

Green School Practices and Organizational Performance in Public Elementary Schools in District of Trece Martires City, Cavite: Basis for Sustainable Eco-Friendly Program

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ABSTRACT

This study determined the relationship between Green School Practices and Organizational Performance in public elementary schools in the District of Trece Martires City, Cavite, as the basis for a Sustainable Eco-Friendly Program. A quantitative descriptive-correlational design was employed. The respondents comprised 80 School Governance Council members, 16 school heads, and 270 teachers, for a total of 366 participants selected from a population of 929 through total enumeration and proportionate stratified random sampling. Data were gathered using a validated and pilot-tested researcher-made questionnaire, while school-head organizational performance was assessed through documentary analysis of Office Performance Commitment and Review Form ratings for 2024 and 2025.

Frequency, percentage, weighted mean, analysis of variance, Pearson product-moment correlation, and ranking were used. Green School Practices were Highly Evident across all eight dimensions (grand mean = 4.58), with energy conservation obtaining the highest composite mean (4.69) and climate change mitigation and adaptation the lowest (4.49). Significant differences among the three respondent groups were found in seven dimensions, whereas community participation and partnerships showed no significant difference. School heads demonstrated Outstanding organizational performance (overall mean = 4.89). None of the eight Green School Practice dimensions was significantly related to organizational performance ($p > .05$). Respondents moderately encountered implementation challenges (grand mean = 2.73), particularly limited space for greening, limited waste-segregation awareness, and difficulty sustaining green spaces. The proposed program was Highly Acceptable (grand mean = 4.60). The findings indicate that environmental practices were strongly embedded in school operations, but organizational performance may be shaped by factors beyond the measured sustainability practices. The proposed program prioritizes systematic monitoring, resource mobilization, environmental literacy, climate resilience, sustainable facilities, and stakeholder collaboration.

Keywords: *green school practices, organizational performance, environmental sustainability, public elementary schools, school leadership, sustainable eco-friendly program*

INTRODUCTION

Environmental sustainability has become an essential concern for educational institutions as climate change, biodiversity loss, environmental degradation, and resource depletion affect the conditions in which schools operate. Schools are not only centers of learning but also institutions capable of shaping the environmental knowledge, values, and practices of learners, families, and communities. The 2030 Agenda for Sustainable

Development and Education for Sustainable Development emphasize the role of education in promoting responsible lifestyles, climate action, and institutional transformation (United Nations, 2015; UNESCO, 2020).

Green School Practices translate these commitments into school policies, programs, and routines. They include waste management and reduction, energy conservation, water conservation, greening and biodiversity, environmental education and awareness, sustainable school infrastructure, climate change mitigation and adaptation, and community participation and partnerships. A whole-school approach requires sustainability to be integrated across governance, curriculum, operations, infrastructure, and stakeholder engagement rather than treated as a collection of isolated activities (UNESCO, 2024).

Philippine schools operate within a policy environment that supports environmental responsibility. Republic Act No. 9003 institutionalized ecological solid-waste management, Republic Act No. 9512 mandated environmental awareness and education, and Republic Act No. 9729 strengthened climate-change mitigation and adaptation. Department of Education issuances further encourage school greening, community environmental initiatives, climate-responsive activities, comprehensive school safety, and Education for Sustainable Development (Department of Education, 2014, 2021, 2022, 2023a, 2023b). These mandates position school leaders and governance councils as key actors in translating environmental policy into sustained school practice.

Existing studies have associated green initiatives with environmental awareness, operational efficiency, stakeholder engagement, and improved school conditions. Energy-conservation practices can reduce unnecessary consumption, environmental education can strengthen green behavior, and school gardens and biodiversity projects can make sustainability visible in daily school life (Bueno, 2020; Oestar, 2023; Santos & Ramirez, 2020). International studies likewise suggest that green-school initiatives may support school climate, well-being, innovation, and organizational effectiveness (Bakar et al., 2023; Kerret et al., 2019; Wang & Chen, 2022).

