reduction of customary rules.
3	Vertical – Spiritual Relations	The relationship between humans and God, ancestors, and cosmic forces.	Customary obedience is sacred; violations are considered spiritual transgressions.
4	Horizontal – Social Relations	Interpersonal and communal relationships within the social structure.	Maintains social harmony, collective solidarity, and stability of customary order.
5	Ecological Relations	The relationship between humans and nature framed by customary values.	Nature is regarded as sacred and must be preserved; not an object of exploitation.
6	Buyut Technological Prohibition	Restrictions on the use of certain modern technologies.	A mechanism to limit modernization that could disrupt social and spiritual balance.
7	Buyut Social Prohibition	Restrictions governing social interaction and community structure.	Preserves identity purity, behavioral norms, and customary kinship systems.
8	Buyut Ecological Prohibition	Restrictions against environmentally harmful actions.	Customary-based environmental protection ensuring forest and agricultural sustainability.
9	Cultural Resistance Strategy	The ultimate outcome of the structured value system.	A strategy of cultural resilience to preserve identity and continuity amid modernization.
Sources (author, 2025)			

The diagram illustrates Pikukuh as the core value within the Baduy cultural system, serving as the foundation of the entire social and spiritual order. Pikukuh is absolute and unchangeable, as reflected in the principle *"Lojor teu meunang dipotong, pondok teu meunang disambung"* (what is long must not be cut, what is short must not be extended), which emphasizes strict preservation of ancestral traditions without addition or reduction.

This core value regulates three main relational dimensions: vertical (spiritual) relations between humans, God, and ancestors; horizontal (social) relations among community members; and ecological relations

between humans and nature. Together, these dimensions create spiritual, social, and environmental balance.

To safeguard this balance, the system applies buyut (customary prohibitions) covering technological, social, and ecological restrictions. These prohibitions function as mechanisms to limit modernization and prevent disruptions to cultural harmony.

4.5. Political Dimension: Indigenous Autonomy and State Negotiation

The Baduy community governance system is based on hierarchical yet deliberative customary leadership structure. Leadership pinnacle rests with three *Pu'un* (highest spiritual leaders) each leading the three DalamBaduy villages. *Pu'un* are viewed as representatives of *Batara Tunggal* on earth and possess highest spiritual and temporal authority.

Below *Pu'un* are *Jaro Tangtu* who assist *Pu'un* in running customary governance. For *Baduy Luar*, there are *Jaro Pamarentah* who function as liaisons between Baduy community and formal governance. This structure reflects dualism in governance systems: customary system regulating internal life based on *pikukuh*, and formal system accommodating relations with the state.

Decision-making in Baduy community occurs through deliberation (*sangkan*) involving customary stakeholders and community members. This model reflects deliberative democracy principles based on consensus, not majority voting. Decisions are considered valid if mutual agreement is reached and does not contradict *pikukuh*. See Fig. 2 below.

Figure 2. **Baduy Community Leadership Structure (Lebak Regent Regulation Number 38 2023)**

Recognition of indigenous legal communities in Indonesia has experienced fluctuations following political regime changes. During Dutch colonial era, Baduy community received relative recognition through indirect governance systems. However, during New Order era with Law Number 5 of 1979 on Village Governance, there were attempts to uniformize village governance structures threatening indigenous community autonomy.

The 1998 Reform brought fresh air with constitutional recognition of indigenous legal communities in 1945 Constitution amendments. Article 18B paragraph (2) states that the state recognizes and respects indigenous legal community units and their traditional rights as long as they remain alive and in accordance with societal development and principles of the Unitary State of the Republic of Indonesia.

Law Number 6 of 2014 on Villages provides more progressive recognition by categorizing "customary villages" as entities having authority to regulate and manage governance affairs, local community interests based on community initiative, original rights, and/or traditional rights recognized and respected in the governance system of the Unitary State of the Republic of Indonesia.

However, implementing this recognition faces practical challenges. Pratiwi, et,al. (67) in research on institutional transformation of Baduy indigenous community identified tensions between modern state bureaucratic logic and customary logic. Establishing Kanekes Village as a customary village required leadership structure adaptation combining customary and formal elements.

Research findings show that although formally Kanekes Village has a village head (elected from and by Baduy community), in practice highest authority remains with *Pu'un* and other customary stakeholders. The village head functions more as mediator between Baduy community and government bureaucracy, while strategic decisions regarding internal life are still determined based on *pikukuh*.

One arena of conflict between *pikukuh* and state interests is infrastructure development. Local and central governments have several times proposed building paved roads, electricity networks, and modern public facilities in Baduy territory under development and welfare rationales.

However, Baduy community consistently rejects modern infrastructure considered contrary to *pikukuh*. They argue that welfare is not always measured by access to modern technology but by harmony with nature and spiritual obedience. Unpaved footpaths, for instance, are viewed as more aligned with the philosophy of "letting the land breathe" and preventing erosion.

The developed negotiation strategy uses zonation mechanisms: *Baduy Dalam* territory is completely free from modern development, while *Baduy Luar* has greater flexibility. Paved roads, for example, are only built up to certain limits outside core customary areas, while visitors and government officials entering customary areas must walk.

