

Value-Based Governance for Sustainable Islamic Education: A Systematic Review of Islamic Schools, Madrasahs, and Pesantren

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Abstract: Governance and sustainability in Islamic educational institutions have often been examined as separate domains, leaving the relationship between Islamic ethical values, institutional mechanisms, and long-term educational outcomes insufficiently synthesized. This review aimed to explain how *khalifah*, *amanah*, and related Islamic values are conceptualized, translated into governance practices, and connected to sustainable education in Islamic schools, madrasahs, and pesantren. A systematic literature review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020. Searches were undertaken in Scopus, the Education Resources Information Center, Web of Science, Institute of Electrical and Electronics Engineers Xplore, the Multidisciplinary Digital Publishing Institute platform, and Google Scholar. Of 171 full-text reports assessed, 45 studies were included in the final synthesis. Data were analyzed using thematic and framework synthesis, while methodological quality was appraised using the Mixed Methods Appraisal Tool and relevant Joanna Briggs Institute checklists. The findings indicate that *khalifah* primarily provides a foundation for stewardship, whereas *amanah* underpins vertical and horizontal accountability. These values contributed to sustainability only when institutionalized through value-based leadership, participatory governance, quality assurance, responsible resource management, stakeholder collaboration, monitoring, and continuous improvement. Reported outcomes encompassed environmental, institutional, financial, social, quality, and human-resource sustainability. However, centralized authority, weak documentation, limited resources, uneven professional capacity, and symbolic value implementation constrained these mechanisms. Islamic values therefore support sustainable education only when embedded in formal structures, procedures, distributions of responsibility, and evaluation systems rather than remaining at the level of institutional rhetoric.

Keywords: Islamic educational governance; khalifah; amanah; sustainable education; madrasah; pesantren; systematic literature review.

Introduction

Sustainable education has become a central global concern because educational institutions are expected not only to transmit knowledge but also to develop the values, competencies, and institutional capacities required to address interconnected ecological, social, and economic challenges. The 2030 Agenda situates education within commitments to people, planet, prosperity, peace, and partnership, while Sustainable Development Goal 4 calls for inclusive and equitable quality education and incorporates education for sustainable development through Target 4.7 (United Nations, 2015). UNESCO similarly conceptualizes Education for Sustainable Development as a transformative agenda involving educational policy, institutional environments, educator capacity, youth empowerment, and community action, rather than as an additional environmental topic within the curriculum (UNESCO, 2020). At the same time, Sustainable Development Goal 16 emphasizes effective, accountable, inclusive, and participatory institutions, demonstrating that sustainable educational outcomes depend substantially on how institutions are governed.

Sustainability in education should consequently not be reduced to environmental protection. Although waste reduction, energy conservation, climate literacy, and environmentally responsible behavior remain essential, schools must also sustain educational quality, institutional legitimacy, financial viability, human-resource capacity, social inclusion, and community trust. An institution may implement visible environmental programs while remaining administratively fragile, financially dependent, or unable to maintain initiatives after a leadership transition. Conversely, an institution may possess stable financial resources while reproducing centralized decision-making, weak accountability, or limited teacher participation. Sustainable education therefore requires an integrated understanding of environmental, social, institutional, financial, quality, and human-resource sustainability (United Nations, 2015; UNESCO, 2020).

This multidimensional challenge is especially significant for Islamic schools, madrasahs, and pesantren. These institutions perform overlapping educational, religious, moral, social, and organizational functions. They are expected to provide academic quality, transmit Islamic knowledge, develop students' character, preserve institutional identity, serve surrounding communities, and respond to technological and socioeconomic transformation. Studies of pesantren indicate that institutional continuity depends on their ability to combine religious traditions with environmental action, financial management, institutional innovation, digital communication, and social engagement (Aini et al., 2025; Anabarja & Mubah, 2021). Yet modernization is not

necessarily seamless. It may increase institutional relevance while also producing tensions between inherited authority, professional management, market-oriented communication, and the preservation of religious identity.

Within Islamic ethics, *khalifah* and *amanah* provide an important normative foundation for responding to these responsibilities. The Qur'anic conception of humanity as *khalifah* frames human agency as delegated stewardship that should not result in injustice or environmental corruption, whereas *amanah* represents a morally demanding trust for which human beings remain accountable (Ministry of Religious Affairs of the Republic of Indonesia, n.d.). In educational governance, *khalifah* may therefore be interpreted as a responsibility to manage knowledge, personnel, finances, facilities, communities, and the natural environment in a manner that protects present and future well-being. Islamic environmental scholarship similarly presents the natural world as a bestowed trust rather than an unrestricted object of exploitation (Ba Kader et al., 1983; Foltz et al., 2003).

Amanah, meanwhile, connects authority with vertical and horizontal accountability. Vertical accountability concerns responsibility before God, whereas horizontal accountability involves students, teachers, parents, foundations, regulators, donors, communities, and future generations. These dimensions are not substitutes for organizational procedures. Rather, they provide a moral basis for transparency, responsible budgeting, equitable decision-making, and institutional reporting. Research on spiritual and financial accountability in pesantren illustrates how honesty, service, budgeting, program documentation, and financial statements may become expressions of *amanah*, although formal financial information may still remain concentrated among internal authorities (Wati et al., 2022).