However, environmental programs may vary in consistency because of differences in resources, space, leadership support, stakeholder participation, awareness, and monitoring systems. Moreover, many studies examine only one or a few environmental practices, while organizational-performance research often focuses on leadership and management without integrating a comprehensive sustainability framework. Localized evidence connecting all eight Green School Practice dimensions with documented school-head performance remained limited in the District of Trece Martires City, Cavite.

Accordingly, this study assessed the implementation of Green School Practices, tested differences among School Governance Councils, school heads, and teachers, described school-head organizational performance through OPCRF ratings, examined the relationship between the two principal variables, identified implementation challenges, and evaluated the acceptability of a proposed Sustainable Eco-Friendly Program. The study sought to generate school- and district-level evidence for improving environmental sustainability while maintaining strong organizational performance.

Literature Review

Whole-School Sustainability and Green School Practices

Sustainable Development Theory defines development as meeting present needs without compromising the capacity of future generations to meet their own needs (World Commission on Environment and Development, 1987). Applied to education, this principle requires schools to align environmental protection, social responsibility, and resource stewardship with their teaching and institutional functions. UNESCO's Education for Sustainable Development roadmap therefore promotes a whole-school approach that joins curriculum, governance, campus operations, infrastructure, and community action (UNESCO, 2020).

Green School Practices operationalize this approach by embedding sustainability in everyday school life. Bakar et al. (2023) described green-school initiatives as institutional practices that reduce environmental impacts and strengthen environmental responsibility. Genc and Aydin (2024) similarly emphasized that sustainability education and green-school implementation require coordinated educational management rather than stand-alone

projects. This integration makes environmental goals visible in school policies, routines, student activities, and community partnerships.

The source study organized Green School Practices into eight dimensions, allowing sustainability to be examined comprehensively. This multidimensional structure responds to the limitation of studies that focus only on waste, energy, gardening, or environmental awareness. It also supports the development of a targeted intervention because strengths and gaps can be identified by domain rather than reduced to a single general rating.

Resource Conservation and Sustainable School Operations

Waste, energy, and water management are central to sustainable school operations. Republic Act No. 9003 provides the legal foundation for segregation, recycling, composting, reduction, and proper disposal in Philippine institutions. Local studies have reported that waste programs are visible but may become difficult to sustain when monitoring, resources, or stakeholder participation are insufficient (Oestar, 2023; Prisco & Cubillas, 2022). Regular audits, accessible facilities, and clear accountability systems are therefore necessary for continuity.

Energy-conservation practices include switching off unused equipment, maximizing natural lighting, installing efficient devices, and monitoring consumption. Bueno (2020) found that these practices supported both environmental responsibility and operational efficiency. Water conservation similarly depends on preventive maintenance, efficient fixtures, learner awareness, monitoring, and rainwater reuse. These measures connect environmental goals with responsible school-resource management.

Sustainable infrastructure extends these practices to the physical learning environment. The World Green Building Council (2022) emphasized facilities that minimize environmental impact while improving efficiency, health, safety, and accessibility. In schools, natural ventilation, durable eco-friendly materials, accessible design, water and energy systems, and routine maintenance influence whether environmental programs can be sustained beyond awareness campaigns.

Environmental Education, Climate Resilience, and Community Partnerships

Environmental education develops knowledge, values, skills, and behaviors needed for ecological responsibility. Santos and Ramirez (2020) found that environmental awareness influenced teachers' implementation of sustainable practices, while Kerret et al. (2019) linked green-school environments with environmental hope and behavior among learners. These findings indicate that school sustainability is strengthened when classroom learning and institutional practice reinforce one another.

Climate-change mitigation and adaptation broaden the school's responsibility from conservation to resilience. The IPCC (2023) distinguishes mitigation actions that reduce environmental impact from adaptation actions that strengthen capacity to manage climate risks. Schools can contribute through carbon-reduction activities, greening, paperless systems, disaster preparedness, hazard awareness, emergency planning, and partnerships with local disaster-risk-reduction offices.

