Collaborative Governance of Tourism Policy of Bali Province, Policy Study based on Local Wisdom Sad Kerthi

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ABSTRAK

Pada awal 2025, Bali menghadapi banjir besar yang melumpuhkan pariwisata serta tragedi di Monkey Forest, Ubud, yang menewaskan dua wisatawan asing akibat tertimpa pohon. Peristiwa ini menyoroti rapuhnya tata kelola pariwisata, padahal sektor ini merupakan tulang punggung ekonomi daerah. Penelitian ini menganalisis tata kelola kolaboratif kebijakan pariwisata Bali dengan menekankan integrasi Sad Kerthi, falsafah Hindu-Bali tentang keseimbangan lingkungan dan spiritual, sebagaimana tercantum dalam Surat Edaran Gubernur Bali No. 4/2022. Metode studi kasus kualitatif digunakan melalui sepuluh wawancara mendalam, observasi lapangan (Maret–Juni 2024), dan analisis dokumen kebijakan, termasuk RPJPD 2025–2045. Analisis tematik dengan triangulasi lintas sumber memastikan validitas temuan. Hasil penelitian menunjukkan implementasi Sad Kerthi masih dominan simbolis. Ritual budaya berjalan, tetapi kesadaran ekologis rendah, pencemaran dan deforestasi (46– 51 ha/tahun) tetap terjadi, serta masalah kesehatan mental meningkat. Forum kolaboratif ada, namun lebih dikuasai pemerintah sehingga partisipasi adat dan komunitas terbatas. Kesimpulannya, transformasi Sad Kerthi menjadi kerangka operasional membutuhkan kolaborasi lintas sektor, penguatan kapasitas kelembagaan, dan pendidikan berbasis budaya.

ABSTRACT

In early 2025, Bali faced a major flood that disrupted tourism activities, followed by a tragedy in Monkey Forest, Ubud, where two foreign tourists died after being struck by a falling tree. These incidents highlight the fragility of Bali's tourism governance, despite the sector being the backbone of the regional economy. This study analyzes collaborative governance in Bali's tourism policy with emphasis on integrating *Sad Kerthi*, the Hindu-Balinese philosophy of environmental and spiritual balance, as outlined in Governor's Circular No. 4/2022. A qualitative case study was conducted through ten in-depth interviews, three months of field observations (March–June 2024), and policy document analysis, including the RPJPD 2025–2045. Thematic analysis with cross-source triangulation ensured validity. Findings indicate that *Sad Kerthi* implementation remains largely symbolic. Rituals are regularly performed, yet ecological awareness is weak, pollution and deforestation (46–51 ha/year) persist, and mental health issues are rising. Collaborative forums exist but are still dominated by government actors, limiting genuine participation from customary institutions and communities. The study concludes that cross-sector collaboration, institutional capacity strengthening, and culture-based education are essential to transform *Sad Kerthi* from a symbolic policy into an operational framework for sustainable tourism governance.

NTRODUCTION

Bali is widely recognized not only for its natural beauty and cultural richness, but also for its local wisdom that guides community life. One of the most important philosophical foundations for maintaining environmental balance is the Hindu-Balinese concept of Sad Kerthi, which means "six noble efforts of purification." This doctrine comprises six interrelated dimensions: Atma Kerthi (purification of the soul), Segara Kerthi (purification of the sea), Danu Kerthi (purification of fresh water), Wana Kerthi (forest preservation), Jana Kerthi (human development), and Jagat Kerthi (maintenance of the universe). Taken together, these values articulate a philosophy of harmony that positions humans as an inseparable part of nature and provide a normative basis for ecological stewardship in Bali.

In recent decades, however, the implementation of Sad Kerthi has faced increasing challenges. Tourism-driven development and infrastructure expansion have often neglected the ecological carrying capacity of the island, resulting in flooding, inadequate drainage, and waste accumulation. The overexploitation of land for villas and hotels, combined with weak spatial planning enforcement, has further exacerbated ecological vulnerabilities and highlighted the urgent need to re-integrate Sad Kerthi into contemporary sustainable development policies. Although sustainability discourses are widely discussed at national and regional levels, studies specific to Bali reveal that local cultural values are rarely translated into operational governance frameworks (Antlov et al., 2019; Maryudi & Sahide, 2017; Wirawan, 2022; Wahid et al., 2025).

