

Review

Sustaining Free Secondary Education in Ghana: A Sustainable Cost-Sharing Model for Reforming the Free Senior High School Policy

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Received: 10 August 2026; **Revised:** 30 September 2026; **Accepted:** 9 October 2026; **Published:** 27 October 2026

Abstract: Senior High School (SHS) education is central to human capital development and national competitiveness in developing contexts such as Ghana. The introduction of the Free Senior High School (FSHS) policy in 2017 significantly expanded access and equity in secondary education by removing financial barriers to participation. However, persistent concerns regarding implementation capacity, educational quality, financing adequacy, and long-term sustainability reveal critical policy gaps. This study adopts a qualitative conceptual approach, drawing on an integrative literature review and thematic analysis of scholarly and policy literature to examine the sustainability challenges of the FSHS policy. The analysis is informed by Kingdon's Multiple Streams Framework, Human Capital Theory, and the Education for Sustainable Development perspective. Five interrelated themes emerged: expansion of access and equity; policy formulation, political commitment, and institutional preparedness; tensions between policy intentions and implementation realities; structural and operational constraints undermining quality; and policy evaluation gaps and sustainability concerns. The study proposes a Sustainable Cost-Sharing Model (SCSM) based on differentiated contributions aligned with ability to pay. The model reframes secondary education financing as a shared responsibility among the state, households, and institutions, offering a conceptual pathway for sustaining access, strengthening educational quality, improving system resilience, and enhancing long-term policy sustainability.

Keywords: Free Senior High School Policy; Secondary Education Reform; Education Financing; Thematic Analysis; Policy Sustainability; Ghana

1. Introduction

Senior High School (SHS) education represents a critical stage in the development of human capital, serving as both a gateway to tertiary education and a foundation for workforce participation. In Ghana, the introduction of the Free Senior High School (FSHS) policy in 2017 marked a transformative effort to eliminate financial barriers and expand access to secondary education. The policy has since achieved significant increases in enrolment and improved equity in access, particularly among students from disadvantaged backgrounds [1]. Despite these notable gains, the FSHS policy is confronted with a fundamental policy dilemma: the rapid expansion of access has not been matched by commensurate improvements in institutional capacity, financing, and educational quality. This imbalance has generated systemic strains, including overcrowding, infrastructure deficits, teacher workload pressures and declining instructional effectiveness [2,3].

The core problem this paper addresses, therefore, is the growing disconnect between the policy's access-driven

objectives and the structural, financial, and governance capacities required to sustain quality secondary education in Ghana. While the policy has succeeded politically and socially in widening participation, its long-term sustainability remains uncertain due to persistent funding gaps, weak evaluation mechanisms, and limited alignment between policy design and implementation realities [4,5]. Recent studies continue to report concerns regarding infrastructure adequacy, teacher wellbeing, educational quality, and long-term financing sustainability within the FSHS policy despite ongoing access gains [1,3,6–8].

The rationale for this study emerges from the absence of an integrative and forward-looking framework capable of reconciling these competing demands. Existing scholarship has largely examined access, quality, financing, and implementation challenges in isolation, resulting in fragmented insights that offer limited guidance for comprehensive reform. There is thus a critical need for a conceptual model that synthesizes these dimensions and provides a sustainable pathway for maintaining access while improving quality and ensuring fiscal viability. In response to this gap, this study adopts a qualitative conceptual approach to critically examine the FSHS policy and proposes a SCSM. The model is designed to realign financing structures with equity considerations and institutional realities, contributing to ongoing policy debates on how best to sustain free secondary education in Ghana and comparable contexts.

To address the identified gap and guide the conceptual analysis, this study was structured around the following research questions:

1. What are the major financial, institutional, governance, and structural challenges affecting the sustainability of Ghana's FSHS policy?
2. How have the issues of access, equity, educational quality, implementation, and sustainability been addressed within the existing literature on FSHS and related free secondary education policies?
3. What are the main limitations of the current financing approach?
4. Based on insights from the literature, how can a more sustainable, equitable, and quality-oriented cost-sharing framework be developed to support the future of secondary education in Ghana?

2. Education Financing, Equity, and Sustainability in Secondary Education

The financing of secondary education remains one of the most debated issues in education policy, particularly in contexts where governments seek to expand access while maintaining educational quality and fiscal sustainability. Existing scholarship identifies three broad approaches to education financing: universal state-funded provision, cost-sharing arrangements involving households and governments, and targeted financing systems that allocate resources according to socio-economic need [9,10]. While universal free education policies are frequently associated with improvements in access and equity, studies consistently highlight the fiscal pressures that arise when enrolment expands more rapidly than available resources [11,12].

Cost-sharing approaches emerged partly in response to these sustainability concerns. The central premise of cost-sharing is that the benefits of education accrue not only to the state but also to households and society, thereby justifying shared financial responsibility [13]. However, critics argue that poorly designed cost-sharing systems may deepen educational inequalities if they fail to protect disadvantaged groups. Consequently, contemporary financing debates increasingly emphasize equity-oriented and ability-to-pay approaches, whereby contributions are differentiated according to socio-economic circumstances while preserving opportunities for vulnerable learners [10,13].

The literature further distinguishes between universal subsidies, which provide equal benefits to all students regardless of economic status, and targeted subsidies, which concentrate public resources on learners with the greatest financial need [9,14]. Proponents of targeted approaches argue that they improve fiscal efficiency and long-term sustainability by aligning public expenditure with capacity-to-pay considerations. Within this perspective, sustainable financing is not viewed solely as a revenue-generation challenge but as a question of balancing access, equity, quality, and fiscal responsibility. These debates provide the conceptual foundation for the SCSM proposed in this study, which seeks to integrate equity considerations with differentiated financing responsibilities and long-term policy sustainability.

3. Theoretical Foundation of the SCSM

The SCSM proposed in this study is grounded in three complementary theoretical perspectives: Kingdon's Multiple Streams Framework, Human Capital Theory, and the Education for Sustainable Development (ESD) perspective. Together, these theories provide the conceptual assumptions upon which the model is constructed and explain how access, equity, quality, financing, and policy sustainability can be integrated within a single framework.