Community participation helps sustain these initiatives by mobilizing knowledge, labor, technical assistance, and resources. Employee Engagement Theory holds that cognitively, emotionally, and behaviorally engaged individuals contribute more strongly to organizational goals (Kahn, 1990; Saks, 2022). In the school context, parents, governance councils, local governments, environmental organizations, teachers, and learners become co-implementers of sustainability rather than passive recipients of school programs.

School Leadership and Organizational Performance

Transformational Leadership Theory explains how leaders build a shared vision, stimulate innovation, motivate stakeholders, and support individual development. In green-school implementation, school heads influence policy adoption, resource mobilization, program monitoring, and staff participation. Belencion (2020) reported that collaborative leadership and participatory management contributed to organizational performance in public elementary schools, supporting the importance of leadership in sustaining institutional initiatives.

Organizational performance in the present study was represented by school-head OPCRf ratings. The dimensions reflected strategic leadership, school operations and resource management, teaching and learning, self

and staff development, and stakeholder connections. Contemporary school-leadership literature similarly emphasizes strategic direction, professional capacity, resource management, and community engagement as interacting dimensions of school effectiveness (Hallinger, 2023; Leithwood et al., 2023).

International evidence has sometimes reported positive links between sustainability initiatives and organizational outcomes, including operational efficiency, stakeholder satisfaction, and leadership effectiveness (Nguyen & Tran, 2024; Wang & Chen, 2022). Nevertheless, the strength of this relationship can depend on measurement, context, variation in performance ratings, implementation maturity, and other institutional factors. A localized correlational analysis was therefore necessary rather than assuming that highly visible green practices automatically predict school-head performance.

Theoretical and Conceptual Integration

The study integrated Sustainable Development Theory, Transformational Leadership Theory, and Employee Engagement Theory. Sustainable Development Theory explains the environmental content of the eight practices; Transformational Leadership Theory explains how school heads guide change, resources, and organizational performance; and Employee Engagement Theory explains why the participation of teachers, governance councils, families, learners, and partners is necessary for implementation.

The conceptual framework followed an Input–Process–Output model. Inputs consisted of references, survey results, OPCRf ratings, implementation challenges, program-acceptability evidence, and the three respondent groups. The process included survey administration, documentary analysis, statistical treatment, interpretation, and program development. The output was the Sustainable Eco-Friendly Program, supported by a feedback loop for continuous monitoring and revision.

This framework allowed the study to assess both environmental practices and organizational performance while avoiding causal claims. The design examined whether the variables were statistically associated and used the identified gaps—rather than the existence of a significant correlation alone—to guide intervention planning.