Tourism development in Baduy territory presents complex political dilemmas. On one side, tourism brings economic benefits to the community, especially *Baduy Luar* who sell handicrafts, forest honey, and organic agricultural products. On the other side, unmanaged tourism can threaten customary area sanctity and disrupt social order.

Herandy (68) in research on tourism impacts on Baduy community found behavioral changes and economic orientation among *Baduy Luar*, who are beginning to orient toward cash economy rather than subsistence. However, social control mechanisms based on *pikukuh* can still prevent excessive commercialization. Baduy community develops special rules for tourists: prohibited from bringing cameras to certain areas, prohibited from smoking, prohibited from bringing instant food and drinks, must respect local customs, and must be accompanied by local guides. This constitutes "customary governance" regulating external relations.

Susilawati et al. and Waluya at.el. (69, 70) analyzed tourism communication strategies based on local wisdom developed by Baduy community. They found that narratives constructed in tourist interactions emphasize spirituality and environmental conservation aspects, not exoticism or primitivism. This is a strategy to control their identity representation before the public.

Another potential conflict relates to land and natural resource rights. Baduy territory is geographically located in areas with economic potential, both for mining, plantations, and commercial forestry. In some cases, there are overlapping claims between customary rights and government-issued concession permits.

Baduy community has a concept of collective land ownership based on cosmology: land is entrusted by *Batara Tunggal* that must be preserved. This concept contradicts individual ownership logic and land commodification in modern legal systems.

Legal recognition of indigenous community customary rights in Law Number 41 of 1999 on Forestry and Constitutional Court Decision Number 35/PUU-X/2012 stating that customary forests are not state forests provides legal basis for Baduy community claims. However, formal recognition processes still face bureaucratic obstacles.

4.6. Educational Dimension: Knowledge Transmission Based on *Pikukuh*

One of the most controversial manifestations of *pikukuh* is rejection of formal education. Baduy community, particularly *Baduy Dalam*, do not enroll their children in government school systems. They believe formal education will teach values contrary to *pikukuh* and distance younger generations from ancestral traditions (12, 15). From human rights and national education policy perspectives mandating basic education, this stance is often viewed as problematic. However, Baduy community argues they have their own education system relevant to their life context and guaranteed by cultural rights.

Research by Asyari and Subai (71, 72) on *Baduy Dalam* and formal education found this rejection is not due to anti-knowledge attitudes but epistemological and value incompatibility between national curriculum and *pikukuh*-based knowledge systems. National curriculum oriented toward modern literacy, science, and skills for industrial work world is deemed irrelevant to life based on subsistence agriculture and harmony with nature.

Knowledge transmission in Baduy community occurs through family and community-based informal education. Children learn through observation, imitation, and direct participation in daily activities. This learning process is holistic, integrating technical knowledge (agriculture, crafts), moral values, and spirituality. Waluya, et.al. (18) in research on cultural ecology as environmental education source found that Baduy children acquire sophisticated ecological knowledge through direct experiences in forests and fields. They learn to recognize hundreds of plant species, understand seasonal cycles, soil conservation techniques, and environmental ethics from early ages.

Spiritual education occurs through rituals and oral stories. *Pu'un* and parents tell stories about ancestors, *pikukuh* origins, and consequences of violating *buyut*. This storytelling method is highly effective in instilling values because it involves children's emotions and imagination. This informal education system

also includes clear gender role learning: boys learn farming, hunting, and making tools from fathers and uncles, while girls learn weaving, cooking, and household management from mothers and grandmothers.

Some researchers argue that Baduy community traditional knowledge has high educational value and is relevant for Education for Sustainable Development (ESD). Zidny and Eilks (41) propose that Baduy indigenous knowledge can become socio-cultural context for transformative learning.

They identified several aspects of Baduy knowledge aligned with ESD principles: (a) Sustainable Agriculture: *Huma* system with long rotation, local variety usage, natural pest control, and organic fertilization represents environmentally friendly agriculture model; (b) Biodiversity Conservation: Practices protecting forbidden forests and zonation systems reflect understanding of ecosystem preservation importance; (c) Appropriate Technology: Use of simple technology suited to local resource availability and non-environmentally destructive; (d) Responsible Consumption: Subsistence consumption patterns and waste avoidance; (e**)** Spiritual Ecology: View that nature has intrinsic value, not just instrumental value

However, integrating indigenous knowledge into formal education systems faces epistemological challenges. Traditional knowledge systems that are holistic, contextual, and spiritual differ fundamentally from modern scientific epistemology that is reductive, universal, and secular. Baduy younger generation, especially *Baduy Luar*, face identity dilemmas in the digital era. They are exposed to the outside world through tourist interactions, media access (though limited), and temporary migration for work or trade.

Research by Praptika et al. (65) found that despite modernization pressures, Baduy youth have fairly strong psychological resilience due to *pikukuh* value internalization from childhood. However, there are concerns among customary elders that younger generations, particularly those frequently interacting with the outside world, are beginning to experience commitment erosion toward *pikukuh*. Several observed change indicators include: increasing desire to use communication technology, clothing preference changes among Baduy Luar, and interest in attending formal education or modern skills training.

Baduy community response to this phenomenon is through strengthening *pikukuh* value education and rituals reinforcing collective identity. However, in the long term, *pikukuh* sustainability will highly depend on younger generation's ability to find meaning and tradition relevance in a continuously changing world context.