Existing literature on sustainability in Indonesia and ASEAN often emphasizes normative commitments, policy adoption, or technical approaches to environmental management. Yet few studies examine how Sad Kerthi has been formalized as public policy and operationalized through collaborative governance across provincial institutions and customary village (desa adat) structures. The gap lies in the lack of empirical analysis of how traditional philosophical principles are aligned or fail to align with policy instruments such as spatial planning, environmental regulations, and e-government platforms. This research seeks to address that gap by asking: (1) How has the provincial government of Bali integrated Sad Kerthi into sustainable development policy frameworks? (2) In what ways are customary villages and local communities involved in the governance and implementation of Sad Kerthi-based initiatives? and (3) What challenges and opportunities emerge in aligning Sad Kerthi values with contemporary policy instruments and cross-sectoral governance?

The objective of this study is therefore to analyze the relevance and challenges of implementing Sad Kerthi in Bali's sustainable development policies by examining the interplay between provincial strategies, customary institutions, and community participation, while situating Bali's experience within broader ASEAN policy discourses on sustainability and local wisdom.

Literature Review

Collaborative Governance Theory

Collaborative governance has become a key framework in public policy, particularly in addressing complex socio-ecological problems. Ansell and Gash (2008) define collaborative governance as a process in which public agencies engage with non-state actors in collective decision-making, emphasizing shared responsibility, trust-building, and consensus orientation. Subsequent studies (Emerson & Nabatchi, 2015; Purdy, 2012) expand this framework by highlighting critical factors such as initial conditions, institutional design, facilitative leadership, and trust as mechanisms that influence collaboration outcomes. These works demonstrate that collaborative governance can

improve legitimacy and effectiveness, yet they also underscore its fragility in contexts where power asymmetries and weak institutional arrangements persist. For Bali, where tourism development involves government, private sector, and customary villages, these theoretical models provide a useful lens to assess how Sad Kerthi can be operationalized in policy processes.

Local Wisdom and Policy Integration

A growing body of literature highlights the role of local wisdom or traditional ecological knowledge (TEK) in policy innovation. White (2018) emphasizes that indigenous values such as Sad Kerthi can guide more responsible and adaptive governance frameworks, while Chen (2019) notes that cultural norms often enhance stakeholder trust and compliance in community-based governance. In the Indonesian context, scholars have argued that customary law (*adat*) and village institutions (*desa adat*) function not only as cultural entities but also as regulatory actors that contribute to environmental and social governance (Antlov et al., 2019; Wirawan, 2022). However, the integration of such values into formal policies often remains symbolic rather than procedural, raising concerns about tokenism. Empirical gaps persist in understanding how Sad Kerthi is translated into enforceable policy instruments, especially within the framework of Bali's regional development plan (RPJPD 2025–2045) and local regulations (*Peraturan Daerah*) that explicitly reference the doctrine.

Collaborative Governance in Tourism and Environmental Policy

The tourism sector has been a major testing ground for collaborative governance models, particularly in regions that depend heavily on natural and cultural resources. Smith and Jones (2020) and Lee et al. (2021) show that collaborative approaches in tourism governance can enhance sustainability outcomes, though they also face institutional and political barriers. Research from Southeast Asia similarly emphasizes community-based ecotourism and participatory conservation as strategies that balance livelihoods with ecological integrity (Tien et al., 2024; Maryudi & Sahide, 2017). Yet most studies focus on operational practices rather than the normative integration of local philosophical systems. In Bali, despite Sad Kerthi being promoted as a cultural foundation for tourism policy, its practical integration into multi-stakeholder governance remains underexplored. Existing studies tend to emphasize economic diversification or environmental impacts without systematically analyzing the collaborative mechanisms between provincial bureaucracy, private tourism actors, and *desa adat*.