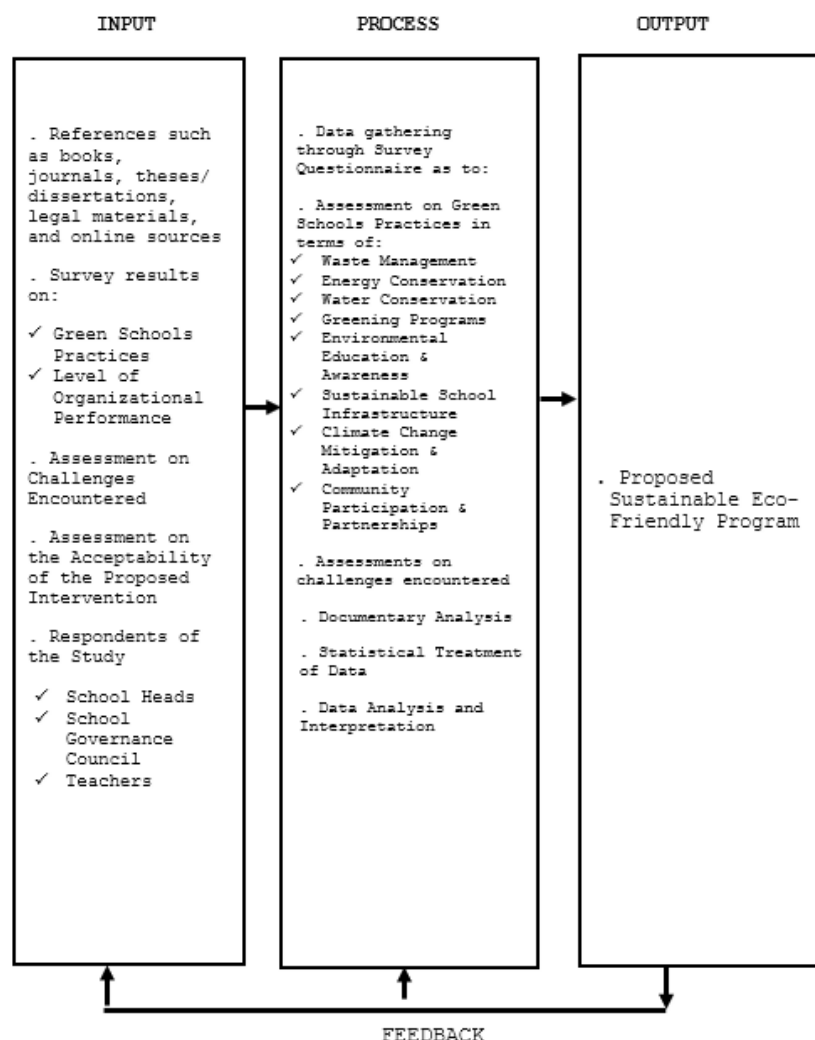


Figure 1. *Research paradigm of the study*

METHODS

Research Design

The study employed a quantitative descriptive-correlational design. The descriptive component determined the level of implementation of Green School Practices, the organizational performance of school heads, implementation challenges, and program acceptability. The correlational component examined the direction and significance of the relationship between the eight Green School Practice dimensions and organizational performance without manipulating the variables.

Research Locale

The study was conducted in the 16 public elementary schools of the District of Trece Martires City, Cavite. The locale was selected because its schools implemented environmental programs under a common division and district policy context while differing in school size, facilities, available space, personnel, and stakeholder resources. Data collection commenced in October 2024 and was completed in May 2026.

Participants and Sampling Technique

The population consisted of 929 stakeholders: 80 School Governance Council members, 16 school heads, and 833 teachers. Total enumeration was applied to all governance-council members and school heads because of their small populations and direct roles in school governance. The teacher sample was determined using Slovin's formula at a .05 margin of error and distributed proportionately among the 16 schools through proportionate stratified random sampling. The final sample consisted of 366 respondents: 80 governance-council members, 16 school heads, and 270 teachers.

Table 1. *Population and sample distribution*

Respondent Group	Population	Sample	Coverage
School Governance Council members	80	80	100%
School heads	16	16	100%
Teachers	833	270	32%
Total	929	366	—

Research Instrument

A researcher-made survey questionnaire was the primary data-gathering instrument. It assessed Green School Practices across eight dimensions: waste management and reduction, energy conservation, water conservation, greening and biodiversity, environmental education and awareness, sustainable school infrastructure, climate change mitigation and adaptation, and community participation and partnerships. Separate sections measured implementation challenges and the acceptability of the Sustainable Eco-Friendly Program using five-point response scales.

The instrument underwent expert validation and pilot testing to improve clarity, relevance, reliability, and content alignment. The source manuscript did not report a numerical reliability coefficient; therefore, no coefficient is asserted in this article. Organizational performance was obtained through documentary analysis of school-head OPCRF ratings for School Years 2024 and 2025.

Data Gathering Procedure

Permission to conduct the study was sought from the Schools Division Superintendent, District Supervisor, and principals of participating schools. After approval, the validated questionnaires were distributed in printed form and through Google Forms according to respondent accessibility and preference. Retrieved questionnaires were checked for completeness and accuracy, encoded, organized, and submitted for statistical analysis. Relevant OPCRF documents were examined to obtain the organizational-performance ratings following the Results-Based Performance Management System used by the Department of Education (Department of Education, 2015).