4.7. Challenges and Opportunities for *Pikukuh* Sustainability

The sustainability of *pikukuh* in the contemporary era faces complex challenges from both internal and external sources, yet opportunities for resilience and adaptation also emerge. Internally, generational dynamics constitute the primary challenge, with perception differences between older and younger

generations about *pikukuh* relevance in modern contexts. Older generations tend toward more rigid *buyut* interpretations, while younger generations desire greater flexibility in negotiating between tradition and modernity. Economic pressures compound this challenge as cash economy needs increase for purchasing goods that cannot be self-produced (salt, sugar, clothing), creating tension with *pikukuh* principles of simplicity and subsistence. Furthermore, material welfare disparities between *Baduy Dalam and Baduy Luar*, as well as between those engaged in tourism and those who are not, generate internal gaps that threaten community cohesion and solidarity.

External challenges present equally formidable obstacles to *pikukuh* maintenance. Development pressures from infrastructure policies, economic acceleration programs, and government welfare initiatives often lack cultural sensitivity, imposing mainstream development indicators (electricity access, paved roads, formal literacy rates) that contradict Baduy welfare definitions. Tourism invasion, particularly by visitors lacking education in customary ethics and rules, disturbs daily life rhythms and threatens sacred area sanctity. Climate change poses perhaps the most existential threat, as rainfall pattern alterations, increased natural disaster frequency, and biodiversity disruptions directly undermine traditional agricultural systems dependent on predictable natural cycles. Additionally, tenurial conflicts arising from legal status uncertainty of customary lands and potential clashes with private sector concessions or state forestry programs create persistent insecurity.

Despite these challenges, significant opportunities and strategic pathways for *pikukuh* sustainability exist. Progressive legal recognition developments, including customary forest acknowledgment and customary rights formalization, provide stronger legal protection frameworks. Community-based tourism models, when properly managed to control visitor numbers and behaviors, can generate economic benefits without compromising *pikukuh* values, transforming potential threats into sustainable livelihood sources. The growing international recognition of indigenous knowledge systems opens opportunities for dialogue between Baduy traditional knowledge and modern science, potentially producing innovations in environmental conservation and sustainable development while validating indigenous epistemologies.

Strategic initiatives for long-term sustainability include systematic documentation and revitalization efforts that must be conducted respectfully, positioning Baduy community members as subjects and co-producers rather than objects of research. Such documentation can support cultural transmission to younger generations while protecting intellectual property rights. Participation in regional, national, and international indigenous peoples networks such as AMAN (Aliansi Masyarakat Adat Nusantara/Indigenous Peoples Alliance of the Archipelago) strengthens political positioning, expands resource access, and builds solidarity across indigenous communities facing similar pressures. These strategic engagements enable knowledge exchange, advocacy capacity building, and collective resistance against homogenizing forces of globalization, ultimately enhancing *pikukuh* resilience through both internal strengthening and external alliance building.

4.8. Pikukuh as a Cultural Resistance Model of Baduy Community in Maintaining Identity Amid Modernization

The model illustrates how Pikukuh functions as the core cultural value system that underpins the Baduy community's strategy of cultural resistance to modernization. At the center of this value system is the principle *"Lojor teu meunang dipotong, pondok teu meunang disambung"* ("What is long must not be cut, and what is short must not be extended"), which symbolizes the obligation to preserve ancestral traditions without alteration. This principle serves as the normative foundation that guides social behavior, cultural practices, and community decision-making. Rather than merely representing customary rules, Pikukuh constitutes a comprehensive worldview that shapes how the Baduy people interpret and respond to social change.

The model further demonstrates that Pikukuh operates through three interconnected dimensions: the vertical, horizontal, and ecological dimensions. The vertical dimension reflects the spiritual relationship between humans and *Batara Tunggal*, emphasizing obedience to sacred and ancestral mandates. The horizontal dimension governs social relations among community members through values such as solidarity, mutual cooperation, and social harmony. Meanwhile, the ecological dimension regulates the relationship between humans and nature, promoting environmental stewardship and sustainable resource management. Together, these dimensions create a holistic framework that integrates spiritual, social, and ecological responsibilities within everyday life.

The operationalization of Pikukuh is manifested through Buyut, or customary prohibitions, which translate abstract cultural values into concrete social practices. Buyut functions as a regulatory mechanism that ensures adherence to ancestral norms and maintains social order within the community. The model identifies three major categories of prohibitions: technological, social, and ecological restrictions. Technological prohibitions limit forms of modernization perceived as disruptive to traditional life, social prohibitions safeguard cultural identity and customary norms, while ecological prohibitions protect forests, agricultural systems, and environmental sustainability. Through these mechanisms, Pikukuh becomes a living cultural system rather than a purely symbolic belief structure.

An important finding emerging from the model is the existence of a filtering process through which the Baduy community responds to external pressures. Modernization, represented as an external force, continuously challenges traditional cultural structures through technological advancement, economic integration, and sociocultural change. However, the model suggests that the Baduy do not reject modernization entirely. Instead, they engage in selective modernization, accepting certain changes while rejecting those that threaten the integrity of their cultural values. This selective adaptation demonstrates that cultural preservation and social adaptation are not mutually exclusive but can coexist within a resilient cultural system.