Khalifah and *amanah* operate within a broader Islamic ethical vocabulary. *Shūrā* supports consultation and collective deliberation; *‘adl* requires fairness in decision-making and resource distribution; *ihsān* and *itqān* orient institutional actors toward excellence and disciplined improvement; *rahmah* emphasizes care; *khidmah* frames service as an organizational purpose; and *maqāṣid al-sharī‘ah* provides a framework for protecting human, intellectual, social, and material well-being. However, the presence of these values in institutional visions does not automatically produce good governance. Their practical importance depends on whether they influence authority structures, stakeholder forums, budgeting procedures, quality-assurance cycles, monitoring, evaluation, and corrective action.

Governance theory provides a conceptual language for examining this movement from ethical values to institutional practice. Collaborative governance emphasizes inclusive participation, facilitative leadership, trust-building, institutional design, and deliberation among actors who cannot achieve collective objectives independently (Ansell & Gash, 2008). Emerson et al. (2012) further identify principled engagement, shared motivation, and capacity for joint action as interconnected mechanisms. Within Islamic education, these perspectives highlight relationships among kiai, foundations, principals, teachers, students, parents, alumni, religious authorities, government bodies, donors, and communities. They also enable a critical distinction between genuine *shūrā* and meetings that merely legitimize decisions already made by dominant authorities.

Previous studies have developed across several partially disconnected themes. Environmental research examines eco-pesantren, green madrasa, waste management, water and energy conservation, environmental curricula, and ecological behavior. Studies have shown that Islamic environmental values can be embedded through teacher development, curricular and extracurricular programs, resource-conservation routines, and environmentally oriented institutional policies (Junaidah et al., 2025; Sulaeman et al., 2026; Syukri et al., 2024). Nevertheless, many studies focus on successful or award-recognized institutions and measure reported implementation rather than long-term changes in energy use, water consumption, waste volume, or ecological behavior.

A second body of research concerns quality assurance, institutional performance, and continuous improvement. Value-based quality assurance has been associated with cyclical planning, implementation, evaluation, control, and improvement in madrasahs and Islamic-school programs (Jannana et al., 2025; Syamkhotsaa et al., 2026). Islamic continuous-quality-improvement models also connect *amanah*, *ihsān*, *shūrā*, self-evaluation, and corrective action with quality culture (Azza & Yasin, 2025). However, some studies remain conceptual or rely on descriptive accounts, leaving the comparative effectiveness of value-based quality systems insufficiently tested.

A third research cluster focuses on financial sustainability, productive resources, entrepreneurship, and institutional continuity. Strategic financial planning emphasizes budgeting, resource prioritization, revenue diversification, partnership, transparency, and risk management (Riinawati et al., 2024). Other studies address productive waqf, income-generating units, and entrepreneurship as means of reducing institutional dependence and supporting educational programs (Kurniady et al., 2024; Najihah et al., 2025; Rahmatullah et al., 2026). Yet diversified income does not necessarily guarantee accountability, and claims of financial sustainability are often made without multiyear evidence concerning liquidity, donor retention, business survival, or revenue stability.

Leadership, digitalization, and institutional adaptation constitute another expanding domain. Value-based branding and digital communication can help pesantren preserve identity while strengthening public engagement (Aini et al., 2025). Digital governance may also support documentation, information sharing, and quality assurance, although its effectiveness depends on personnel competence, infrastructure, data management, and

institutional continuity (Riyanto, 2026). Likewise, hybrid and distributed leadership may combine religious legitimacy with professional expertise, but they may also reproduce ambiguity over authority and responsibility (Taufikin, 2023).

Taken together, the literature provides substantial evidence on environmental programs, quality assurance, financial management, leadership, digital transformation, and institutional resilience. Nevertheless, it remains conceptually fragmented. Studies frequently discuss Islamic values without specifying the mechanisms through which they shape organizational behavior; others investigate governance without clearly identifying its ethical foundations; and many invoke sustainability without distinguishing environmental, social, institutional, financial, quality, and human-resource outcomes. The evidence base is also uneven, being dominated by qualitative and frequently single-site cases, with limited longitudinal measurement, comparative analysis, or examination of failed governance.

This systematic literature review addresses these limitations through a PICO–CIMO-informed synthesis of institutional context, Islamic ethical values, governance mechanisms, and multidimensional sustainability. Its contribution lies not merely in cataloguing Islamic principles or sustainable-school practices, but in reconstructing the pathway from normative values to institutional mechanisms and outcomes. The review analyzes 45 studies 29 classified as Core and 16 as Supporting and addresses four questions:

- 1) How are *khalifah*, *amanah*, and related Islamic values conceptualized and operationalized in the governance of Islamic schools, madrasahs, and pesantren?
- 2) Through what leadership, management, accountability, and quality-assurance mechanisms are Islamic values translated into institutional policies and practices?
- 3) What environmental, social, institutional, financial, quality, and human-resource sustainability outcomes are associated with value-based governance?
- 4) What contextual factors facilitate or hinder these mechanisms, and what methodological and empirical gaps remain?

Method

This study employed a systematic literature review to identify, appraise, and synthesize evidence concerning how Islamic ethical values are translated into governance mechanisms and multidimensional sustainability outcomes in Islamic schools, madrasahs, and pesantren. The review was reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020 statement and its explanation and elaboration document (Page, et al., 2021; Page, et al., 2021). PRISMA 2020 was used as a reporting framework for documenting information sources, selection procedures, appraisal, and synthesis; it was not treated as a method of data analysis or an instrument for assessing study quality.

The literature-search component was documented with reference to PRISMA-S, particularly its recommendations concerning databases and platforms, search dates, reproducible search strings, supplementary searching, and deduplication (Rethlefsen et al., 2021). The review focus was organized using an adapted PICO CIMO framework. Population and context referred to Islamic educational institutions at school level; the phenomenon of interest involved value-based governance; mechanisms encompassed leadership, management, accountability, quality assurance, and resource management; and outcomes covered multiple dimensions of educational sustainability.