Data Analysis

Frequency and percentage described the respondent distribution. Weighted means and ranks summarized Green School Practices, implementation challenges, and program acceptability. One-way analysis of variance tested differences among School Governance Councils, school heads, and teachers. Pearson product-moment correlation measured the relationship between each Green School Practice dimension and organizational performance. Statistical decisions were made at the .05 level of significance.

Ethical Consideration

The source manuscript documented administrative authorization from the division, district, and participating schools before data collection. Responses were consolidated for group-level analysis. The manuscript did not provide a formal research-ethics approval number or detailed informed-consent and data-retention procedures; accordingly, this article does not claim an approval identifier or procedures not documented in the source.

RESULTS AND DISCUSSION

Implementation of Green School Practices

Table 2. *Summary assessment of Green School Practices*

Dimension	SGC	Heads	Teachers	Composite	Rank
Energy conservation	4.78	4.69	4.61	4.69	1
Greening and biodiversity	4.86	4.56	4.53	4.65	2
Environmental education and awareness	4.73	4.63	4.51	4.62	3
Community participation and partnerships	4.59	4.66	4.52	4.59	4
Waste management and reduction	4.66	4.47	4.45	4.53	5
Water conservation	4.63	4.47	4.47	4.52	6.5
Sustainable school infrastructure	4.69	4.50	4.37	4.52	6.5
Climate change mitigation and adaptation	4.51	4.53	4.43	4.49	8
Grand mean	4.68	4.56	4.49	4.58	—

Green School Practices were Highly Evident, with a grand mean of 4.58. Energy conservation ranked first ($M = 4.69$), followed by greening and biodiversity ($M = 4.65$), environmental education and awareness ($M = 4.62$), and community participation and partnerships ($M = 4.59$). Waste management and reduction ($M = 4.53$), water conservation ($M = 4.52$), sustainable school infrastructure ($M = 4.52$), and climate change mitigation and adaptation ($M = 4.49$) were likewise Highly Evident.

The highest-rated practices included switching off unused lights and appliances ($M = 4.81$), installing energy-efficient equipment ($M = 4.74$), teaching water conservation ($M = 4.81$), integrating environmental topics across subjects ($M = 4.79$), and engaging parents and stakeholders in green initiatives ($M = 4.66$). These findings show that sustainability was embedded in both operations and instruction, consistent with the whole-school approach advocated by UNESCO (2020, 2024).

The comparatively lower indicators identified concrete improvement needs: composting and eco-brick alternatives ($M = 4.17$), rainwater collection or reuse ($M = 4.10$), infrastructure accessibility and sustainability ($M = 4.19$), carbon-footprint reduction programs ($M = 4.14$), and regular communication with environmental partners ($M = 4.45$). Similar studies have noted that monitoring, infrastructure, and long-term stakeholder support often determine whether visible environmental activities become sustainable systems (Oestar, 2023; Prisco & Cubillas, 2022).

Differences among Respondent Groups

Table 3. *ANOVA results for Green School Practice assessments*

Dimension	F	p	Interpretation
Waste management and reduction	5.186	.006	Significant
Energy conservation	4.309	.014	Significant
Water conservation	3.405	.034	Significant
Greening and biodiversity	14.420	.001	Significant
Environmental education and awareness	5.383	.005	Significant
Sustainable school infrastructure	12.847	.001	Significant
Climate change mitigation and adaptation	6.191	.002	Significant
Community participation and partnerships	.587	.556	Not significant

Significant differences among School Governance Councils, school heads, and teachers were found in seven dimensions. The largest group differences appeared in greening and biodiversity ($F = 14.420$) and sustainable school infrastructure ($F = 12.847$). Community participation and partnerships was the only dimension without a significant difference ($F = 0.587$, $p = .556$).