The outcome of this process is the formation of a cultural resistance strategy that enables the Baduy community to maintain its collective identity amidst rapid social transformation. This strategy is

expressed through three interconnected domains. The socio-cultural domain strengthens collective identity and ecological wisdom; the political domain supports customary autonomy and negotiation with state institutions; and the educational domain facilitates the intergenerational transmission of indigenous knowledge and cultural values. Consequently, cultural resistance in the Baduy context should not be understood as open opposition to modernity, but rather as a continuous effort to preserve cultural integrity while adapting to changing circumstances. See Fig. 3.

Figure 3. Pikukuh as a Cultural Resistance Model of Baduy Community

From a theoretical perspective, the model aligns closely with *Cultural Resistance Theory*, which explains how communities preserve their identities through cultural practices in the face of dominant external influences. It also reflects the principles of *Cultural Resilience Theory*, highlighting the capacity of communities to adapt while maintaining their core values and social structures. Furthermore, the ecological dimension resonates with *Social-Ecological Resilience Theory*, emphasizing the interdependence between cultural sustainability and environmental stewardship. Finally, the transmission of Pikukuh through Buyut and customary education corresponds to the framework of *Indigenous Knowledge Systems*, which views local knowledge as a dynamic mechanism for sustaining community identity across generations. Collectively, these theoretical perspectives suggest that Pikukuh functions not only as a customary norm but also as a comprehensive system of cultural resilience that sustains the social, ecological, and cultural continuity of the Baduy community in the face of modernization

Discussion

This qualitative instrumental case study analyzed *pikukuh* as the Baduy community's cultural resistance strategy in facing modernization, based on six months of fieldwork (March–August 2024) in Kanekes Village, Lebak Regency, Banten. Through integrative thematic analysis of in-depth interviews, participant observation, and document analysis across three analytical dimensions socio-cultural, political, and educational, the study generated the following principal findings and conclusions. These are discussed in relation to the three theoretical frameworks underpinning the study: Cultural Resistance Theory (29), Cultural Resilience Theory (31) and Social-Ecological Resilience Theory (49).

First, in the socio-cultural dimension, pikukuh functions as the normative foundation of Baduy collective identity, structured around a tripartite cosmology: vertical harmony with *Batara Tunggal* (spiritual dimension), horizontal harmony among community members (social dimension), and ecological harmony with nature (environmental dimension) (9, 15). This cosmological architecture is not merely symbolic; it generates lived obligations that permeate every aspect of daily existence, from agricultural cycles to social interaction to bodily practice. The *buyut* system operationalizes these values as actionable prohibitions, constructing clear identity boundaries between the Baduy world and the external world of modernity. Crucially, the cultural resistance practiced is not total-defensive but selective-strategic: Baduy Luar's adoption of QRIS digital payment systems for tourism purposes (64)

without abandoning core pikukuh principles exemplifies theorizes as "*culturally embedded resilience pathways*" adaptive responses that preserve the cultural core while selectively engaging modernity. From a Social-Ecological Resilience perspective, the hierarchical differentiation between *Baduy Dalam* (strict custodians) and *Baduy Luar* (protective buffer layer) constitutes a structural resilience mechanism consistent with panarchy theory (52): the outer community absorbs external perturbations, shielding the inner community's cultural-ecological core. Ecologically, the three-zone forest management system (*leuweung kolot*, *leuweung titipan*, *leuweung cadangan*) and *huma*-based swidden agriculture represent institutionalized adaptive management practices (51, 73) that maintain forest cover, regulate biodiversity, and ensure long-term food security demonstrating the high relevance of indigenous ecological knowledge for contemporary sustainable development challenges (41).

Second, in the political dimension, pikukuh constitutes the legitimating foundation of Baduy indigenous autonomy in ongoing negotiation with state governance systems. The community's governance structure with Pu'un wielding supreme spiritual-temporal authority over Baduy Dalam, and Jaro Pamarentah mediating relations with the formal state embodies a deliberate institutional dualism. This duality allows the community to participate in formal administrative structures without subordinating customary authority to them. The consistent rejection of modern infrastructure (paved roads, electrical grids) within customary areas is not mere conservatism but a calculated political strategy: controlling the penetration of modernity into the cultural-ecological core. The zonation mechanism whereby modern development is permitted only at the geographic periphery of Baduy territory represents a spatial resistance strategy consistent with Scott's (29)s "weapons of the weak," recast at the community level as "territorial sovereignty through cosmological legitimation." Tourism governance further illustrates this political sophistication: special visitor protocols (prohibitions on cameras, cigarettes, and modern food in sacred areas) constitute a form of "customary foreign policy" that controls community representation and limits cultural commodification (69). Constitutional and legal advances particularly Article 18B(2) of the 1945 Constitution and Constitutional Court Decision No. 35/PUU-X/2012 on customary forests provide formal openings for Baduy land rights claims, though implementation gaps and bureaucratic resistance remain significant obstacles (74). Theoretically, the Baduy political strategy exemplifies what Kirmayer et al. (31) call "community agency" as a core dimension of cultural resilience: the collective capacity to define cultural boundaries and negotiate with external institutions on the community's own terms.