Kingdon's Multiple Streams Framework provides the policy perspective underpinning the model. The framework proposes that policy change becomes possible when problem, policy, and political streams converge, creating opportunities for policy action [15]. In the context of Ghana's FSHS policy, the growing challenges of underfunding, infrastructure deficits, declining quality, and implementation pressures constitute the problem stream, while the SCSM represents a policy solution designed to address these emerging challenges. The framework therefore explains the need for policy adaptation and reform rather than policy abandonment.

Human capital theory offers an economic foundation for the model. The theory views education as an investment in human capabilities that yields economic and social returns to individuals and the community at large [16]. According to the theory, the benefits of secondary education go beyond the individual recipient to include families, employers, and the state. By these arguments, the model suggests that the cost of secondary education should not be shouldered by the state alone but distributed among stakeholders in accordance with their ability to pay. Thus, the study's proposition of differentiated cost-shifting mechanism is anchored on the human capital theory's assertion that education is an investment that goes beyond the direct costs of provision.

A focus on Education for Sustainable Development (ESD) perspective offers a sustainability and equity foundation for the model. ESD views education as an important way of promoting inclusive, equitable and sustainable development and stresses the need to transform education policies, learning places, institutional practices and communities in service of sustainable development [17]. Within the SCSM this informs protection of those learners who are disadvantaged; consideration of how to allocate educational resources responsibly; and taking account of the long-term resilience of the education system. Instead of looking just at how best to increase access, the emphasis is therefore upon balancing access, quality, equity and long-term system sustainability.

These theoretical perspectives explain the core components of SCSM. Kingdon's framework explains the need for policy reform, Human Capital Theory justifies shared financing responsibilities, and the ESD perspective guides the model's commitment to equity and sustainability. The model should therefore be understood not merely as a literature-derived financing proposal but as a theoretically informed conceptual framework for sustaining free secondary education in Ghana. **Table 1** summarizes the theoretical foundations of the SCSM.

Table 1. Theoretical Foundations of the SCSM.

Theory	Core Principle	Component of SCSM Explained
Kingdon's Multiple Streams Framework [15]	Policy reforms emerge when problems, policy solutions, and political opportunities converge	Explains the need to reform the current FSHS financing structure and adopt a new policy framework
Human Capital Theory [16]	Education is an investment that produces benefits for individuals and society	Justifies shared financial responsibility among the state, households, and institutions
Education for Sustainable Development [17]	Education systems should promote equity, inclusion, responsible resource use, and long-term sustainability	Supports differentiated contributions, protection of disadvantaged learners, and long-term financing sustainability
Integrated Theoretical Contribution	Combining policy reform, investment logic, and sustainability principles	Forms the conceptual basis of the SCSM

4. Methods

4.1. Literature Search Strategy

This study adopts a qualitative conceptual research design to critically examine Ghana's Free Senior High School (FSHS) policy, with the objective of synthesizing existing scholarship and policy evidence to identify implementation gaps and propose a sustainable cost-sharing framework. As a non-empirical inquiry, the study does not involve primary data collection but is grounded in the systematic analysis and interpretation of extant literature. Conceptual qualitative approaches are particularly suited to policy-focused research where the aim is theory development, critical reflection, and model construction rather than hypothesis testing or statistical generalization [18].

An integrative literature review approach was employed to guide the methodological process. Integrative reviews enable the inclusion and synthesis of diverse forms of literature, including empirical studies, theoretical papers, policy documents, and conceptual analyses, thereby allowing for a comprehensive understanding of complex social and policy phenomena [18]. This approach was considered appropriate given the multidisciplinary nature of secondary education policy, which spans education economics, governance, curriculum studies, leadership, and social equity.

The literature reviewed for this study comprised peer-reviewed journal articles, doctoral and master's theses, policy reports, government documents, and scholarly books addressing secondary education, free education policies, education financing, policy implementation, and educational quality in Ghana and comparable contexts. A total of 286 scholarly and policy sources published between 2012 and 2026 were initially identified, reflecting both recent developments and foundational works necessary for contextual depth. Following relevance screening and quality appraisal, 214 sources were retained for detailed analysis. The inclusion of a limited number of earlier seminal works was deliberate, ensuring theoretical continuity and conceptual grounding where more recent literature directly built on earlier policy and education theory [15].

The literature search was conducted across multiple academic and policy databases, including ERIC, Scopus, Web of Science, Google Scholar, and institutional repositories of Ghanaian universities. Policy documents were sourced from official government portals, including the Ministry of Education and the Ministry of Finance, as well as constitutional and manifesto documents relevant to the origins and implementation of the FSHS policy [19–21]. Search terms used to retrieve relevant literature included “Free Senior High School policy,” “secondary education financing,” “education policy implementation in Ghana,” “free secondary education in Africa,” “policy intention and implementation gaps,” “education quality and access,” “double track system,” and “sustainable education financing.” These terms were applied individually and in combination to capture both Ghana-specific and comparative international studies.

4.2. Literature Screening and Selection Process

To enhance transparency and methodological rigour, the literature review followed a multi-stage screening and selection process. The initial search across academic databases, institutional repositories, and policy sources yielded 286 records. Following identification, duplicate records appearing across multiple databases were removed. The remaining records were then subjected to title and abstract screening to assess their relevance to the study objectives.

Studies were retained if they addressed one or more of the following areas: (a) Free Senior High School policy in Ghana, (b) free secondary education reforms in Africa and comparable contexts, (c) education financing and cost-sharing mechanisms, (d) educational access and equity, (e) educational quality and implementation outcomes, or (f) policy sustainability and governance. Studies were excluded if they focused exclusively on primary education, tertiary education without relevance to secondary education policy, non-educational sectors, or contained insufficient methodological or conceptual detail.

Thereafter, full-text assessment was conducted to determine the extent to which each source contributed to the study's conceptual focus. Quality appraisal considered the credibility of the publication source, methodological clarity, relevance to the research problem, theoretical contribution, and policy significance. Preference was given to peer-reviewed journal articles, official policy documents, scholarly books, and postgraduate theses from accredited institutions.

Given the integrative nature of the review, source quality was assessed using criteria appropriate to each type of evidence. Peer-reviewed journal articles were evaluated based on publication quality, methodological rigor, clarity of findings, relevance to the study objectives, and contribution to education policy scholarship. Doctoral and master's theses were assessed based on institutional credibility, methodological transparency, analytical depth, and relevance to the FSHS policy and education financing debates. Government reports and policy documents were evaluated on the basis of institutional authority, policy relevance, evidentiary support, and direct applicability to education policy formulation and implementation. Conceptual and theoretical works were assessed according to their scholarly influence, theoretical coherence, and relevance to the study's analytical framework. Sources lacking sufficient methodological detail, scholarly credibility, or direct relevance to the study objectives were excluded during the assessment process.