Conceptual and Theoretical Framing

This study builds on the collaborative governance framework (Ansell & Gash, 2008; Emerson & Nabatchi, 2015) to examine how Sad Kerthi functions as both a normative value system and a policy instrument in Bali's tourism governance. The conceptual model situates the analysis within three key dimensions:

- **Initial Conditions**: historical role of *desa adat*, existing provincial regulations (e.g., *Perda* on spatial planning, RPJPD Bali 2025–2045), and patterns of power asymmetry between government and private tourism actors.
- **Institutional Design and Facilitative Leadership**: formal mechanisms for integrating Sad Kerthi into policy (provincial decrees, planning instruments), and the role of provincial leadership in mediating between bureaucratic and customary institutions.

- **Collaborative Dynamics and Outcomes**: trust-building, shared understanding, and joint decision-making processes among government, private sector, and *desa adat*; linked to outcomes such as environmental preservation, cultural resilience, and sustainable tourism practices.

From this framework, the study advances three analytical propositions:

1. **Integration Proposition**: The degree to which Sad Kerthi is embedded in policy instruments (laws, plans, regulations) influences the quality of collaboration between provincial government and *desa adat*.
2. **Trust Proposition**: Trust between customary institutions and government agencies functions as a critical mechanism that enables Sad Kerthi to move from symbolic reference to actionable governance.
3. **Outcome Proposition**: Collaborative governance that successfully operationalizes Sad Kerthi is more likely to produce sustainable tourism outcomes that balance ecological integrity with cultural values, compared to governance models driven solely by economic efficiency.

These propositions guide the empirical analysis by linking theoretical constructs to observable indicators, such as the participation of *desa adat* in planning forums, the use of Sad Kerthi language in official policy documents, and stakeholder perceptions of fairness and trust in decision-making processes.

RESEARCH METHODS

This study employs a qualitative research design using a single-case study method. A case study approach is appropriate because it enables in-depth exploration of Sad Kerthi as a local wisdom-based policy framework within the specific institutional and socio-cultural setting of Bali Province. The single-case design is justified given that Bali represents a unique policy environment in which Hindu-Balinese values are explicitly institutionalized into provincial development planning. While findings may not be statistically generalizable, they provide analytical generalization (Yin, 2018) to contexts where local wisdom is integrated into sustainable development governance.

Informants and Sampling

Informants were selected using purposive sampling to ensure representation of actors directly engaged in the formulation, implementation, and interpretation of Sad Kerthi policies. In total, ten informants were interviewed, consisting of two core informants and eight supporting informants. The two core informants were: (1) the Governor of Bali Province and (2) the Principal Expert Planner of Bali Province. The eight supporting informants included: (3) a representative of the Bali Customary Village Assembly (*Majelis Desa Adat*), (4) the Head of the Natural Resources Conservation Center (KSDA) of Bali Province, (5–6) two lecturers from the Indonesian Hindu University (UNHI), (7) the Head of the Indigenous Peoples Advancement Office (PMA) of Bali Province, and (8–10) three local customary leaders involved in community-based conservation activities. This composition allowed triangulation across government officials, customary institutions, academics, and practitioners. Selection criteria included: (a) formal authority or direct involvement in Sad Kerthi-related policies, (b) expertise in customary governance or environmental management, and (c) willingness to participate voluntarily.

Data Collection Procedures

Data were collected from March to June 2024 through semi-structured interviews, document analysis, and participatory observation. Interviews were guided by an interview protocol (see Appendix A), covering themes such as Sad Kerthi's conceptualization, integration into policy instruments, governance mechanisms, and implementation challenges. Each interview lasted between 60–90 minutes, conducted in Indonesian and Balinese languages as preferred by the informants. Interviews were recorded with consent, transcribed verbatim, and where necessary, translated into English using a back-translation procedure to preserve meaning.

Secondary data included policy documents (e.g., *Peraturan Daerah* and RPJPD Bali 2025–2045), official government reports, and scholarly publications. Document review served both to triangulate interview findings and to trace how Sad Kerthi is formally embedded in policy. Limited participatory observation was also conducted in customary rituals and conservation activities, providing contextual insights into the lived practice of Sad Kerthi.