Third, in the educational dimension, the Baduy community's rejection of formal schooling constitutes a principled epistemological resistance rather than anti-intellectualism. This rejection reflects a fundamental incompatibility between the national curriculum's orientation toward modern literacy, industrial skills, and individual advancement, and pikukuh's epistemological framework grounded in subsistence agriculture, communal solidarity, and ecological interdependence. Boaventura de Sousa Santos' concept of "epistemicide" the destruction of alternative knowledge systems through institutional dominance provides a useful theoretical lens: forced enrollment in national schools would constitute precisely such epistemological violence (12, 15). In contrast, *pikukuh*-based knowledge transmission operates through an indigenous pedagogy that is experiential, holistic, intergenerational,

and contextually embedded. Children acquire deep ecological literacy knowledge of hundreds of plant species, seasonal cycles, soil conservation techniques, and environmental ethics through direct participation in forest and field activities (18). Spiritual knowledge is transmitted through Pu'un's oral storytelling, ritual participation, and lived embodiment of customary law. The gender-differentiated apprenticeship system (boys learning farming and tool-making; girls learning weaving and household management) ensures organic and comprehensive transmission across generations. Zidny et al. (41) demonstrate that Baduy indigenous knowledge aligns closely with Education for Sustainable Development (ESD) principles, encompassing sustainable agriculture (*huma* system), biodiversity conservation, traditional ecological technology, responsible consumption, and ecological spirituality. These findings support the argument that indigenous knowledge systems should be treated not as supplementary curiosities but as legitimate, co-equal epistemologies within pluriversal frameworks for global sustainability (75).

Fourth, the long-term sustainability of pikukuh faces multi-level and intersecting challenges. Internally, generational dynamics present the most immediate threat: younger *Baduy Luar* members, increasingly exposed to market economies through tourism, show growing orientation toward cash-based livelihoods and consumption patterns that subtly erode the simplicity principle at the heart of pikukuh. The Baduy Dalam–Luar gap may widen over time as Luar members accumulate economic capital and social capital from external networks. Externally, climate change poses an indirect but existential risk: the community's rain-fed *huma* agriculture and forest-based livelihoods are highly sensitive to rainfall variability and temperature shifts, threatening the ecological foundations upon which pikukuh sustainability depends. Tenurial conflicts over natural resource rights, mass tourism pressure, and ongoing government incentives for infrastructure development in Baduy territory represent additional structural vulnerabilities.

Against these challenges, however, several structural opportunities exist: the Constitutional Court Decision No. 35/PUU-X/2012 provides a legal basis for customary forest recognition; the national indigenous peoples' alliance (AMAN) provides solidarity networks and advocacy capacity; the growing global valorization of indigenous knowledge in UN sustainability frameworks (SDGs, Kunming-Montreal Biodiversity Framework) creates discursive space for Baduy knowledge claims; and the community's demonstrated capacity for selective modernization evidenced by the QRIS adoption for tourism commerce suggests an adaptive flexibility that bodes well for long-term resilience (49).

Taken together, these findings refine and extend the theoretical frameworks employed. The Baduy case demonstrates that *cultural resistance* (29) in indigenous community contexts is not adequately captured by the weapons-of-the-weak model, which tends to foreground individual, covert, and reactive strategies. Instead, pikukuh represents a *proactive, institutionalized, and cosmologically grounded* resistance system — collectively enacted through formal customary structures, spatially organized, and spiritually legitimated. This finding calls for an expansion of Cultural Resistance Theory to encompass community-level, publicly enacted, and governance-embedded forms of resistance in indigenous contexts.

Regarding Cultural Resilience Theory (31), the Baduy case confirms and enriches all three core dimensions (collective identity, cultural continuity, community agency) while adding a fourth: *ecological embeddedness* the degree to which cultural resilience is grounded in and conditioned by the integrity of the natural environment. This extension bridges cultural and social-ecological resilience frameworks. For Social-Ecological Resilience Theory (49), the Baduy buyut system provides a compelling empirical illustration of indigenous institutions functioning as adaptive social-ecological feedbacks that maintain system-level resilience across multiple pressures, validating Berkes's (51, 73) argument for the centrality of traditional ecological knowledge in resilient social-ecological system governance.

The study carries several practical implications. For policy, the findings underscore the need for culturally-sensitive, community-led approaches to indigenous affairs: infrastructure development plans, educational programs, and tourism governance frameworks affecting Baduy territory must be designed through genuine Free, Prior, and Informed Consent (FPIC) processes, respecting the community's right to define its own development trajectory. For education, the depth and sophistication of pikukuh-based ecological and social knowledge warrants formal recognition in Indonesia's pluralistic education framework, and positions Baduy indigenous knowledge as a valuable resource for developing Education for Sustainable Development curricula (41).