Studies were eligible when they examined Islamic schools, madrasahs, or pesantren providing primary, secondary, vocational, or equivalent school-age education. Studies focused exclusively on higher education were excluded unless findings concerning school-level institutions could be separated. Eligible organizational phenomena included governance, leadership, educational management, accountability, quality assurance, school-based management, resource management, stakeholder participation, or related institutional mechanisms.

Studies were also required to address *khalifah*, *amanah*, or defensible Islamic ethical proxies such as *shūrā*, *‘adl*, *ihsān*, *itqān*, *maqāṣid al-sharī‘ah*, *khidmah*, spiritual accountability, trusteeship, or ecological stewardship. Sustainability outcomes could be environmental, social, institutional, financial, quality-related, or human-resource-oriented and could include resilience, institutional continuity, stakeholder trust, resource efficiency, or continuous improvement.

Peer-reviewed journal articles published from 2021 to 2026 were prioritized. Qualitative, quantitative, and mixed-methods studies were eligible, as were systematic reviews and conceptual articles when they presented an explicit and extractable governance model. Studies were excluded when they examined an ineligible population, treated governance or Islamic values only superficially, lacked a substantive sustainability outcome, represented an ineligible publication type, duplicated another report, or contained insufficient information for reliable extraction. Methodological weakness did not automatically result in exclusion unless reporting was inadequate to determine the context, procedure, or findings.

The research search log records Scopus, the Education Resources Information Center, Web of Science, Institute of Electrical and Electronics Engineers Xplore, the Multidisciplinary Digital Publishing Institute

platform, and Google Scholar were used as the primary discovery sources. SINTA, GARUDA, and reference-list searching were used as supplementary discovery channels. Searches were conducted between on 27 June and 17 July 2026.

Search terms were combined into three blocks. The institutional block included “Islamic school,” “madrasah,” “madrasa,” “pesantren,” and “Islamic boarding school.” The governance and values block included *khalifah*, *amanah*, stewardship, *shūrā*, Islamic values, Islamic leadership, governance, management, accountability, quality assurance, and stakeholder participation. The sustainability block included *sustainab*, resilience, continuous improvement, quality culture, environmental sustainability, financial sustainability, human-resource sustainability, green madrasa, eco-pesantren, and Sustainable Development Goals. Syntax was adapted to the Boolean and field-search conventions of each source.

Retrieved records were consolidated in Microsoft Excel and deduplicated manually by comparing titles, authors, publication years, and digital object identifiers. Titles and abstracts were assessed using three standardized decisions: INCLUDE, when the available information justified full-text examination; EXCLUDE, when a record clearly failed an eligibility criterion; and UNCERTAIN, when the title and abstract were insufficient for a defensible decision. Records classified as uncertain were retained for full-text examination to reduce premature exclusion. Each article was assessed as a separate unit, and information was not transferred between studies.

A total of 655 records were identified. After the removal of 90 duplicate records, 565 records were screened by title and abstract, of which 344 were excluded. Full texts were sought for 221 reports; 50 reports could not be retrieved, leaving 171 reports for full-text eligibility assessment. The initial full-text assessment excluded 92 reports and provisionally retained 79 reports. Comparative eligibility refinement subsequently excluded a further 34 reports because they did not sufficiently meet the predefined eligibility criteria, including weak construct alignment, indirectly defined sustainability outcomes, contextual mismatch, conceptual redundancy, or inadequate reporting. Accordingly, 126 of the 171 full-text reports were excluded, and 45 studies were included in the final synthesis. Page length was not used as an eligibility criterion.

Screening was conducted by one reviewer using a standardized screening form. Records classified as uncertain were reassessed against the predefined eligibility criteria before a final decision was made. At the full-text stage, reports were excluded because they involved an ineligible population or educational level ($n = 26$), did not examine a relevant governance or quality-assurance mechanism ($n = 93$), or did not report relevant sustainability or institutional-improvement outcomes ($n = 7$).

A structured extraction matrix recorded authorship and year, country, institutional setting, study design, participants, data-collection and analysis procedures, Islamic values, governance mechanisms, sustainability dimensions, principal findings, limitations, methodological concerns, and relevance to each research question. Core studies directly connected Islamic ethical values, institutional mechanisms, and sustainability outcomes. Supporting studies contributed evidence concerning a relevant mechanism, context, barrier, or outcome without establishing the complete value, mechanism, outcome pathway.

Empirical studies were appraised using the Mixed Methods Appraisal Tool, which accommodates qualitative, quantitative, and mixed-methods designs (Hong et al., 2018). Its criteria were considered item by item rather than converted automatically into a single percentage score. Relevant Joanna Briggs Institute tools were used for qualitative studies, analytical cross-sectional designs, systematic reviews, and text-and-opinion evidence (JBI, n.d.).

Methodological quality and substantive relevance were treated as separate dimensions. A highly relevant but methodologically weak study could remain in the synthesis, but its claims were assigned lower evidentiary weight and were not used independently to support strong conclusions. Conversely, a methodologically strong article was not retained when its population, constructs, or outcomes fell outside the review questions.

Statistical meta-analysis was not appropriate because the studies differed substantially in design, institution, participants, operational definitions, and outcome measures. Evidence was therefore analyzed through combined framework and thematic synthesis. Initial deductive coding followed four domains: Islamic ethical values, governance mechanisms, sustainability outcomes, and contextual enablers or barriers. Inductive codes were then generated for recurrent mechanisms, contradictions, and unintended outcomes not adequately represented by the preliminary framework.