Researcher Positionality and Ethics

The researcher is a native Balinese, which facilitated access to customary leaders and increased rapport during interviews. At the same time, this positionality carries the risk of interpretive bias. To mitigate this, reflexivity was maintained through a field journal, and interpretations were subjected to peer debriefing with academic colleagues not directly involved in the field. In addition, member checking was conducted by sharing preliminary findings with five informants for verification of accuracy.

All informants provided informed consent prior to participation, and no financial compensation was offered. Ethical approval was sought from the host university's research committee, which determined that formal Institutional Review Board (IRB) clearance was not required given the non-invasive nature of the study and the adult status of all participants.

Data Analysis

Data were analyzed using thematic analysis following Braun and Clarke's (2006) six-phase model, assisted by NVivo 12 software. The process included:

1. **Familiarization**: reading and re-reading transcripts while annotating initial impressions.
2. **Open coding**: generating codes from informants' narratives, e.g., "symbolic policy use," "trust in *desa adat*," "conflict with investors."
3. **Axial coding**: grouping codes into broader categories such as "institutional design," "stakeholder trust," and "implementation barriers."
4. **Selective coding**: refining categories into major themes aligned with the conceptual framework (e.g., *initial conditions, collaborative dynamics, policy outcomes*).
5. **Triangulation**: comparing interview themes with documentary evidence (e.g., a claim about limited *desa adat* involvement was cross-checked against RPJPD documents).
6. **Interpretation**: relating the thematic findings to collaborative governance theory and Sad Kerthi's normative dimensions.

The unit of analysis was the governance process of Sad Kerthi within Bali's provincial tourism policy.

Validity and Reliability

To enhance credibility, multiple strategies were applied:

- **Source triangulation**: comparing government, customary, academic, and practitioner perspectives.
- **Method triangulation**: integrating interviews, documents, and observations.
- **Member checking**: five informants reviewed preliminary interpretations.
- **Dependability**: an **audit trail** of coding decisions and analytic memos was maintained.
- **Transferability**: detailed contextual description ("thick description") of Bali's institutional and cultural setting is provided to support application to other cases.

Direct verbatim quotations will be presented in the Results to substantiate each major theme, with at least two to three illustrative excerpts per theme. This ensures that interpretations remain grounded in participants' voices and the local socio-cultural context.

RESULTS AND DISCUSSIONS

Result

Environmental and Development Problems in Bali

According to the *RPJPD Bali Province 2005–2045 Environment and Forestry Master Report* (Bali Provincial Government, 2020), Bali is facing complex environmental and development challenges. Official data indicate a massive reduction of agricultural land following the implementation of Bali Provincial Regulation No. 16/2009 on the Provincial Spatial Plan (RTRW). Between 2010 and 2017, rice fields declined by 3,282 hectares (from 81,908 ha to 78,626 ha), and during 2017–2020 they further shrank by 3,125.79 hectares. These figures were derived from satellite-based land cover mapping conducted by the Ministry of Agriculture (2018; 2021), which uses annual remote sensing validation. Triangulation with interviews from the Bali Provincial Planning Office confirmed that "land conversion for villas and tourism facilities is the dominant factor reducing rice paddies" (Interview, Provincial Planner, 2024).

Additional problems include declining water availability, as illustrated in Table 1, which compares water supply and demand across regencies in Bali (MoEF, 2023). Denpasar and Badung, the island's most urbanized districts, experienced the highest deficits (up to -279% in Gianyar), reflecting increasing pressure on freshwater resources. Observational data from field visits in Gianyar confirmed that several irrigation channels had been diverted to serve tourism facilities rather than agriculture.

Table 1.
Water deficit in Bali Province

Yes	Regency/City	Water Preparation (m3/yr)	Water Requirement (m3/yr)	Total Water Deficit (m3/yr)	%
1	Jembrana	324.464.970,07	432.589.720,10	-108.124.750,03	-33,32
2	Tabanan	391.015.984,65	834.623.841,58	-443.607.856,92	-113,45
3	Badung	126.316.503,59	382.229.377,95	-255.912.874,36	-202,60
4	Gianyar	124.233.000,84	471.741.734,85	-347.508.734,01	-279,72
5	Squirt	142.389.489,81	228.973.909,97	-86.584.420,17	-60,81