The pattern suggests that internal practices were experienced differently depending on stakeholder role. Governance-council members generally provided the highest ratings, while teachers gave more conservative assessments in several dimensions, possibly because they experienced daily operational limitations more directly. The agreement on community participation indicates a shared view of external involvement and partnership activities. Engagement theory supports the importance of incorporating multiple stakeholder perspectives when evaluating school programs (Kahn, 1990; Saks, 2022).

Organizational Performance of School Heads

Table 4. *OPCRF ratings of school heads for 2024 and 2025*

School	2024	2025	Overall
Aliang ES	4.88	4.52	4.70
Aguado ES	4.97	4.95	4.96
Agtas ES	4.87	4.92	4.90
Bagong Pook ES	4.97	4.96	4.97
Conchu ES	4.93	4.92	4.92
De Ocampo ES	4.67	4.75	4.71
Feliciano Cabuco	4.97	4.98	4.98
Hugo Perez ES (Main)	4.87	4.82	4.85
Hugo Perez ES (Annex)	4.83	4.76	4.79
Kanggahan ES	4.87	4.92	4.90
Lapidario ES	4.97	4.97	4.97
Osorio ES	4.98	4.98	4.98
Palawit ES	4.93	4.84	4.88
Southville ES	4.94	4.92	4.93
Trece Martires ES	4.99	4.99	4.99
Victoriano Luciano ES	4.87	4.82	4.85
Overall	4.91	4.88	4.89

School-head organizational performance was Outstanding in both years. The district mean was 4.91 in 2024 and 4.88 in 2025, producing an overall mean of 4.89. School-level overall ratings ranged from 4.70 to 4.99, indicating consistently high performance with limited variation among the 16 schools.

The result reflects strong performance in the leadership and management functions represented by the OPCR. This is consistent with literature emphasizing strategic direction, operational management, professional development, teaching and learning, and stakeholder connections as central dimensions of school effectiveness (Hallinger, 2023; Leithwood et al., 2023). The narrow range of ratings is also important when interpreting the subsequent correlations because limited outcome variation can reduce the possibility of detecting strong statistical associations.

Relationship between Green School Practices and Organizational Performance

Table 5. *Correlations between Green School Practices and organizational performance*

Dimension	r	p	Interpretation
Waste management and reduction	-.165	.526	Not significant
Energy conservation	-.202	.436	Not significant
Water conservation	-.310	.226	Not significant
Greening and biodiversity	-.300	.242	Not significant
Environmental education and awareness	-.219	.398	Not significant
Sustainable school infrastructure	.102	.696	Not significant
Climate change mitigation and adaptation	-.136	.603	Not significant
Community participation and partnerships	.391	.121	Not significant

None of the eight Green School Practice dimensions was significantly related to school-head organizational performance. Correlation coefficients ranged from $r = -.310$ for water conservation to $r = .391$ for community participation and partnerships, and all p-values exceeded .05. The null hypothesis of no significant relationship was therefore retained for every dimension.

The absence of a significant relationship does not mean that Green School Practices lack educational or environmental value. Rather, the OPCRF ratings were uniformly Outstanding and may have reflected a broad set of leadership, instructional, administrative, and accountability functions beyond environmental sustainability. The result contrasts with studies reporting positive associations between sustainability initiatives and organizational outcomes (Nguyen & Tran, 2024; Wang & Chen, 2022), indicating that the relationship may depend on context, measurement, implementation maturity, and variability in the organizational-performance indicator.

Because the design was correlational, the findings do not establish causation. They indicate only that the observed differences in Green School Practice scores did not correspond significantly with the observed OPCRF variation in this sample. Future research may include more differentiated organizational outcomes, longitudinal data, resource variables, school size, leadership practices, and direct environmental-performance indicators.