The screening process resulted in the retention of 214 sources for detailed thematic analysis and conceptual synthesis. The selection procedure ensured that only sources making substantive contributions to understanding access, equity, quality, financing, governance, and sustainability within secondary education policy were included in the final review. The literature identification, screening, eligibility assessment, and final selection process are summarized in **Figure 1**.

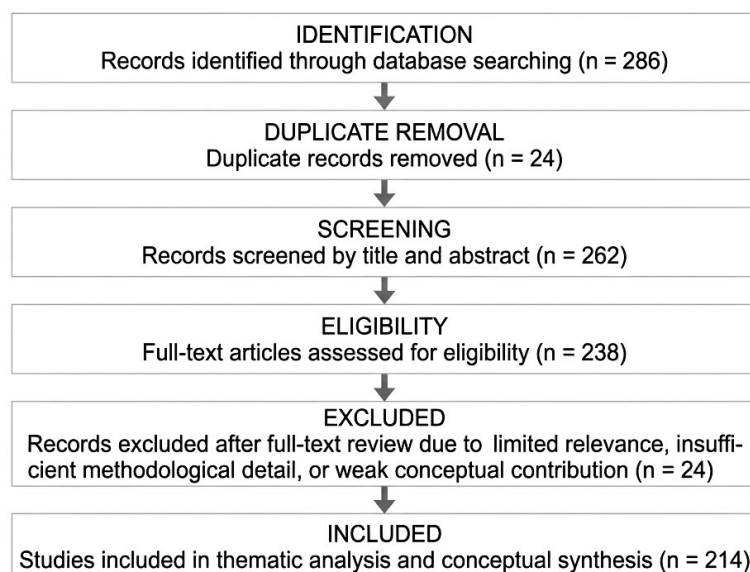


Figure 1. PRISMA-Based Literature Search and Screening Process.

Source: Authors' construct based on the literature review procedure.

4.3. Reporting Sources

The 214 sources retained through the screening and quality assessment process informed the thematic synthesis and conceptual development of the study. Consistent with accepted practice in integrative and conceptual review studies, only sources cited directly in the narrative text are included in the reference list. The broader pool of reviewed literature was used to identify thematic patterns, establish conceptual relationships, and support the development of the SCSM. A complete list of the 214 sources reviewed is provided in the **Supplementary Materials**. The number of sources analysed should therefore not be interpreted as equivalent to the number of references cited in the final manuscript.

4.4. Data Analysis

The retained literature (n = 214) was analysed using a qualitative thematic analysis approach consistent with integrative literature review methodology [18]. The analysis involved iterative reading and constant comparison of the selected sources to identify recurring concepts, patterns, and explanatory perspectives related to the sustainability of Ghana's FSHS policy. Initial codes included enrolment expansion, equity gains, political commitment, stakeholder participation, institutional preparedness, funding constraints, infrastructure deficits, teacher workload, implementation challenges, educational quality concerns, policy evaluation, and sustainability issues. These codes were subsequently grouped into broader analytical categories and refined into higher-order themes through repeated comparison across empirical studies, policy documents, theoretical works, and comparative international literature [14,22–24].

The transition from codes to themes followed an interpretive process in which conceptually related categories were merged and organised into coherent patterns explaining the FSHS policy experience. This process resulted in five interrelated themes: expansion of access and equity; policy formulation, political commitment and institutional preparedness; tensions between policy intentions and implementation realities; structural and operational constraints undermining quality; and policy evaluation gaps and sustainability concerns. Theme saturation was

considered achieved when additional sources produced no substantially new concepts beyond those already identified. Relationships among the themes were established through analytical mapping of the policy process, revealing how access outcomes, policy design, implementation experiences, operational challenges, and sustainability concerns interacted within a broader policy system [15,25].

To improve trustworthiness and reduce the influence of individual researcher's subjectivity, all three authors were involved in the coding and theme development processes. Initially, the authors coded the retained literature independently, generating similar concepts and preliminary categories. The derived codes and tentative themes were then compared across the three analyses, with agreement areas maintained and disagreements addressed by the group, collectively re-evaluating the relevant literature and arriving at a consensus. Instead of calculating an inter-coder reliability score, themes were developed using researcher triangulation, iterative comparison, consensus, and final checking against the relevant literature. As with the integrative review and reflexive analytic approaches described earlier [18], this added weight to the idea that the five themes identified reflected commonalities across the literature rather than the perspective of a single researcher. The contribution of the reviewed literature to the thematic synthesis and development of the SCSM is presented in **Table 2**.

Table 2. Contribution of Reviewed Literature to Thematic Synthesis and Development of the SCSM (n = 214).

Source Category	Number (n)	Primary Evidence Area	Key Themes Informed	Direct Contribution to SCSM
Journal Articles (Empirical and Non-empirical)	96	Access, equity, quality, implementation outcomes	Themes 1, 3 and 4	Identified enrolment gains, quality trade-offs, funding pressures and implementation challenges that justified financing reform.
Doctoral and Master's Theses	42	Stakeholder experiences, institutional readiness and school-level implementation	Themes 2 and 3	Provided context-specific evidence on stakeholder concerns, inequalities and capacity limitations informing equity-sensitive design features.
Policy Documents and Government Reports	28	Legal frameworks, financing arrangements and enrolment trends	Themes 2 and 5	Established fiscal realities, governance structures and implementation constraints underpinning the shared responsibility framework.
Cross-National Comparative Studies	31	Free secondary education reforms in Africa and comparable contexts	Themes 1, 4 and 5	Highlighted common patterns of access growth, fiscal strain and quality pressures, supporting sustainable financing mechanisms.
Conceptual and Theoretical Works	17	Policy processes, human capital investment, education financing and sustainability	All Themes	Provided the theoretical foundation for integrating access, equity, quality, financing, governance and sustainability.

Note: The table links evidence sources directly to thematic findings and components of the SCSM.