The synthesis proceeded from coding relevant findings to constructing descriptive themes and higher-order analytical explanations, consistent with thematic-synthesis principles (Thomas & Harden, 2008). The analytical chain examined how Islamic values were institutionalized or remained symbolic through leadership, participation, accountability, quality assurance, resource management, monitoring, and evaluation, and how these mechanisms were associated with multidimensional sustainability.

Results and Discussion

1. Study Selection and Characteristics of the Included Studies

The selection process followed identification, deduplication, title-and-abstract screening, full-text assessment, and final inclusion. Because records from the initial search have not yet been fully reconciled, the numbers identified, deduplicated, screened, and unsuccessfully retrieved remain unreported. At the eligibility stage, 171 unique reports were assessed in full text. Ninety-two were excluded during the initial assessment, and 79 were retained as provisionally relevant. Comparative eligibility refinement excluded a further 34 reports. Consequently, 45 studies were included and 126 full-text reports were excluded.

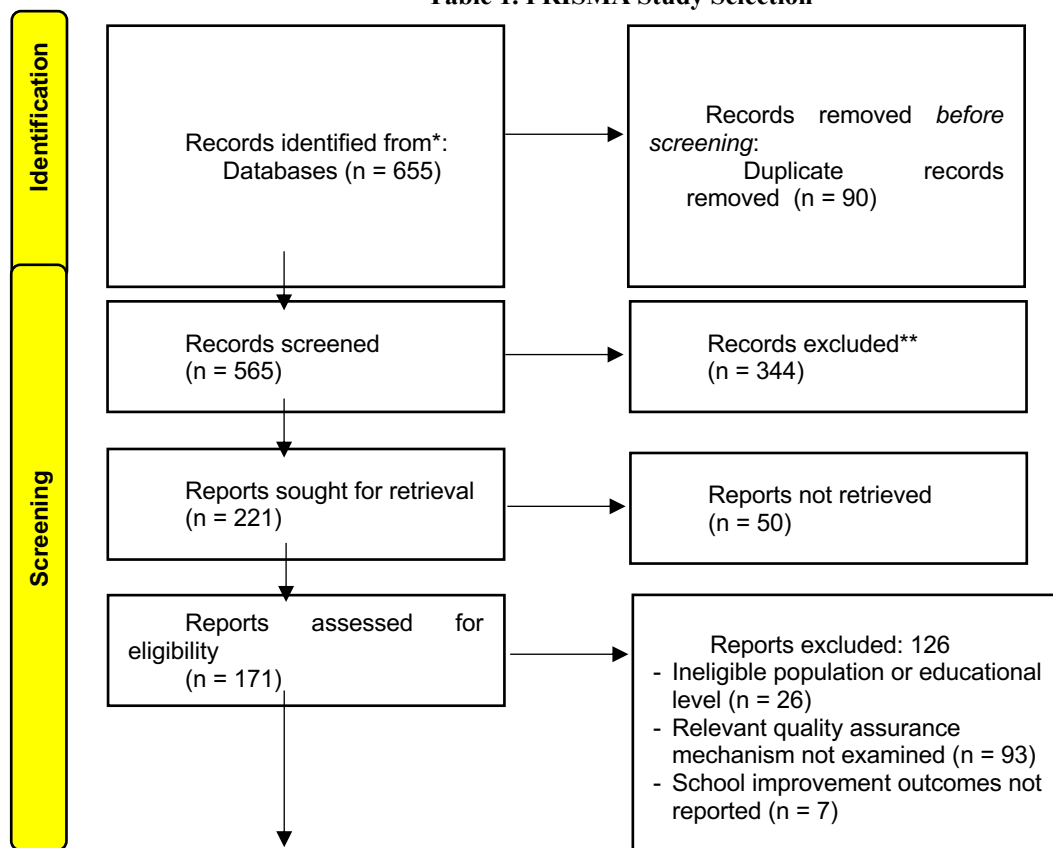
The final corpus comprised 29 Core and 16 Supporting studies. Core studies presented a direct, extractable relationship among Islamic values, governance or management mechanisms, and one or more sustainability dimensions. Supporting studies contributed evidence concerning contexts, mechanisms, barriers, negative cases, or particular outcomes but did not establish the complete value–mechanism–outcome pathway.

The included studies were published between 2021 and 2026. Most empirical investigations were undertaken in Indonesia, reflecting the scale and institutional diversity of its Islamic schools, madrasahs, and pesantren. The corpus included Islamic elementary and secondary schools, madrasah ibtidaiyah, madrasah tsanawiyah, madrasah aliyah, vocational pesantren, traditional boarding schools, and integrated school-pesantren systems. A small number of studies extended beyond single Indonesian settings, including a meta-synthesis of distributed leadership in Muslim educational contexts.

Qualitative case studies represented the most common design. They were used extensively to investigate environmental governance, spiritual leadership, quality assurance, accountability, institutional adaptation, and stakeholder relations. Multisite studies offered greater contextual variation than single-site investigations, particularly in studies of green madrasahs, spiritual leadership, vocational education, and human-resource sustainability. Nevertheless, even multisite research generally focused on reported mechanisms and perceptions rather than longitudinal sustainability indicators.

A smaller group employed quantitative or mixed-methods designs. These studies examined sustainable leadership, sustainable innovation, accountability measurement, human-resource sustainability, and school-based management. Quantitative evidence strengthened the analysis of associations but remained largely cross-sectional. The corpus also contained systematic reviews and conceptual models addressing continuous quality improvement, green management, productive waqf, Islamic leadership, and digital-circular schooling. These broadened the theoretical coverage but were assigned lower evidentiary weight when search procedures, appraisal, or empirical validation were limited.