Conclusion

This study demonstrates that *pikukuh* functions as a multi-layered and dynamic cultural resistance strategy that enables the Baduy community of Kanekes Village to maintain collective identity, cosmological order, and ecological integrity amid intensifying modernization pressures. Three principal conclusions emerge from the findings. First, in the socio-cultural dimension, *pikukuh* constructs collective identity through a tripartite cosmology vertical harmony with *Batara Tunggal*, horizontal social solidarity, and ecological harmony operationalized through the ten *buyut* prohibitions. Resistance is not total rejection but selective modernization: the community absorbs economically pragmatic innovations while firmly guarding its cosmological core. The Baduy Dalam–Luar stratification functions as a structural buffer mechanism, with the outer community absorbing external pressures and shielding the inner community's cultural integrity. Second, in the political dimension, *pikukuh* grounds a hybrid governance system through which the community maintains indigenous autonomy within the formal Indonesian state. Spatial zonation, leadership dualism (*Pu'un* for customary governance, *Jaro Pamarentah* for state mediation), and community-managed tourism protocols together constitute a coherent political strategy for cultural self-determination. Constitutional recognition (Article 18B, Constitutional Court Decision No. 35/PUU-X/2012) provides a legal basis for customary rights, though implementation gaps remain. Third, in the educational dimension, the rejection of formal schooling reflects principled epistemological resistance rather than anti-intellectualism. *Pikukuh*-based informal learning through apprenticeship, oral tradition, ritual, and direct ecological practice transmits sophisticated intergenerational knowledge encompassing ethnobotany, agroecology, and environmental ethics that aligns closely with Education for Sustainable Development (ESD) principles.

These findings contribute to three theoretical frameworks. For Cultural Resistance Theory (Scott, 1985), the Baduy case extends the model beyond individual covert resistance to community-level, institutionalized, and cosmologically legitimated collective resistance. For Cultural Resilience Theory (Kirmayer et al., 2011), the study confirms collective identity, cultural continuity, and community agency as core resilience dimensions while adding *ecological embeddedness* as a fourth dimension specific to land-based communities. For Social-Ecological Resilience Theory (Folke et al., 2010), the *buyut* system illustrates indigenous institutions functioning as adaptive social-ecological feedbacks that sustain system-level resilience across multiple simultaneous pressures.

Limitations. This study has three principal limitations. First, as a single-site instrumental case study, the findings are contextually bounded to the Baduy community of Kanekes Village and cannot be directly generalized to other indigenous communities in Indonesia or Southeast Asia. Second, access to Baduy Dalam was limited by customary protocols only Jaro Pamarentah and designated representatives participated as informants, meaning the innermost custodians of *pikukuh* were not directly interviewed. Third, the six-month fieldwork period (March–August 2024) captures a cross-sectional snapshot; longitudinal dynamics of generational value transmission and community responses to emerging pressures remain underexplored.

Future research directions. Three directions are recommended. First, *longitudinal studies* tracking *pikukuh* transmission across at least two generational cohorts would reveal whether the selective modernization strategy is sustaining or gradually eroding the cosmological core under accelerating economic integration. Second, *comparative case studies* with other Indonesian indigenous communities facing similar modernization pressures such as the Tengger, Suku Anak Dalam, and Dayak communities would enable identification of structural commonalities and divergences in indigenous cultural resistance models, advancing a comparative indigenous resilience typology for the archipelago. Third, *participatory action research* co-designed with the Baduy community would enable the development of culturally-grounded policy instruments particularly around customary land recognition, education alternatives, and sustainable tourism governance that honor the community's epistemological agency rather than imposing external frameworks.

Declarations

Clinical trial number

Not applicable

Consent to Publish declaration

Not applicable

Informed consent

Not applicable.

Ethical Approval and accordance

The study protocol was approved has been approved by the Head of the Research Institute at Universitas Terbuka under approval number B/244/UN31.LPPM/PT.01.03/2023. The study was conducted in accordance with the ethical principles and guidelines of the approving committee, as well as relevant regulations governing research involving human participants as stipulated in Article 9 (Academic Integrity) of the research contract.

Author Contribution

SP: Writing – review & editing, Writing – original draft, Investigation, Formal analysis. Supervision, Project administration, Methodology, Investigation, Funding acquisition, Formal analysis, Conceptualization.

Declaration of AI use

During the preparation of this work, the authors used AI-assisted technologies (ChatGPT, Claude) to identify formatting requirements and ensure compliance with editorial instructions. After using this tool, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Figures