Yes	Regency/City	Water Preparation (m3/yr)	Water Requirement (m3/yr)	Total Water Deficit (m3/yr)	%
6	Bangli	165.502.462,10	337.090.854,83	-171.588.392,72	-103,68
7	Karangasen	279.034.775,64	524.766.161,60	-245.731.385,96	-88,06
8	Stuttgart	491.070.463,68	746.166.685,17	-255.096.221,49	-51,95
9	Denpasar	34.779.742,42	103.142.016,67	-68.362.274,25	-196,56
	Bali	2.078.807.392,80	4.061.324.302,72	-1.982.516.909,92	-95,37

Source: Digital Map of the National Carrying Capacity and Water Holding Capacity of Bali Province on a scale of 1:250,000 (Ministry of Environment and Forestry, 2023

Energy security also presents a growing challenge, with provincial documents reporting declining availability of fossil-based sources, while interviews with government planners highlighted slow progress in renewable alternatives. On the socio-cultural side, moral and cultural degradation has been noted: "Balinese youth increasingly neglect religious ceremonies due to digital distractions," explained a lecturer from UNHI (Interview, 2024). These observations align with provincial reports warning of erosion in cultural identity. Finally, institutional capacity was identified as a critical weakness; a senior planner acknowledged that "coordination across agencies remains fragmented, so even well-written plans struggle in implementation" (Interview, Bali Provincial Expert, 2024; Rustanto et al., 2024).

Initial Conditions and Institutional Design

Consistent with Ansell and Gash's (2008) emphasis on *initial conditions*, findings suggest that Bali's collaborative tourism governance begins from a context of institutional imbalance. While Sad Kerthi has been codified into several regulatory instruments   most notably the Governor's Circular Letter No. 4/2022 on Balinese Life Guidelines   customary villages (*desa adat*) remain consultative rather than co-decision-making actors. Document analysis of meeting protocols (Governor's Secretariat, 2022) showed that formal planning forums are dominated by provincial bureaucracies, with customary representatives invited only at later stages. One village leader remarked: *"We are asked to attend after the draft is finished; our role is symbolic"* (Interview, Desa Adat Representative, 2024).

Resource constraints also form part of the initial conditions. The Provincial Environmental Office reported shortages in qualified staff to monitor land conversion and waste flows. This confirms the literature on collaborative governance, which stresses the importance of adequate resources and balanced power among participants (Emerson & Nabatchi, 2015).

Facilitative Leadership and Collaborative Processes

Evidence suggests that the role of facilitative leadership remains underdeveloped. While Governor Koster publicly appealed for multi-stakeholder cooperation in Sad Kerthi implementation, interviews revealed that no independent facilitators or secretariat mechanisms exist to sustain dialogue. Minutes of coordination meetings in 2022 showed only quarterly forums, often limited to information sharing rather than joint problem-solving. A representative from the Customary Village Assembly commented: *"We listen to presentations, but decisions are still taken by the provincial officials"* (Interview, 2024).

The issue of trust emerged prominently. Government actors expected communities to comply with Sad Kerthi-based regulations, while customary leaders expressed skepticism about government commitment. This aligns with Rulinawati et al. (2024), who argue that trust is

central to collaborative governance but fragile when participation is unequal. In Bali, trust deficits manifested in resistance to tourism zoning policies, with local communities perceiving them as prioritizing investors.

Policy Dimensions of Sad Kerthi

Atma Kerthi (Purification of the Soul)

Interviews with lecturers from UNHI highlighted concerns about declining mental health and character values among Balinese youth. One stated: *"The psyche of our people is fragile; suicide rates are among the highest in Indonesia"* (Interview, 2024). Official data from the National Police (Pusiknas, 2023) reported 3.07 suicide deaths per 100,000 population in Bali, higher than the national average. However, policy translation remains weak: while character education is promoted in schools, no systematic monitoring of Atma Kerthi programs exists. Possible evaluation indicators could include participation in religious ceremonies, integration of Sad Kerthi modules into curricula, and community surveys on value adherence.