Together, these evidence categories informed the thematic synthesis and subsequent development of the SCSM, particularly the relationships among access, institutional capacity, financing adequacy, quality, governance, and sustainability.

To strengthen analytical transparency, the development of the SCSM followed a sequential interpretive process. First, recurrent issues identified across the literature were coded and organised into thematic categories. Second, relationships among the resulting themes were examined to identify common causal patterns affecting policy sustainability. Third, these interconnections were interpreted through the lenses of Kingdon's Multiple Streams Framework, Human Capital Theory and Education for Sustainable Development. The SCSM therefore emerged not from a single source or study but from the integration of recurring patterns across the reviewed literature, thematic synthesis findings and the study's theoretical foundations.

4.5. Thematic Analysis

To understand the implementation dynamics and sustainability challenges of Ghana's Free Senior High School (FSHS) policy, the reviewed literature was subjected to qualitative thematic analysis. This analytical process involved identifying recurring patterns, convergences and tensions across empirical, conceptual and policy-oriented studies relating to access, equity, institutional capacity, governance, financing, and educational quality. Rather than organizing the literature chronologically or by source type, findings were synthesized into interrelated themes which reflect dominant explanatory trends within the scholarship.

The five themes, which are presented below, are not discrete categories but analytically connected dimensions of the FSHS policy experience. Together, they illustrate how early gains in access and equity are mediated by political

decision-making, institutional readiness, implementation realities, structural constraints and weaknesses in policy evaluation. This thematic structure provides the interpretive foundation for the conceptual model proposed later in the paper.

5. Findings

5.1. Theme 1: Expansion of Access and Equity as the Dominant Policy Outcome

Across global and African contexts, the literature consistently identifies the expansion of access and equity as the primary and most visible outcome of free secondary education policies. These policies are largely framed as strategic interventions to advance Sustainable Development Goal 4, which emphasizes inclusive and equitable quality education as a foundation for human capital development [10,26]. Evidence from multiple jurisdictions suggests that the removal of direct household costs constitutes a powerful mechanism for increasing enrolment, particularly among students from economically disadvantaged backgrounds. However, this expansion is frequently achieved at significant structural and institutional cost. Comparative experiences from Kenya and Uganda reinforce this pattern. Kenya's Free Secondary Education policy, introduced in 2008, led to rapid enrolment growth and improved retention, yet the literature documents persistent underfunding, delayed government disbursements, infrastructural strain and shortages of qualified teachers [11,27]. Although the policy covered user fees and basic learning materials, these provisions proved insufficient to safeguard instructional quality, thereby constraining its long-term contribution to human capital development [28]. Similarly, Uganda's universal secondary education policy resulted in a dramatic rise in student numbers without commensurate increases in budgetary allocations, leading to overcrowded classrooms, low teacher remuneration and weakened curriculum relevance [12]. Ghana's FSHS policy aligns closely with these broader patterns. Anchored in constitutional mandates and international commitments, the policy successfully removed financial barriers that had historically excluded many qualified Junior High School graduates from SHS education [19,21]. Empirical evidence demonstrates a substantial enrolment increase following implementation, with participation rising sharply in the 2017/2018 academic year [2]. These gains were particularly pronounced among students from public and less-endowed schools, indicating progress towards equity objectives [14]. Nevertheless, the literature increasingly characterizes this access expansion as an incomplete policy success, noting that persistent disparities in outcomes and resource distribution continue to privilege students from more advantaged backgrounds [13]. Thus, while access expansion constitutes the dominant and most celebrated outcome of FSHS, it simultaneously exposes systemic vulnerabilities that complicate the realization of quality education. Recent reviews of secondary school fee abolition in Sub-Saharan Africa similarly indicate that access gains are frequently accompanied by quality and financing challenges [29,30]. While literature overwhelmingly portrays access expansion as the most frequently reported outcome of the FSHS policy, a thematic shift reveals that these gains were shaped, both enabled and constrained, by the nature of political commitment and institutional preparedness during policy formulation.

5.2. Theme 2: Policy Formulation, Political Commitment and Institutional Preparedness

The literature portrays Ghana's FSHS policy as a politically robust reform underpinned by strong electoral commitment and constitutional legitimacy but institutionally underprepared for the scale and complexity of its implementation. Analyses of policy formulation emphasize that the agenda-setting process was driven by persistent public concern over access inequities and the political salience of secondary school placement outcomes [16,29]. The policy's prominence in successive electoral cycles, culminating in its inclusion as a flagship promise in the 2016 general elections, underscores the centrality of political urgency in shaping its design [21]. While formal consultations with key stakeholders such as the Conference of Heads of Assisted Secondary Schools and civil society organisations were reported, the literature raises questions regarding the depth and influence of these engagements on final policy decisions [31]. Scholars suggest that stakeholder participation was largely procedural rather than substantive, limiting opportunities to interrogate institutional capacity, infrastructure readiness, and financing sustainability prior to implementation. As a result, the policy entered the execution phase with limited preparatory investment in system-wide readiness including teacher deployment, infrastructure expansion and governance co-ordination. Recent studies continue to highlight the influence of politics and stakeholder participation in shaping perceptions and implementation outcomes of the FSHS policy [32,33].

This pattern reflects a broader concern in the policy literature that politically driven reforms, when expedited to meet electoral timelines, often outpace administrative capacity [34]. Within this context, the literature suggests that while the FSHS policy benefited from substantial political commitment and public legitimacy, implementation was constrained by reported limitations in institutional preparedness, infrastructure capacity, financing mechanisms and stakeholder coordination. Literature thus frames institutional preparedness not as a peripheral issue, but as a central determinant of the policy's long-term viability. This interaction between political momentum and limited institutional readiness helps explain why literature consistently documents tensions between the policy's stated intentions and the realities encountered during implementation.

5.3. Theme 3: Tensions between Policy Intentions and Implementation Realities

A central theme emerging from literature is the persistent tension between the stated intentions of the FSHS policy and the realities of its implementation. Policy documents articulate an ambitious vision encompassing access, equity, quality improvement, curriculum diversification and alignment with labour market needs [5,33]. In principle, the integration of Technical and Vocational Education and Training and enhanced resource allocations were intended to ensure that expanded enrolment did not compromise learning outcomes.