Table 1. PRISMA Study Selection



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Studies included in review
(n = 45)**Table 2. Characteristics of the Included Studies**

No.	Study	Evidence design	Primary contribution
1	Azza and Yasin (2025)	Conceptual literature study	Islamic continuous quality improvement
2	Murdiyanto et al. (2025)	Systematic review and conceptual model	Digital-circular governance
3	Syukri et al. (2024)	Qualitative case study	Environmental ethics and stewardship
4	Anabarja and Mubah (2021)	Case-based environmental analysis	Eco-pesantren and social capital
5	Jannana et al. (2025)	Qualitative case study	Cyclical value-based quality assurance
6	Syamkhotsaa et al. (2026)	Empirical quality-assurance study	Islamic values and SPMI/PPEPP
7	Rahmatullah et al. (2026)	Conceptual financing model	Productive waqf and financial sustainability
8	Mahmud and Ramli (2025)	Multisite qualitative study	Spiritual leadership and quality culture
9	Jamilah et al. (2023)	Qualitative study	Teachers and environmental ethics
10	Purwati et al. (2026)	Quantitative survey	Islamic leadership and sustainable innovation
11	Hadisi et al. (2025)	Multisite qualitative study	Spiritual leadership in eco-madrasahs
12	Muin et al. (2025)	Qualitative case study	Ecological tauhid and green-school management
13	Kurniady et al. (2024)	Empirical management study	Income-generating units
14	Najihah et al. (2025)	Empirical entrepreneurship study	Entrepreneurship and institutional continuity
15	Priyanggani et al. (2026)	Empirical governance study	Stakeholder collaboration
16	Kusnan et al. (2026)	Literature/conceptual review	Green management
17	Riyanto (2026)	Integrative study	Digital leadership and quality assurance
18	Chabibi et al. (2025)	Institutional study	Quality and Sustainable Development Goals
19	Ramdhansyah et al. (2026)	Quantitative instrument development	Islamic accountability
20	Maarif et al. (2026)	Qualitative study	Ecological jurisprudence and Adiwiyata
21	Aulia et al. (2024)	Empirical modelling study	Eco-pesantren and environmental behavior
22	Safei and Himayaturohmah (2023)	Comparative qualitative study	Environmental culture and social intervention
23	Rahtikawati et al. (2021)	Empirical leadership study	Religious leadership and school sustainability
24	Suyatman et al.	Qualitative governance	Collaborative strategic

	(2026)	study	leadership
25	Karim et al. (2026)	Mixed-methods study	Human-resource sustainability
26	Junaidah et al. (2025)	Multisite qualitative study	Green-madrasa implementation
27	Sulaeman et al. (2026)	Qualitative case study	Hifzul Bī'ah-based eco-pesantren
28	Waziroh et al. (2026)	Qualitative case study	Institutional innovation and resilience
29	Wati et al. (2022)	Phenomenological study	Spiritual and financial accountability
30	Riinawati et al. (2024)	Qualitative case study	Strategic financial planning
31	Rahmawati et al. (2026)	Quantitative survey	Sustainable leadership and environmental programs
32	Siregar et al. (2026)	Empirical transformation study	Glocalization and adaptive governance
33	Zainuddin et al. (2026)	Policy and governance study	Government oversight of madrasahs
34	Imamah et al. (2026)	Conceptual framework	Islamic leadership and total quality management
35	Rijal and Anwar (2026)	Empirical quality-assurance study	Internal quality assurance
36	Muzammil et al. (2022)	Qualitative study	Pesantren adaptability
37	Taufikin (2023)	Qualitative governance study	Hybrid kiai governance
38	Rahmi et al. (2026)	Qualitative leadership study	Female leadership and participation
39	Muttaqin (2025)	Qualitative adaptation study	Tradition and modernization
40	Dhuhuri et al. (2025)	Empirical governance study	Trust and stakeholder collaboration
41	Hilal et al. (2025)	Qualitative meta-synthesis	Distributed leadership
42	Kurniawan and Nurdin (2023)	Mixed-methods study	Failure of democratic school-based management
43	Rodliyah et al. (2024)	Multisite qualitative study	Vocational curriculum governance
44	Rohmatulloh et al. (2023)	Qualitative case study	Islamic ethics and energy conservation
45	Mardia et al. (2026)	Multicase qualitative study	Teacher agency and centralized authority

2. Islamic Values as Foundations of Governance

Across the studies, *khalifah* was most frequently associated with stewardship, ecological responsibility, and the ethical use of resources. It was operationalized through curriculum integration, waste-management systems, water and energy conservation, environmental routines, and institutional policies in eco-pesantren and green madrasahs (Anabarja & Mubah, 2021; Muin et al., 2025; Syukri et al., 2024). In several studies, however, *khalifah* remained a normative justification rather than an explicitly measured organizational construct.

Amanah was more directly connected to institutional responsibility. It appeared in financial reporting, task allocation, quality-assurance cycles, leadership conduct, and responsibility toward parents and communities (Ramdhansyah et al., 2026; Syamkhotsaa et al., 2026; Wati et al., 2022). Nevertheless, the presence of spiritual accountability did not consistently produce public transparency. In some cases, financial and organizational information remained accessible mainly to internal authorities.