Challenges in Implementing Green School Practices

Table 6. *Challenges encountered in Green School Practice implementation*

Challenge	Mean	Interpretation	Rank
Limited space for gardens and tree planting	3.21	Moderately encountered	1
Limited awareness of proper waste segregation	3.06	Moderately encountered	2
Difficulty sustaining plants and green spaces	3.00	Moderately encountered	3
Insufficient recycling and composting facilities	2.93	Moderately encountered	4
Limited parent involvement in environmental projects	2.81	Moderately encountered	5
Insufficient budget for eco-friendly and climate-resilient facilities	2.79	Moderately encountered	6
Limited funds for energy-efficient equipment	2.73	Moderately encountered	7
Low community participation in awareness programs	2.64	Moderately encountered	8
Inconsistent care for school infrastructure	2.58	Moderately encountered	9
Environmental topics not fully integrated across subjects	2.57	Least encountered	10
Weak or inconsistent external partnerships	2.53	Moderately encountered	11
Frequent water-system leaks or poor maintenance	2.51	Least encountered	12
Inconsistent water-saving habits	2.42	Least encountered	13
Lights and appliances left on when not in use	2.40	Moderately encountered	14
Overall weighted mean	2.73	Moderately encountered	—

Implementation challenges were Moderately Encountered ($M = 2.73$). Limited space for gardens and tree planting ranked first ($M = 3.21$), followed by limited awareness of proper waste segregation ($M = 3.06$), difficulty sustaining plants and green spaces ($M = 3.00$), and insufficient recycling and composting facilities ($M = 2.93$). Budget limitations, parent participation, infrastructure care, and external partnerships also remained concerns.

The challenge profile clarifies why some dimensions, although Highly Evident overall, contained lower indicators. For example, visible greening activities may be strong even when land constraints and maintenance threaten continuity. Likewise, waste segregation may be established while composting, facilities, reporting, and awareness require improvement. Oestar (2023) similarly found that green programs can be visible but difficult to sustain without monitoring, resources, and stakeholder participation.

These results support interventions that combine environmental education with operational systems. Awareness campaigns alone are insufficient when schools lack space, infrastructure, equipment, monitoring tools, or resource partnerships. The proposed program therefore links behavior change with audits, facilities, resource mobilization, partnerships, and accountability mechanisms.

Acceptability of the Sustainable Eco-Friendly Program

Table 7. *Acceptability of the proposed program*

Criterion	Mean	Interpretation	Rank
Guides the development and enhancement of policy guidelines	4.72	Highly acceptable	1
Provides completeness of facts	4.63	Highly acceptable	2
Practical for adoption and implementation	4.60	Highly acceptable	3
Provides knowledge for corrective action	4.55	Highly acceptable	4
Identifies weaknesses in practices and performance	4.50	Highly acceptable	5
Overall weighted mean	4.60	Highly acceptable	—

The proposed Sustainable Eco-Friendly Program was Highly Acceptable ($M = 4.60$). Its strongest criterion was its usefulness in guiding policy development and enhancement ($M = 4.72$), followed by completeness of facts ($M = 4.63$) and practicality for adoption and implementation ($M = 4.60$). The result indicates strong stakeholder support and perceived readiness for implementation.

The high acceptability provides an important foundation but does not demonstrate program effectiveness. The program remains a proposed intervention that requires phased implementation, monitoring, and outcome evaluation. Its projects were designed to respond directly to the lower-rated indicators and the highest-ranked challenges while sustaining areas already rated Highly Evident.