Segara Kerthi (Preservation of the Sea)

Sad Kerthi rituals such as *Melasti* and *Mapakelem* continue to be practiced widely, emphasizing both spiritual purification and ecological awareness. Bali Governor Regulation No. 24/2020 mandates marine protection measures, yet implementation gaps persist. KSDA officials confirmed: *"Despite regulations, marine pollution is still visible, especially plastic waste along Kuta and Sanur beaches"* (Interview, 2024). Empirical data from the Bali Marine and Fisheries Office (2022) showed that plastic waste accounts for 68% of coastal debris, confirming high pollution levels. This suggests that rituals function more symbolically than as direct enforcement mechanisms.

Danu Kerthi (Freshwater Preservation)

Data from the Ministry of Environment and Forestry (2022) indicate that Bali's Water Quality Index (IKA) declined to 53.50, categorized as "not good" according to national standards. Government officials linked this to urban wastewater discharge and agricultural chemical use. Interviews corroborated this, with one planner noting: *"Tourism facilities around lakes often release waste directly, undermining local irrigation"* (Interview, 2024). These findings highlight the need for integrated water resource management (IWRM), combining spatial planning controls with improved wastewater treatment.

Wana Kerthi (Forest Preservation)

Field data from the Provincial Forestry Office reported that net deforestation increased from 46 ha/year (2020–2021) to 51.2 ha/year (2021–2022), based on satellite analysis validated by MoEF (2023). Symbolic protection practices, such as wrapping sacred trees with saput poleng, continue, but interviews with NGOs stressed that these measures lack legal enforcement. A conservation NGO leader remarked: "Poleng protects spiritually, but without legal sanction, logging continues" (Interview, 2024). Comparative studies (Doucet et al., 2024) suggest that co-management mechanisms with NGOs and local groups may offer more effective forest protection.

Jana Kerthi (Human Development)

Human development indicators reveal mixed progress. While access to education and health services has improved, challenges remain in mental health and cultural resilience. Data from the Bali Provincial Health Office (2023) recorded increasing cases of depression, particularly among

youth. Informants linked this trend to declining engagement with traditional practices. To address this, interviewees recommended incorporating ethnopedagogy-based curricula (Sakti et al., 2024) and localized character-building programs.

Jagat Kerthi (Universal Harmony)

The preservation of harmony between humans and the universe is challenged by demographic shifts. The Bali Provincial Core Report (2023) documented significant in-migration from other provinces and abroad, with Denpasar's migrant population exceeding 30% of residents. A provincial planner observed: *"Cultural transmission becomes harder when large groups of newcomers do not participate in local rituals"* (Interview, 2024). This complicates Jagat Kerthi implementation, as integration of migrants into cultural zoning and ritual practices remains weak. Policy responses could include cultural zoning regulations and community-based intercultural programs.

Challenges of Collaborative Governance

Across the Sad Kerthi dimensions, interviews and document analysis converge on three challenges:

1. **Limited public awareness** low community compliance with environmental rules, especially in waste management.
2. **Weak institutional capacity** government agencies face human resource shortages and fragmented coordination (Noor et al., 2023).
3. **Trust deficits** customary leaders doubt the sincerity of provincial authorities, echoing broader concerns in collaborative governance literature (Ansell & Gash, 2008).

As one KSDA official summarized: *"We have good regulations, but implementation falters because institutions are weak and trust is lacking"* (Interview, 2024). These findings confirm Haapasaari et al. (2024), who highlight the centrality of trust and capacity in collaborative policy-making.

Discussion

Atma Kerthi (Purification of the Soul)

Empirical evidence from interviews with lecturers at UNHI and community leaders highlighted the fragile spiritual condition of Balinese society, as reflected in the high suicide rate of 3.07 per 100,000 people in 2023 (Pusiknas, 2023). Informants emphasized that "digital culture erodes discipline and honesty once central to Balinese identity" (Interview, UNHI Lecturer, 2024). These findings suggest that Atma Kerthi has not been effectively translated into systematic character education programs.

Practical implications: The Provincial Education Office, together with the *Majelis Desa Adat*, should integrate Sad Kerthi-based character modules into school curricula and community training programs. Priority interventions include developing ethnopedagogy approaches (Sakti et al., 2024) and establishing monitoring systems for student participation in religious and cultural activities. However, implementation may face barriers from limited teacher capacity and competing pressures from national curricula.