However, empirical studies consistently demonstrate a misalignment between these intentions and operational realities. Rapid enrolment growth has intensified pressure on existing infrastructure, teaching personnel and instructional time, resulting in overcrowded classrooms, deteriorating boarding conditions and elevating teacher workload [8,20]. These conditions have contributed to variable instructional quality and heightened teacher stress, undermining the policy's quality enhancement objectives [9, 34]. The literature further highlights governance-related gaps that exacerbate this tension. Inadequate stakeholder participation, fragmented communication and uneven coordination between central authorities and schools have created ambiguity in policy interpretation and execution [24,35]. Taken together, these findings position the intent–implementation gap as the conceptual hinge of the FSHS debate, revealing how the pursuit of universal access, when insufficiently synchronized with capacity-building measures, generates contradictions that limit educational quality. As these tensions unfolded at the school level, they became embedded within deeper structural and operational constraints that progressively undermine the quality dimensions of the FSHS policy.

5.4. Theme 4: Structural and Operational Constraints Undermining Quality

Beyond intent–implementation misalignment, the literature identifies structural and operational constraints as systemic forces that progressively erode educational quality under the FSHS regime. Chronic underfunding remains a recurring concern, with delays in disbursement affecting the timely provision of food, teaching materials and infrastructural maintenance [14, 36]. These financing bottlenecks have direct implications for classroom instruction, school management and student well-being.

Infrastructure deficits are particularly salient. Overcrowding in classrooms, dormitories and dining halls has been widely documented, compelling the adoption of the double-track system as a temporary mitigation strategy [22,23]. While the double-track system enabled continued access expansion, the literature associates it with reduced instructional time, academic fatigue and declining learning outcomes, thereby reinforcing concerns about quality dilution.

Teacher-related challenges further compound these constraints. High student–teacher ratios, increased workload and delayed remuneration weaken morale and instructional effectiveness, especially in under-resourced schools [37,38]. Similar concerns regarding educational quality, school resources and learning environments continue to be documented in recent studies of secondary education systems across Africa [25]. Collectively, these structural limitations are not presented in the literature as isolated implementation failures but as interlinked constraints embedded in the policy's funding and governance architecture. Their persistence directly justifies calls for reform and alternative financing strategies. Despite growing recognition of these systemic constraints, the literature points to a critical absence of comprehensive policy evaluation mechanisms capable of informing adaptive reform and long-term sustainability.

5.5. Theme 5: Policy Evaluation Gaps and Sustainability Concerns

The final theme highlights a significant gap in Ghana's education policy cycle: the absence of systematic, iterative evaluation mechanisms capable of informing adaptive reform. While trend analyses indicate notable success in access and equity gains during the early years of FSHS implementation, comprehensive policy reviews assessing cost-effectiveness, quality outcomes, and long-term fiscal sustainability remain limited [9,22]. Existing evaluations tend to focus on enrolment metrics rather than holistic assessments of learning outcomes, institutional resilience, or equity-adjusted returns on investment. Moreover, the introduction of interim solutions such as the double-track system has not been accompanied by structured timelines or evidence-based exit strategies, raising concerns about policy drift [23]. Literature increasingly frames this evaluative gap as a structural weakness that undermines responsive governance and long-term sustainability.

Without formal mechanisms for periodic review, stakeholder feedback integration and fiscal reassessment, large-scale reforms such as FSHS risk entrenching inefficiencies even as they deliver politically desirable outcomes. This theme therefore provides a conceptual bridge to the proposed SCSM, positioning it as a response to a clearly identified need for adaptive, evidence-informed policy recalibration. Recent studies on fee-free secondary education in Africa emphasize that long-term sustainability depends on diversified financing mechanisms, regular policy evaluation and equitable resource allocation [39,40].

5.6. Integrative Synthesis: The Mechanism Underlying FSHS Sustainability Challenges

When considered collectively, the five themes reveal a common underlying mechanism explaining the sustainability challenges of the FSHS policy. The literature suggests that policy sustainability is shaped by the interaction between access expansion, institutional capacity and financing adequacy rather than by access gains alone. While the policy successfully expanded educational opportunities and improved equity, enrolment growth occurred more rapidly than the development of the financial, infrastructural, administrative and human resource capacities required to support it [1,2,20]. This created a capacity-access imbalance in which rising student participation generated increasing pressure on schools, teachers, infrastructure, learning resources and government expenditure.

The thematic analysis further demonstrates that strong political commitment enabled rapid policy implementation, but institutional preparedness and adaptive governance mechanisms did not expand at a comparable pace [31,32]. Consequently, implementation challenges, quality concerns and operational constraints emerged not as isolated problems but as interconnected outcomes of a system attempting to sustain universal access without corresponding growth in institutional capacity and resource mobilisation. The absence of robust monitoring, evaluation and financing adjustment mechanisms further limited the system's ability to respond effectively to these pressures [9,24].

Viewed together, the themes suggest that the long-term sustainability of FSHS depends on achieving a balance between three mutually reinforcing dimensions: educational access, educational quality and financial sustainability. Where access expands without adequate financing and capacity development, quality deterioration and governance strain become increasingly likely. The central contribution of the literature, therefore, is not simply that implementation challenges exist, but that these challenges originate from a structural misalignment between policy ambitions and system capacity.

It is this synthesized understanding that informs the development of the proposed SCSM. The model is derived from the literature's consistent finding that sustaining universal access requires a financing and governance arrangement capable of generating additional resources while protecting equity and supporting quality improvement. The proposed framework therefore seeks to realign access objectives with institutional capacity, differentiated financing responsibilities and long-term sustainability considerations, thereby addressing the core causal mechanism identified across the five themes. The themes and subthemes identified through the thematic synthesis are presented in **Table 3**.

Table 3. Thematic Synthesis and Implications for the SCSM.

Theme	Key Findings from Literature	Sustainability Challenge Identified	Implication for SCSM
Expansion of Access and Equity	FSHS increased enrolment and reduced financial barriers.	Rapid enrolment growth increased pressure on resources.	Financing mechanisms must sustain access while supporting educational quality.