Proposed Sustainable Eco-Friendly Program

Table 8. *Condensed Sustainable Eco-Friendly Program for Fiscal Year 2027*

Priority Area	Programs	Core Actions	Schedule/Budget
Waste management	P.L.A.S.T.I.K.; B.A.S.U.R.A.	Composting and eco-bricks; waste audits and reporting	Jul 2027–Mar 2028; ₱70,000
Energy conservation	I.L.A.W.; T.I.P.I.D. Kuryente	Energy audits, monitoring charts, switch-off campaigns	Whole year; ₱50,000
Water conservation	P.A.T.A.K.; D.A.L.O.Y.	Rainwater collection and reuse; leak and use monitoring	Aug 2027– whole year; ₱90,000
Greening and biodiversity	B.U.H.A.Y.; G.U.L.A.Y. sa Paaralan Plus	Native-species projects; vertical and container gardens	Whole year; ₱90,000
Environmental education	S.U.K.A.T.; K.A.L.I.K.A.S.A.N.	Quarterly evaluation; stakeholder advocacy and environmental events	Whole year; ₱55,000
Sustainable infrastructure	A.K.S.E.S.; E.C.O. Build	Accessibility and sustainable-facility assessment; eco-friendly materials	Jul 2027–Jun 2028; ₱190,000
Climate action	B.A.W.A.S.; L.I.G.T.A.S. Klima	Carbon-reduction campaigns; drills, hazard mapping, and preparedness	Whole year; ₱85,000
Community partnerships	E.C.H.O.; G.R.E.E.N. Action	Partner consultation and communication; community environmental engagement	Whole year; ₱60,000
Operational challenges	T.A.M.A. Segregation Drive	Awareness, color-coded bins, monitoring, and recognition	Whole year; ₱20,000
Operational challenges	K.A.P.I.T. Bisig Para sa Kalikasan	Resource mobilization, partnerships, fundraising, and sustainability plans	Whole year; ₱20,000
Operational challenges	T.A.N.I.M. Sustainability Program	Adopt-a-garden/plant, maintenance responsibilities, monitoring, and recognition	Whole year; ₱10,000

The program combines environmental education, operational monitoring, infrastructure improvement, climate resilience, resource mobilization, and community collaboration. Performance indicators in the source plan include establishment of composting and eco-brick initiatives, regular waste reports, reduced electricity

consumption and water wastage, increased green spaces and native species, quarterly environmental evaluations, improved sustainable facilities, stronger preparedness, regular partner communication, and sustained maintenance of green projects.

CONCLUSION

Green School Practices were Highly Evident in the public elementary schools of the District of Trece Martires City, Cavite. The strongest dimension was energy conservation, while climate change mitigation and adaptation received the lowest—although still highly evident—rating. The results demonstrate that environmental sustainability was consistently integrated into school operations, teaching, greening, resource conservation, and stakeholder activities.

The three respondent groups differed significantly in seven of the eight dimensions, showing that organizational role influenced the assessment of internal practices. Their common assessment of community participation and partnerships indicates shared recognition of external stakeholder involvement. School heads maintained Outstanding OPCRf performance across 2024 and 2025.

No Green School Practice dimension was significantly related to organizational performance within the scope of the study. Thus, the high performance of school heads cannot be attributed statistically to variation in the measured environmental practices alone. Moderate implementation challenges—particularly limited space, awareness, facilities, resources, and maintenance—remain important despite the high overall practice ratings. The highly acceptable Sustainable Eco-Friendly Program offers a responsive framework for addressing these gaps, but its effectiveness must be established through implementation and evaluation.

Recommendation

The Sustainable Eco-Friendly Program may be piloted at Francisco De Castro Elementary School and subsequently considered for broader implementation within the Division of Cavite Province after evaluation. School heads should align the program with school improvement plans, MOOE, Special Education Fund support, DRRM funds, and resource-partnership mechanisms.

Teachers, School Governance Councils, parents, learners, and community partners should participate in regular orientations, collaborative planning, environmental workshops, monitoring, and maintenance activities. Priority should be given to waste-segregation awareness, composting and eco-bricks, rainwater collection, vertical gardening for space-limited schools, sustainable infrastructure, carbon-reduction activities, and systematic communication with environmental partners.

School administrators should establish clear indicators, quarterly monitoring, documented feedback, and periodic program reviews. Future researchers may examine leadership practices, organizational climate, school size, resource availability, direct environmental outcomes, and longitudinal program effects to explain organizational performance more fully and to test whether the proposed interventions produce measurable improvements.

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