Theoretical reflection: These findings challenge collaborative governance theory by showing that trust and consensus alone are insufficient without institutionalized mechanisms for cultural transfer. Atma Kerthi illustrates the need to embed normative values directly into governance structures rather than relying on informal practices.

Segara Kerthi (Preservation of the Sea)

Document analysis of Governor Regulation No. 24/2020 and interviews with KSDA officials revealed a mismatch between ceremonial practices such as *Melasti* and actual marine conservation outcomes. Despite rituals, plastic waste constitutes 68% of coastal debris (Marine and Fisheries Office, 2022). Informants noted that "rituals are powerful spiritually, but tourists continue to throw waste at the beach" (Interview, KSDA Official, 2024).

Practical implications: The Marine and Fisheries Office should establish stricter enforcement of waste management regulations in collaboration with tourism operators. Priority actions include mandatory waste audits for hotels near coastal areas and joint clean-up campaigns with *desa adat*. The main barrier lies in resistance from tourism businesses worried about operational costs and from tourists unfamiliar with local practices.

Theoretical reflection: This case confirms Ansell and Gash's (2008) argument that collaboration requires shared accountability. Without effective monitoring, rituals become symbolic rather than substantive, weakening collaborative trust among actors.

Danu Kerthi (Freshwater Preservation)

The Water Quality Index (IKA) of 53.50 in 2022, categorized as "poor," signals serious water management challenges (MoEF, 2022; Ismanto et al., 2023). Government officials acknowledged that "tourism facilities discharge wastewater directly into lakes" (Interview, Provincial Planner, 2024). Field observations confirmed irrigation channels diverted for hotels.

Practical implications: Responsibility lies with the Provincial Environmental Office and local water management boards. Integrated Water Resource Management (IWRM) should be prioritized, with concrete interventions such as wastewater treatment facilities in tourism zones and stricter permits for land conversion. Barriers include overlapping jurisdiction between provincial and regency-level agencies and limited budget allocations.

Theoretical reflection: Danu Kerthi highlights how power imbalances distort collaborative governance, as tourism investors wield greater influence than farmers. This aligns with Emerson and Nabatchi's (2015) caution that collaboration can reinforce inequality if institutional design is weak.

Wana Kerthi (Forest Preservation)

Empirical data show an increase in net deforestation from 46 ha/year (2020–2021) to 51.2 ha/year (2021–2022) (MoEF, 2023). Symbolic protection, such as wrapping sacred trees with *saput poleng*, has cultural significance but limited legal impact. As one NGO leader stated, "poleng protects spiritually, but without sanctions, logging continues" (Interview, 2024).

Practical implications: The Forestry Office, together with NGOs, should move beyond symbolism by developing co-management agreements and community forest monitoring. Priority should be given to hotspot areas with rapid land conversion. Potential barriers include conflicting land claims and weak enforcement capacity.

Theoretical reflection: Wana Kerthi challenges the assumption in collaborative governance theory that cultural norms automatically strengthen collaboration. Instead, norms may remain symbolic unless reinforced by legal and institutional mechanisms.

Jana Kerthi (Human Development)

While Bali has improved education and health infrastructure, rising mental health cases and

declining character formation are pressing concerns. Informants reported that "students have less interest in cultural learning and more stress from modern lifestyles" (Interview, Indigenous Peoples Advancement Office, 2024).

Practical implications: The Education and Health Offices should prioritize culturally grounded mental health programs, such as counseling integrated with community rituals. Teacher training in ethnopedagogy is needed to bridge traditional values with modern education. Barriers include stigma around mental health and limited trained professionals in rural areas.

Theoretical reflection: Jana Kerthi illustrates how collaborative governance must address not only institutional coordination but also the socio-cultural dimensions of participation. The lack of cultural literacy weakens the trust mechanism central to collaboration.

Jagat Kerthi (Universal Harmony)

Population data from the Bali Provincial Core Report (2023) indicate that migrants now constitute over 30% of Denpasar's population. A provincial planner noted: "newcomers rarely join local rituals, so our cultural transmission is weakened" (Interview, 2024).