Table 3. *Cont.*

Theme	Key Findings from Literature	Sustainability Challenge Identified	Implication for SCSM
Policy Formulation, Political Commitment and Institutional Preparedness	Strong political commitment accompanied by limited institutional readiness.	Capacity expansion lagged behind enrolment growth.	Financing reforms should strengthen institutional and administrative capacity.
Tensions Between Policy Intentions and Implementation Realities	Implementation challenges emerged as enrolment expanded.	Resource shortages and operational pressures affected delivery.	Financing arrangements should be aligned with implementation realities.
Structural and Operational Constraints Undermining Quality	Infrastructure deficits, teacher workload pressures and delayed funding affected quality.	Maintaining educational quality has become increasingly difficult.	Additional resources are required for quality improvement and system strengthening.
Policy Evaluation Gaps and Sustainability Concerns	Limited monitoring and evaluation mechanisms were identified.	Weak adaptive policy mechanisms constrained policy responsiveness.	Financing arrangements should incorporate review, accountability and adjustment mechanisms.

Note: This table synthesises the five themes emerging from the literature review and demonstrates how each theme informed the development of the SCSM.

5.7. Original Contribution of the SCSM

Although previous studies on Ghana's FSHS policy and free secondary education reforms in Africa have provided valuable insights into access expansion, implementation challenges, financing constraints, and educational quality outcomes, these dimensions have generally been examined independently. Existing approaches tend to focus either on universal state financing, access-related outcomes, or implementation effectiveness, with limited attention to the interactions among equity, quality, fiscal sustainability and institutional capacity. Consequently, literature offers fragmented guidance for policymakers seeking comprehensive and sustainable reform.

The SCSM tackles this challenge by developing a new approach to secondary education finance, which views it as a coherent system, rather than an isolated policy issue. It therefore builds on the need for differentiated financial responsibility, protection of vulnerable groups and the need to align financing to institutional and quality development needs.

Unlike many cost-sharing initiatives that simply shift some educational costs from the state to the household, the SCSM is a multi-level policy design. It is innovative, as it integrates the considerations of financing education in terms of capacity to pay and educational equity and access to a broader set of issues: continuation and extension of benefits, improvements in educational quality, institutional capacity, and long-term financial sustainability in the context of a single integrated policy framework. The differentiated approach to financing responsibilities is embedded into the design of the SCSM to meet its objective of protecting disadvantaged populations while providing additional resources for improvements in education quality and institutional capacity. The SCSM shifts the perspective on cost-sharing from being a mechanism for raising revenues for education to an innovative approach to balancing social protection and fiscal sustainability within the FSHS policy design. As a conceptual construct that emerges from the integrative process, however, the SCSM has not been tested empirically, and its implications and mechanisms should not be construed as indicating policy efficacy or feasibility. **Table 4** compares the proposed SCSM with existing education financing and cost-sharing approaches identified in the literature.

Table 4. Positioning the SCSM in Education Financing and Cost-Sharing Literature.

Approach/Model	Financing Approach	Main Objective	Equity Dimension	Sustainability Dimension	Relationship with FSHS	Difference from Proposed SCSM
Universal State-Funded Free Education	Government bears nearly all costs	Increase access and remove financial barriers	Strong emphasis on universal access	Often challenged by rising enrolment and fiscal pressures	Current FSHS approach largely follows this model	Does not explicitly differentiate contributions according to ability to pay
Traditional Cost-Sharing Model	Costs shared between government and households	Reduce government expenditure	May disadvantage poorer households if safeguards are weak	Improves fiscal sustainability but may weaken equity	Proposed periodically in education financing debates	Incorporates equity protections and targeted exemptions
Human Capital Investment Approach	Heavy public investment in education	Develop skilled workforce and economic growth	Access emphasized as investment in human capital	Sustainability depends on state revenue capacity	Influences rationale for FSHS implementation	Links human capital objectives with differentiated financing mechanisms

Table 4. *Cont.*

Approach/ Model	Financing Approach	Main Objective	Equity Dimension	Sustainability Dimension	Relationship with FSHS	Difference from Proposed SCSM
Access- Oriented FSHS Literature	Primarily state-funded	Expand enrolment and participation	Strong focus on participation and inclusion	Sustainability concerns acknowledged but not systematically addressed	Evaluates FSHS outcomes	Moves beyond access to integrate financing, quality and governance considerations
Quality Im- provement Perspective	Increased resource allocation to schools	Improve learning environments and outcomes	Focus on quality disparities	Require continuous investment	Highlights infrastructure and teacher challenges under FSHS	Identifies funding sources for sustained quality improvement
SCSM (This Study)	Differentiated contributions among state, households and institutions based on ability to pay	Balance access, quality, equity and fiscal sustainability	Explicit protection of disadvantaged learners through targeted support	Long-term sustainability embedded through shared responsibility and adaptive financing	Provides a reform pathway for strengthening FSHS	Integrates financing, equity, quality, governance and sustainability within one conceptual policy framework

5.8. Assumptions Underlying the SCSM

The SCSM is based on some assumptions derived from the thematic synthesis and the theoretical foundations of the study. First, the model assumes that household ability-to-pay can be reasonably identified using socio-economic indicators such as income levels, occupation, social protection status, and related measures. Second, it assumes that government retains primary responsibility for protecting disadvantaged learners and ensuring that financial contributions do not become barriers to educational access. Third, the model assumes that additional resources generated through differentiated contributions are reinvested in improving educational quality, infrastructure, learning resources, and institutional capacity. Fourth, the framework assumes the existence of transparent governance and accountability mechanisms capable of administering contributions fairly and efficiently. Finally, the model assumes that stakeholder acceptance of differentiated financing can be achieved through effective communication, consultation, and public trust in the fairness of the system. Collectively, these assumptions define the conditions under which the proposed framework may be expected to operate effectively.

5.9. Potential Risks and Equity Considerations

Although the SCSM seeks to balance equity and sustainability, these risks warrant consideration. First, the use of school categories as a proxy for socio-economic status may not fully capture household-level financial circumstances, creating the possibility of misclassification. Second, inaccurate assessment of ability-to-pay could result in unintended barriers for some vulnerable learners. Third, implementation capacity may vary across regions, potentially generating uneven financing outcomes. Finally, public acceptance of differentiated contributions may depend on perceptions of fairness, transparency, and accountability. These considerations suggest that any future implementation would require robust socio-economic targeting mechanisms, stakeholder engagement, and continuous monitoring to minimise unintended inequities.