Related values expanded the governance framework. *Shūrā* informed consultation and stakeholder participation; *adl* supported fair resource allocation and leadership conduct; *ihsān* and *itqān* were associated with

quality culture; and *maqāṣid*, *khidmah*, ecological tauhid, and *Hifzul Bī'ah* connected organizational action with wider social and environmental welfare (Azza & Yasin, 2025; Maarif et al., 2026; Sulaeman et al., 2026).

3. Governance Mechanisms in Islamic Educational Institutions

Five recurrent mechanisms were identified. First, value-based and spiritual leadership translated ethical principles through vision, role modelling, organizational culture, and strategic direction (Hadisi et al., 2025; Mahmud & Ramli, 2025; Rahtikawatie et al., 2021). Second, collaborative and distributed governance involved teachers, foundations, parents, committees, alumni, and communities in planning and implementation (Hilal et al., 2025; Priyanganani et al., 2026; Suyatman et al., 2026).

Third, accountability mechanisms included budgeting, reporting, role allocation, transparency, stakeholder communication, and measurement of Islamic accountability (Ramdhansyah et al., 2026; Riinawati et al., 2024; Wati et al., 2022). Fourth, quality-assurance mechanisms employed internal standards, evaluation, control, corrective action, and continuous-improvement cycles (Azza & Yasin, 2025; Imamah et al., 2026; Jannana et al., 2025; Rijal & Anwar, 2026; Syamkhotsaa et al., 2026).

Fifth, resource-management mechanisms included productive waqf, school enterprises, income-generating units, entrepreneurship, digital systems, and environmental resource monitoring (Kurniady et al., 2024; Murdiyanto et al., 2025; Najihah et al., 2025; Rahmatullah et al., 2026; Riyanto, 2026). These mechanisms were not uniformly institutionalized. In several cases, they remained dependent on individual leaders, project funding, or informal relationships.

4. Multidimensional Sustainability Outcomes

Environmental sustainability was the most visible outcome. It included waste separation, reduced disposable materials, energy-saving behavior, water conservation, green infrastructure, ecological curricula, and environmental participation (Aulia et al., 2024; Jamilah et al., 2023; Junaidah et al., 2025; Rohmatulloh et al., 2023; Safei & Himayaturohmah, 2023). Evidence was strongest for implementation processes and reported behavior but weaker for objectively measured environmental change.

Institutional sustainability included organizational resilience, continuity of religious identity, adaptation to digitalization, institutional legitimacy, and the ability to integrate tradition with vocational or technological change (Muttaqin, 2025; Muzammil et al., 2022; Siregar et al., 2026; Taufikin, 2023; Waziroh et al., 2026). Digital communication and value-based branding contributed to institutional visibility, but they also raised the possibility that Islamic identity could become a promotional claim without corresponding accountability (Aini et al., 2025).

Financial sustainability was linked to budgeting, revenue diversification, productive waqf, entrepreneurship, and income-generating activities (Kurniady et al., 2024; Najihah et al., 2025; Rahmatullah et al., 2026; Riinawati et al., 2024). Quality sustainability involved internal quality assurance, evaluation, corrective action, and the development of organizational learning (Chabibi et al., 2025; Jannana et al., 2025; Syamkhotsaa et al., 2026). Human-resource and social sustainability included staff development, teacher agency, welfare, participation, trust, employability, and community empowerment (Dhuhuri et al., 2025; Karim et al., 2026; Rahmi et al., 2026; Rodliyah et al., 2024).

5. Enablers, Barriers, and Evidence Gaps

Enabling conditions included leadership commitment, a supportive institutional culture, professional capacity, community participation, policy support, adequate resources, and functional monitoring systems. Positive outcomes were more plausible where religious values were incorporated into role descriptions, budgets, quality procedures, curricula, and evaluation rather than confined to institutional slogans.

Barriers included centralized authority, weak documentation, inadequate funding, uneven staff competence, resistance to change, fragmented digital systems, and superficial participation. Kurniawan and Nurdin (2023) demonstrate that formal school-based management can coexist with the erosion of democratic principles. Mardia et al. (2026) similarly show that strong religious authority can preserve identity while limiting teacher involvement in curriculum planning and evaluation. Zainuddin et al. (2026) identify policy and oversight weaknesses that constrain institutional development.

The evidence base remains dominated by Indonesian qualitative studies, particularly successful single-site cases. Longitudinal studies, comparative designs, unsuccessful cases, and objective environmental, financial, quality, and human-resource indicators were limited. Consequently, the findings support explanatory patterns but not strong causal claims.

6. From Islamic Ethical Values to Institutional Governance Mechanisms

The synthesis indicates that Islamic values become analytically meaningful only when they move beyond

rhetorical presence and influence institutional behavior. Three levels can be distinguished. Value presence refers to the inclusion of *khalifah*, *amanah*, *shūrā*, or other values in visions and leadership discourse. Value internalization occurs when organizational actors incorporate these values into professional norms and everyday relationships. Value institutionalization represents their incorporation into decision-making rules, role allocation, budgeting, quality assurance, reporting, monitoring, and corrective procedures. Much of the literature confirms value presence, while fewer studies demonstrate complete institutionalization.

Khalifah primarily positions authority as stewardship rather than unrestricted control. Its clearest institutional manifestations occurred in environmental governance. Curriculum design, environmental committees, teacher development, waste systems, energy conservation, and resource monitoring transformed stewardship into observable organizational practices (Muin et al., 2025; Sulaeman et al., 2026; Syukri et al., 2024). Nevertheless, these findings should not be interpreted causally because most evidence derives from qualitative cases without counterfactual comparison.