Practical implications: The responsibility falls on provincial and municipal governments to adopt cultural zoning policies and intercultural education programs that encourage migrant participation. Priority interventions include requiring cultural induction for new residents. Barriers involve political sensitivities around migration regulation and economic reliance on migrant labor.

Theoretical reflection: Jagat Kerthi extends collaborative governance theory by showing that cultural heterogeneity complicates consensus-building. The theory's assumption of relatively homogeneous stakeholder values must be re-examined in contexts of rapid demographic change.

Cross-Cutting Discussion

Overall, findings demonstrate that while Sad Kerthi provides a strong normative foundation, its implementation remains constrained by low public awareness, weak institutional capacity, and fragmented coordination. These results resonate with previous studies (Noor et al., 2023; Haapasaari et al., 2024) but extend the literature by showing that cultural values cannot substitute for institutional design.

From a practical perspective, interventions should follow a priority order:

1. Strengthen water governance (Danu Kerthi) as the most urgent ecological crisis.
2. Enhance marine waste enforcement (Segara Kerthi) due to its direct link with tourism.
3. Institutionalize character education (Atma and Jana Kerthi) to address long-term social resilience.

Politically, the main barrier is the asymmetry of power between investors and local communities, which undermines collaborative trust.

From a theoretical standpoint, this case contributes to collaborative governance debates by highlighting three extensions:

• Normative-cultural frameworks like Sad Kerthi can broaden the scope of collaboration beyond economic and administrative logics.
• Trust and facilitative leadership remain fragile unless embedded in institutionalized procedures.

- Power asymmetries in tourism-dependent economies require stronger safeguards to prevent collaboration from becoming symbolic.

CONCLUSIONS

This study has shown that collaborative governance in Bali's tourism policy, framed by the local wisdom of Sad Kerthi, remains limited in effectiveness. Although the six dimensions of Sad Kerthi provide a strong normative foundation, their implementation is still fragmented. Atma Kerthi has not addressed the decline in spirituality and rising mental health issues, Segara Kerthi rituals have not prevented persistent marine pollution, Danu Kerthi faces worsening water quality and scarcity, Wana Kerthi has not curbed deforestation, Jana Kerthi shows weak progress in character development, and Jagat Kerthi is challenged by migration pressures. These findings demonstrate that collaborative governance in Bali continues to be undermined by weak institutional capacity, limited public awareness, and a lack of trust and synergy between provincial government, *desa adat*, communities, and private actors.

This study also acknowledges several limitations. The analysis is based on a single case study of Bali Province and relies on ten key informants, which limits the generalizability of findings and may not fully capture the perspectives of grassroots communities. In addition, the researcher's positionality as a native Balinese, while offering cultural insight, also carries the potential for interpretive bias. These methodological constraints point to the need for broader and more mixed-method studies in the future. Comparative analyses across regencies, quantitative surveys measuring the internalization of Sad Kerthi values, and cross-regional studies of local wisdom–based governance in Indonesia would provide more comprehensive insights.

From a policy perspective, three operational priorities emerge. First, the provincial government together with the *Majelis Desa Adat* should institutionalize a multi-level Sad Kerthi forum that meets regularly, produces joint decisions, and reports on stakeholder satisfaction. Second, water and marine management require urgent attention through integrated water resource projects, stricter wastewater controls, and coastal waste audits for tourism operators, with measurable targets such as annual improvements in the Water Quality Index and reductions in marine debris. Third, Sad Kerthi values must be embedded more deeply into education and public life through ethnopedagogy-based curricula, teacher training, and island-wide cultural campaigns supported by government and private financing. To ensure accountability, these initiatives must be accompanied by a monitoring and evaluation system that tracks progress on each Sad Kerthi dimension, with indicators reported annually through provincial development forums.

In conclusion, while Sad Kerthi remains a valuable cultural foundation for sustainable governance in Bali, its potential can only be realized if local actors strengthen institutional capacity, build public awareness, and transform symbolic practices into measurable policy outcomes. By prioritizing feasible and high-impact interventions, Bali can move closer to becoming a model of culturally rooted collaborative governance for sustainable tourism in Indonesia.

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