6. Discussion

6.1. Contribution and Implications of the SCSM

The thematic findings provide the empirical literature basis for the proposed SCSM. Evidence of expanded enrolment and improved access under FSHS demonstrates the social value of maintaining broad participation, while documented funding pressures, infrastructure constraints, teacher workload, and implementation difficulties indicate that access expansion has placed substantial demands on institutional capacity [1,8,22,36]. The findings therefore suggest that the central policy challenge is not whether access should be maintained, but how the financial and institutional capacity required to sustain it can be strengthened [38].

The SCSM reacted to this trend by transforming the topic information into a differentiated financing proposal. Information on socio-economic inequalities and differences in the availability of educational opportunities justifies the model's focus on protecting learners who have a comparably limited ability to contribute [13,14]. At the

same time, information on insufficient funding, infrastructure, and implementation pressures indicates the need to widen the financing base and tie additional resources to institutional needs. The model's emphasis on monitoring and adjustment also reacts directly to the policy-evaluation gaps detected by the review. In this respect, the SCSM represents a conceptual translation of the review topic information into potential policy architecture rather than an independently tested financing solution.

Indeed, the theoretical perspectives further explain this relationship. Kingdon's Multiple Streams Framework makes it possible to adapt policies to the pressures of their implementation; Human Capital Theory provides a rationale for the sharing of responsibility beneficiaries; while Education for Sustainable Development highlights the need for protection of educational opportunity and the longer-term sustainability of the system. However, these theoretical and literature-based relationships establish a link in conceptual terms, but do not constitute evidence of an effective solution. The feasibility, distributional consequences, administrative requirements and fiscal implications of the proposed framework still need to be established through empirical study.

6.2. The Way Forward: A Sustainable Cost-Sharing Model for Policy and Practice

Elaborating on the issues revealed in the thematic synthesis, the suggested SCSM would transform the insights of the work into reality by providing a stepped up financing system based on the study's findings. In other words, the new approach would not negate the need for universal access to education but would rather base the degree of contribution on the level of capabilities. Furthermore, the SCSM would also ensure the protection of vulnerable groups by funding their education on a public level. The paragraph below will elaborate on the ways in which the idea could be implemented using school categorisation, indicators for mapping ability to pay, examples of contribution levels, and mechanisms for building institutional support.

The equity foundation of the SCSM is grounded in the principle that educational contributions should reflect differences in economic capacity while protecting access for disadvantaged learners. In this study, equity is conceptualized as the fair distribution of educational costs and opportunities according to differing levels of socio-economic advantage rather than the equal treatment of all students regardless of circumstance. Consistent with human capital and social justice perspectives, equitable financing requires that households with greater economic capacity contribute more, while those with limited resources receive greater public support.

The categorization of schools is not intended to serve as a direct measure of household income or a definitive indicator of ability to pay. Rather, it functions as a proxy for broad socio-economic differences that are frequently reflected in school fee structures, resource availability, parental educational background, and community characteristics. The model recognizes that considerable variation exists among households within the same school category and that school attendance alone cannot fully determine financial capacity. Consequently, the proposed categorization should be viewed as a preliminary targeting mechanism rather than a precise measure of household affordability.

For practical policy implementation, ability-to-pay assessments would require more comprehensive indicators, including household income data, social protection enrolment, parental occupation, asset ownership, and other socio-economic measures routinely used in educational welfare targeting. The present study does not claim that school category and ability-to-pay are equivalent. Instead, the categorization framework is employed as a conceptual device to demonstrate how differentiated financial responsibility might be operationalized within a sustainable financing system. Future research should therefore empirically validate and refine the model using household-level socio-economic data to ensure that equity objectives are achieved accurately and transparently.

Conceptually, the Sustainable Cost-Sharing Model positions the state, households, and institutions as co-contributors within a stratified education system. It retains the normative commitment to access learners from disadvantaged backgrounds, while introducing proportional contributions from households and institutions with greater economic capacity. This framework acknowledges pre-existing inequalities within Ghana's basic education system and treats them not as anomalies, but as structural conditions that must be explicitly addressed in policy design. By doing so, the model proposes a theoretically informed framework for reconciling access, quality, and sustainability within large-scale education reforms.

6.3. Justification for School Categorization Framework

The categorization framework proposed in this study should be understood as a conceptual policy tool rather than an officially adopted classification system. The framework is informed by persistent inequalities documented in the literature regarding school resources, socio-economic background of learners, institutional capacity, and educational opportunity structures within Ghana's pre-tertiary education system [2,13,14]. The categorization was developed to operationalize the principle of differentiated contribution according to ability to pay, which constitutes the foundation of the proposed SCSM. Rather than assuming that all students enter the Free Senior High School system with similar socio-economic advantages, the framework recognizes substantial variations in household resources, school quality, and educational opportunity. The categories therefore serve as an analytical mechanism for targeting financial support more equitably and aligning educational financing with social justice and sustainability objectives. The framework is intended as a starting point for policy discussion and would require empirical validation using national household, school financing, and educational attainment data before implementation.

To strengthen the objectiveness of the suggested classification, it is necessary to define indicators that can be used in the future for such determination. For instance, the number of resources per student, quantity of students per teacher, provision of classrooms and other infrastructure, availability of teaching and learning materials, socio-economic characteristics of an area, academic indicators, and the level of institutional capacity. It should be mentioned that classification might be based not on one but several indicators. Therefore, the current research does not aim to measure these levels and set the borders; instead, it offers the generalized vision that must be supported by statistical data at the school and country levels.

6.4. Classification of JHSs and SHSs

The categorization framework presented in this study is a conceptual classification developed by the authors for analytical and policy discussion purposes. It does not represent an official classification system of the Ghana Education Service (GES). Rather, it is intended to illustrate how differentiated financing mechanisms could be operationalized within the proposed SCSM. The classification draws on documented inequalities in school resources, socio-economic contexts, and educational opportunities discussed in the literature, but should be viewed as a conceptual policy framework requiring future empirical validation.

Based on the administrative and funding structures within Ghana's pre-tertiary education system, this paper adopts a categorical framework for secondary school placement and funding analysis. The Ministry of Education recognizes two primary streams under the GES: government (public) schools and private schools. Both streams participate in the Basic Education Certificate Examination (BECE) for progression into SHS [41].