Amanah was more frequently institutionalized through accountability. It linked authority with responsibility to God, institutional members, parents, communities, donors, and future generations. Spiritual accountability gave moral meaning to honesty and service, while horizontal accountability required reportable decisions, accessible information, and responsiveness to stakeholders. Wati et al. (2022) demonstrate that spiritual and financial accountability may coexist, but also show that formal financial disclosure may remain limited. *Amanah* therefore cannot replace audit, transparency, or oversight; it must provide their ethical foundation.

The SPMI evidence demonstrates a comparable movement from values to procedures. Islamic ethical principles were associated with role allocation, truthful reporting, stakeholder communication, evaluation, control, and improvement (Syamkhotsaa et al., 2026). Likewise, value-based quality assurance linked religious purpose with cyclical planning and corrective action (Jannana et al., 2025). These studies support a plausible mechanism in which Islamic values guide quality processes, but they do not establish that the values independently caused institutional sustainability.

Shūrā offers the clearest bridge to participatory governance. It requires more than informing teachers or parents about decisions; it implies opportunities to shape agendas and outcomes. This corresponds with collaborative governance, which emphasizes inclusive participation, facilitative leadership, institutional design, dialogue, and trust (Ansell & Gash, 2008). Evidence of distributed responsibility and stakeholder engagement in Islamic institutions supports these principles (Priyanggani et al., 2026; Suyatman et al., 2026).

Emerson et al.'s (2012) framework provides a complementary interpretation. *Shūrā* resembles principled engagement, *amanah* contributes to shared motivation and trust, and distributed responsibilities establish capacity for joint action. Nevertheless, Islamic educational institutions add a vertical moral dimension and a form of religious legitimacy not fully addressed in conventional governance frameworks. Kiai and madrasah leaders may possess theological, symbolic, and cultural authority in addition to formal administrative power.

Religious legitimacy can mobilize commitment, but it may also restrict disagreement. The existence of consultation forums therefore cannot be treated as evidence of collaborative governance unless participants can influence decisions. Mardia et al. (2026) demonstrate that pesantren may emphasize moral and spiritual formation while maintaining curriculum governance that limits teacher autonomy. Kurniawan and Nurdin (2023) similarly show that decentralization and school-based management do not necessarily guarantee democratic participation.

The relationship between kiai leadership and distributed authority is thus central. Strong leadership can maintain identity, coordinate action, and mobilize resources, but sustainability increasingly requires specialized expertise in curriculum, finance, quality assurance, technology, and environmental management. Rhodes's (1996) network perspective emphasizes organizational interdependence, while Ostrom's (2010) polycentric governance highlights the potential contribution of multiple centers of responsibility. In Islamic education, foundations, kiai, school leaders, teachers, committees, parents, alumni, and state bodies may hold different forms of authority and resources.

The principle of *ʿadl* further requires that authority, workloads, professional opportunities, welfare, and resources be distributed fairly. Human-resource sustainability research suggests that value-based management should combine institutional expectations with professional development, mentoring, welfare, and participation (Karim et al., 2026). *Ihsān* and *itqān* similarly orient institutions toward excellence and disciplined improvement. Their integration with continuous-improvement cycles offers conceptual value, although models that have not been empirically tested should not be treated as evidence of effectiveness (Azza & Yasin, 2025; Imamah et al., 2026).

Overall, Islamic ethical concepts extend collaborative-governance theory by connecting institutional cooperation with transcendent responsibility, religious legitimacy, and moral accountability. At the same time, the evidence challenges normative claims that Islamic terminology itself guarantees ethical administration. Values become governance mechanisms only when they alter participation, resource allocation, reporting, evaluation, and the capacity to identify and correct institutional failure.

7. Multidimensional Sustainability, Contextual Conditions, and Implications

Sustainability in Islamic education emerged as a configuration of ecological, institutional, financial, quality, human-resource, and social capacities. This multidimensional interpretation corresponds with the relationship between Sustainable Development Goal 4, which foregrounds inclusive and equitable quality education, and Sustainable Development Goal 16, which emphasizes accountable and participatory institutions (United Nations, 2015). It is also consistent with Education for Sustainable Development as a whole institution process involving policy, educators, learning environments, youth, and communities (UNESCO, 2020).

Environmental sustainability was the most developed theme. Green-madrasa and eco-pesantren initiatives incorporated environmental policies, curriculum integration, student and staff participation, waste management routines, water and energy conservation, green facilities, and ecological extracurricular activities (Junaidah et al., 2025; Sulaeman et al., 2026). Islamic ethics also supported energy-saving behavior when linked with learning, daily routines, and institutional supervision (Rohmatulloh et al., 2023). However, most studies measured implementation, perceptions, or reported behavior rather than objective reductions in resource consumption. Environmental-program or Adiwiyata status should therefore not be treated as equivalent to independently measured sustainability performance (Indonesia, 2025).

Institutional sustainability concerned the capacity to maintain religious purpose while adapting to organizational and technological change. Traditional identity frequently functioned as a source of legitimacy and resilience, but could become restrictive when interpreted as resistance to professionalization or distributed expertise. Hybrid governance, vocational adaptation, and institutional innovation illustrate that continuity need not require organizational immobility (Siregar et al., 2026; Taufikin, 2023; Waziroh et al., 2026).

Digitalization contributed to communication, documentation, public engagement, and quality assurance, yet it did not automatically generate sustainable governance. Its benefits depended on infrastructure, data management, trained personnel, strategic planning, and institutional continuity (Riyanto, 2026). Value-based branding similarly enabled pesantren to communicate identity in digital environments, but created a risk that religious values could function primarily as marketing symbols (Aini et al., 2025).