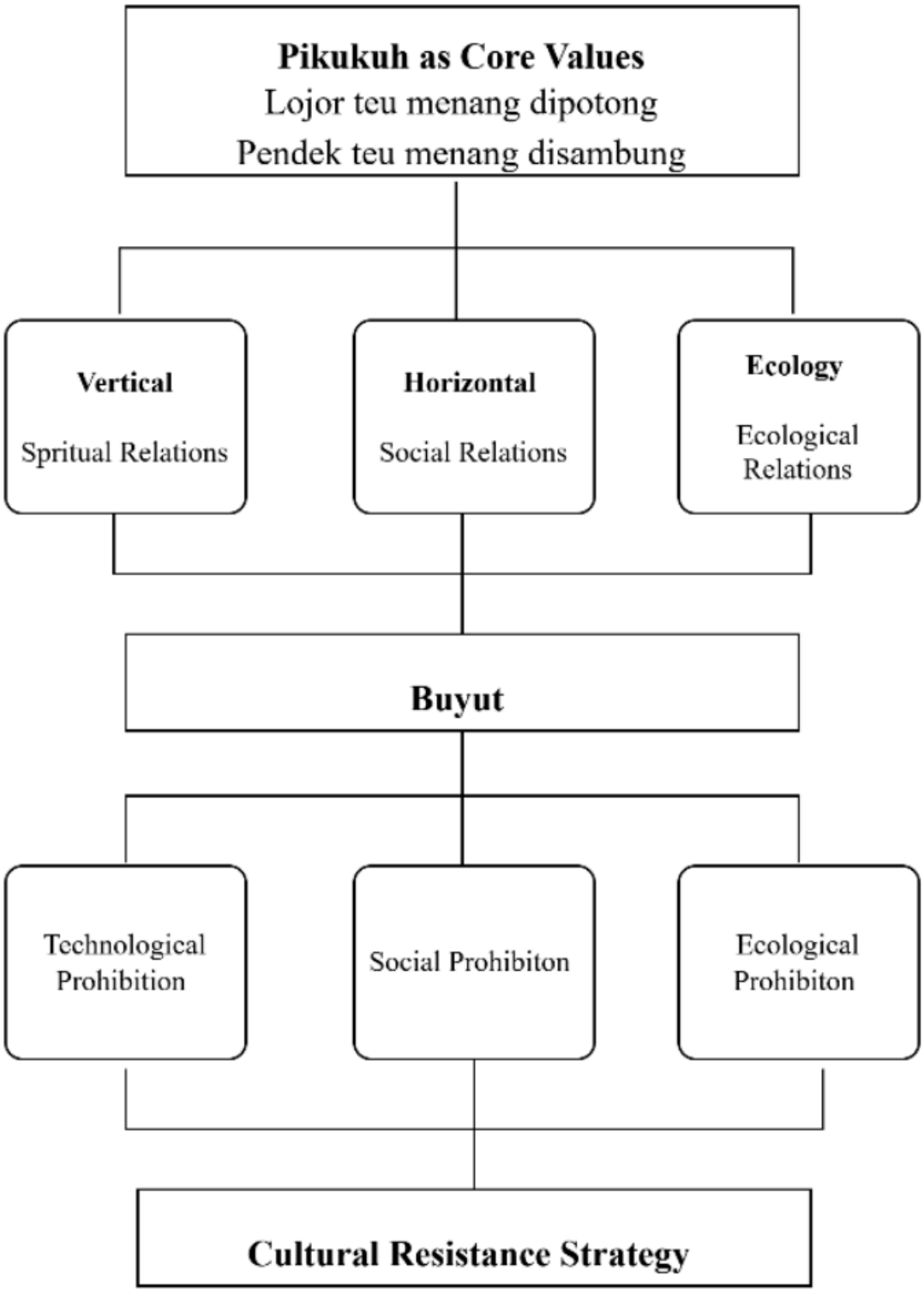


Figure 1

Conceptual Framework of *Pikukuh*as Multi-Dimensional Resistance

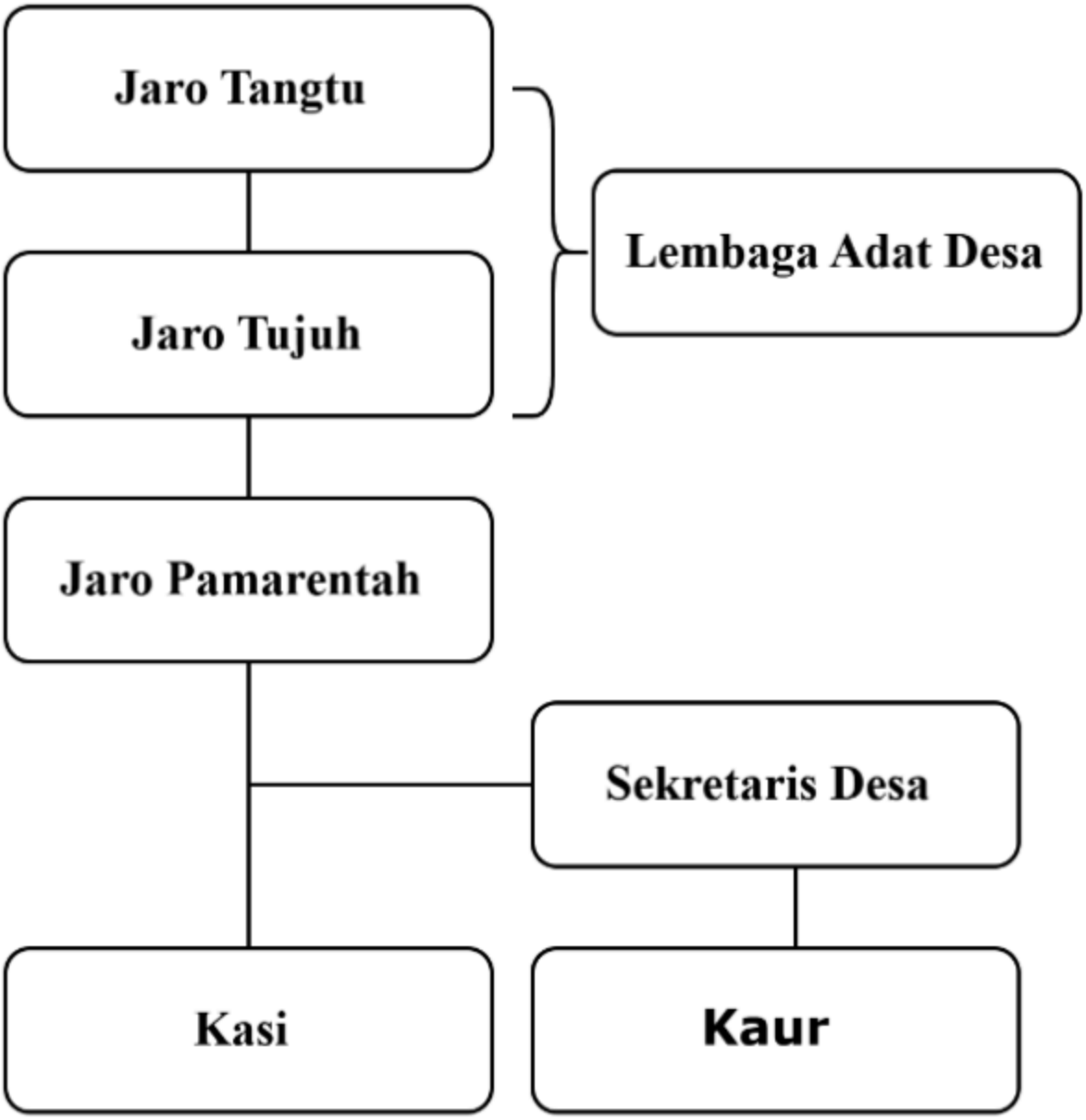


Figure 2