Financial sustainability was supported by strategic budgeting, revenue diversification, productive waqf, entrepreneurship, and income generating units (Kurniady et al., 2024; Najihah et al., 2025; Rahmatullah et al., 2026; Riinawati et al., 2024). Indonesia's Pesantren Law recognizes the educational, religious, and community-empowerment functions of pesantren, while the financing framework provides for government, community, lawful external, and endowment related funding (Indonesia 2019, 2022). Nevertheless, diversification should not be equated with accountability. Sustainable financial governance requires standardized records, authorization procedures, accessible reporting, conflict-of-interest controls, and risk assessment.

Quality sustainability was most clearly represented in SPMI, PPEPP, PDCA, and other continuous-improvement cycles. These systems connected standard setting, implementation, evaluation, control, and improvement with Islamic responsibility and organizational learning (Azza & Yasin, 2025; Jannana et al., 2025; Rijal & Anwar, 2026; Syamkhotsaa et al., 2026). Their contribution lies in moving quality assurance beyond accreditation documentation. Yet the effectiveness of explicitly Islamic quality models remains insufficiently compared with other systems.

Human-resource sustainability linked institutional performance with staff competence, welfare, teacher agency, mentoring, distributed authority, and professional participation. Karim et al. (2026) associate progressive Islamic management with professional development and staff sustainability. Conversely, Mardia et al. (2026) demonstrate how centralized curriculum governance can weaken teacher agency. Human-resource sustainability therefore requires more than training; it includes opportunities to influence decisions, equitable workloads, welfare, succession planning, and recognition of professional knowledge.

Social sustainability emerged through trust, inclusion, stakeholder collaboration, local community participation, and empowerment. Collaborative programs were more sustainable when communities were not merely recipients but contributed knowledge, resources, and decision making capacity (Dhuhuri et al., 2025; Priyanggani et al., 2026). Female leadership and participatory conflict management also broadened attention to inclusion within Islamic educational governance (Rahmi et al., 2026).

Across these dimensions, facilitating conditions included committed leadership, supportive organizational culture, community involvement, professional capacity, policy support, adequate infrastructure, and functional evaluation systems. Barriers included centralized authority, resistance to change, weak documentation, insufficient funding, fragmented data, limited competence, and symbolic implementation of Islamic values.

Several contradictions remain. Strong religious identity can support resilience while discouraging critical discussion. Spiritual accountability may encourage honesty while existing alongside limited public transparency. Digitalization can strengthen relevance while turning Islamic values into institutional branding. Environmental awards may encourage whole-school action while producing positive-case selection in research. These contradictions demonstrate why value presence should not be treated as equivalent to value institutionalization.

The evidence should be interpreted cautiously. It is dominated by Indonesian single-site qualitative studies and often focuses on institutions already considered successful or innovative. Longitudinal data, unsuccessful

programs, comparative designs, and objective environmental, financial, educational, and human resource indicators remain limited. Some conceptual reviews also provide insufficiently transparent search and appraisal procedures.

Policy and practice should therefore emphasize integrated governance rather than isolated programs. Madrasahs and pesantren should connect environmental planning, educational quality, finance, personnel welfare, and stakeholder accountability. Foundations should clarify authority among boards, kiai, principals, and professional managers. Quality assurance systems should incorporate measurable sustainability indicators. Leadership development should include collaborative governance, financial accountability, data use, human-resource development, and environmental management.

Government support should align the National Education System, the Pesantren Law, pesantren financing, the national Sustainable Development Goals framework, and environmental-school policy while respecting institutional distinctiveness (Indonesia 2003, 2019, 2021, 2022, 2025). Future research should prioritize comparative and longitudinal designs, multiyear financial and environmental indicators, teacher-retention measures, pre-post program evaluation, and the systematic study of failed or discontinued initiatives.

Conclusion

This systematic literature review examined how *khalifah*, *amanah*, and related Islamic ethical values are conceptualized, translated into institutional governance, and associated with sustainable education in Islamic schools, madrasahs, and pesantren. The findings indicate that *khalifah* primarily frames educational authority as stewardship over people, knowledge, finances, facilities, and the natural environment, whereas *amanah* provides a normative basis for accountability to God, institutional stakeholders, surrounding communities, and future generations. Related principles including *shūrā*, *ʿadl*, *ihsān*, *itqān*, *khidmah*, and *maqāṣid* extend this foundation toward participation, fairness, service, excellence, and collective welfare.

However, Islamic terminology alone does not ensure sustainable or accountable governance. Sustainability becomes more plausible when ethical values are institutionalized through value-based leadership, participatory decision-making, transparent accountability, quality-assurance cycles, responsible resource management, stakeholder collaboration, systematic monitoring, and continuous improvement. These mechanisms were associated with environmental responsibility, social participation, institutional resilience, financial continuity, quality culture, and human-resource development.

Implementation was facilitated by committed leadership, supportive organizational culture, professional capacity, community involvement, adequate resources, and enabling policy frameworks. Conversely, centralized authority, symbolic value implementation, weak documentation, limited transparency, resistance to change, insufficient funding, and uneven staff competence constrained the translation of ethical principles into sustainable practice.

The evidence base remains uneven and is dominated by qualitative and frequently single-site case studies. The review therefore supports cautious explanatory conclusions rather than strong causal claims. Islamic educational institutions should integrate ethical values into formal governance structures, clarify authority, strengthen transparent financial and quality systems, and adopt measurable sustainability indicators. Future research should use comparative and longitudinal designs and objective measures of environmental performance, financial resilience, educational quality, stakeholder trust, and staff retention.

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