Baduy Community Leadership Structure (Lebak Regent Regulation Number 38 2023)

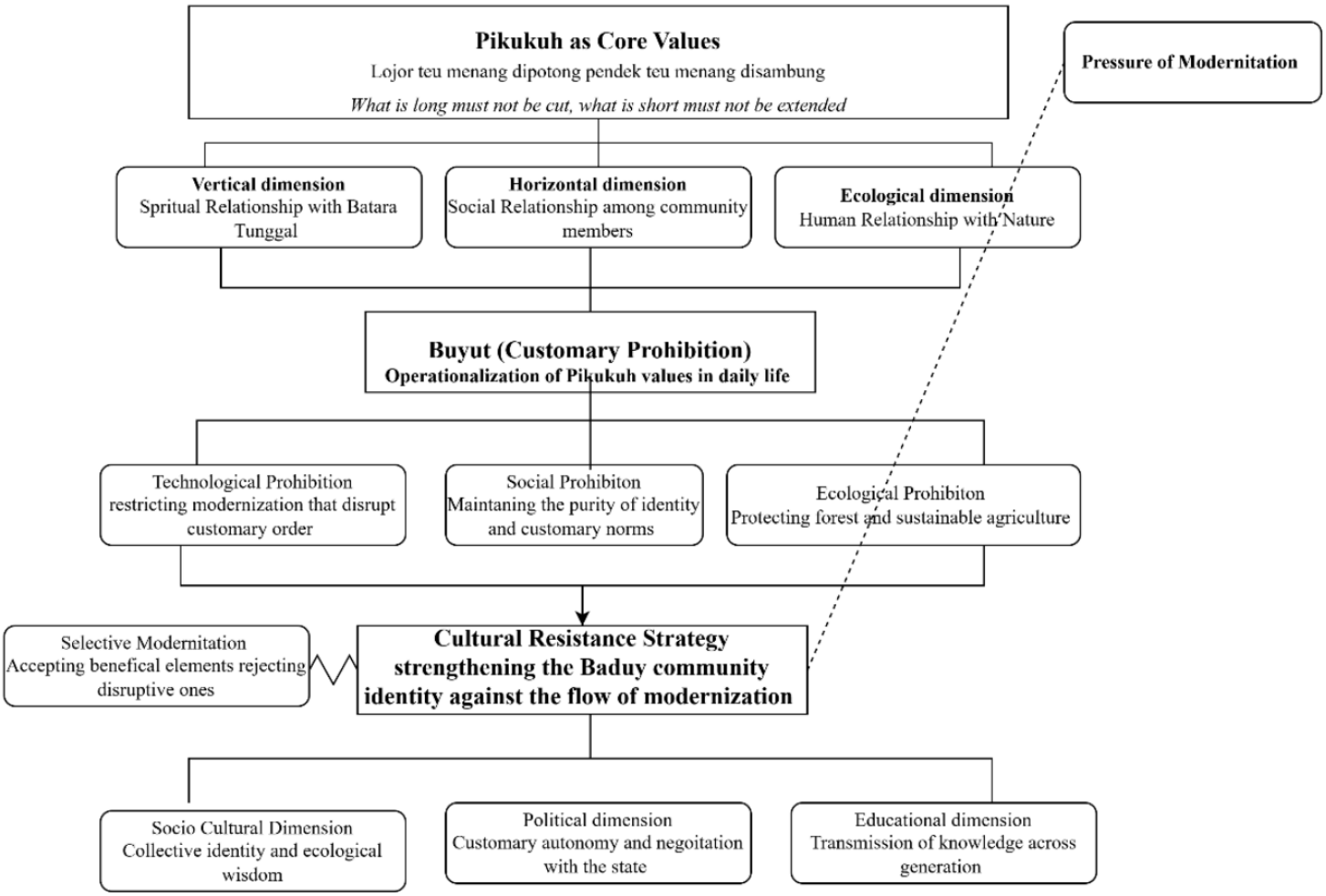


Figure 3

Pikukuh as a Cultural Resistance Model of Baduy Community