To advance the objectives of access, equity, quality, and cost-sharing, a nuanced categorization is necessary. Government Junior High Schools (JHSs) are subdivided into two distinct groups based on their governance models:

1. Institutional Schools: These are establishments attached to specific institutions (e.g., University of Ghana Basic School, Burma Camp Basic School), which often retain a degree of autonomy in management and administration.
2. Community-Based Public Schools: These are directly managed by the local District Education Authorities, forming the core of the public school system.

While both are publicly oriented, the differential governance structures of these subgroups can influence managerial innovation and pedagogical experiences. Private schools are further stratified into three categories, determined by their annual fee structures, which serve as a proxy for socio-economic positioning and resource availability. The three categories set out in **Figure 2** were developed as an analytical framework for considering differences in school resources, socio-economic context, infrastructure, learning resources and institutional capacity. The indicators in **Table 5** operationalize these constructs, although they are not formally classified or assigned validated thresholds in this study. The private JHS is also categorized into three-tiered stratification based on a composite of financial, socio-economic, and infrastructural indicators. This categorization is critical for understanding the pre-existing inequalities that students carry into the Basic Education Certificate Examination (BECE) and, consequently, into the Free SHS placement system.

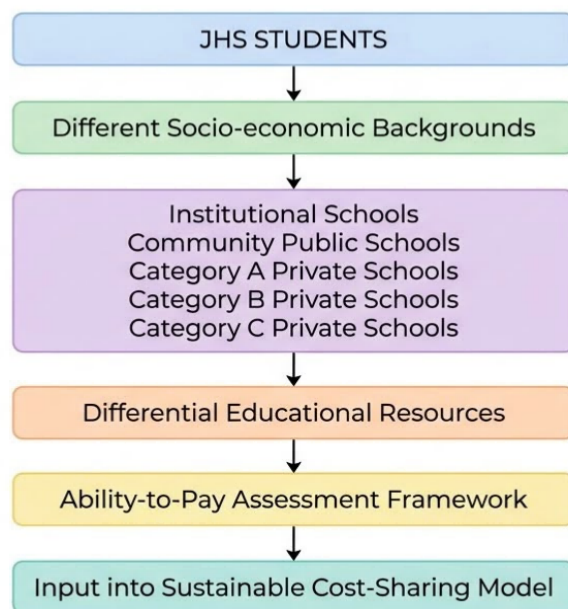


Figure 2. Conceptual Categorization of JHS and SHS/TVET Pathways within the SCSM.

Source: Authors' construct.

Table 5. Proposed Measurable Indicators for Future Empirical Classification within the SCSM.

Indicator	Potential Measure	Indicative Interpretation within the Conceptual Categories	Potential Validation Data
Per-student resources	Annual expenditure and resources available per learner	Higher resource availability indicates greater institutional advantage; lower availability indicates greater resource need.	School expenditure and administrative records
Student-teacher ratio	Number of enrolled students per teacher	Lower ratios indicate relatively stronger instructional capacity; higher ratios indicate greater resource constraint.	GES/EMIS school-level data
Infrastructure adequacy	Classroom capacity, sanitation, laboratories, libraries, ICT and boarding facilities	More adequate facilities indicate stronger institutional capacity; infrastructure deficits indicate greater need.	School census and infrastructure records
Learning resources	Availability of textbooks, ICT facilities, laboratory materials and other instructional resources	Greater availability indicates stronger resource capacity; limited availability indicates disadvantage.	School inventory and EMIS data
Socio-economic context	Household income, occupation, social protection status, asset ownership and characteristics of the catchment area	Greater household or community advantage suggests higher potential capacity to contribute; disadvantage indicates greater need for public support.	Ghana Statistical Service household surveys and social protection data
Academic outcomes	BECE/WASSCE performance, completion and progression indicators	Used as a contextual indicator alongside resources and socio-economic conditions, not as a stand-alone measure of ability to pay.	WAECE/GES administrative data
Institutional capacity	Staffing, administrative capacity, enrolment pressure and financial/resource management	Stronger capacity indicates relative institutional advantage; weaker capacity identifies areas requiring additional support.	GES/Ministry of Education administrative records

Note: These indicators are proposed for future empirical operationalisation of the SCSM and are not validated thresholds in the present study. No individual indicator should independently determine school category or household ability to pay. Future classification should employ a composite framework and establish appropriate weights and cut-off points through empirical analysis.

6.5. Key Characteristics of Each Category

Category A (High-Fee Private Schools): Conceptually, Category A represents comparatively high-fee and well-resourced private schools, characterised by stronger infrastructure, greater access to teaching and learning resources and socio-economic contexts indicating relatively greater household capacity to contribute.

Category B (Mid-Range Private Schools): Category B represents moderately resourced private schools, with

intermediate fee levels, infrastructure, learning resources and socio-economic characteristics relative to Categories A and C.

Category C (Low-Fee Private Schools): Category C represents comparatively low-fee and resource-constrained private schools serving contexts characterised by greater socio-economic disadvantage, more limited infrastructure and learning resources, and potentially lower household capacity to contribute.

This stratification demonstrates that disparities in educational quality, resource access, and post-graduation trajectories are firmly entrenched long before the SHS level. The FSHS policy, while removing financial barriers at the point of SHS entry, interacts with this pre-conditioned landscape.

This categorization provides an important conceptual lens for understanding how pre-existing socio-economic and educational inequalities may influence the design of differentiated financing arrangements within the proposed SCSM. The framework highlights the need for financing and implementation strategies that are responsive to varying levels of educational disadvantage and institutional capacity.

6.6. Categorization of SHS

The educational pathway from the JHS to SHS is characterized by systemic stratification in the GES's Computerized School Selection and Placement System (CSSPS). The GES formalizes this hierarchy by categorizing the SHS schools into 3 tiers (A, B, and C). This model incorporates Technical Vocational Education and Training (TVET) and Private SHS into D and E respectively for placement. The model's objective is to promote TVET, which aligns with the existing placement category, aim at elevating the quality of TVET institutions, transforming them into sought-after pathways for skills development, rather than being perceived as a default option. Below is the model for placement of JHS graduates into SHS towards the SCSM.

The contribution rates presented in the model should not be viewed as the primary contribution of the framework. Rather, the SCSM is intended to demonstrate how equity considerations, ability-to-pay principles, shared financing responsibility, quality improvement, and policy sustainability can be integrated into a single financing and governance architecture. **Figure 3** therefore illustrates the operational logic of the model and the relationships among its major components.

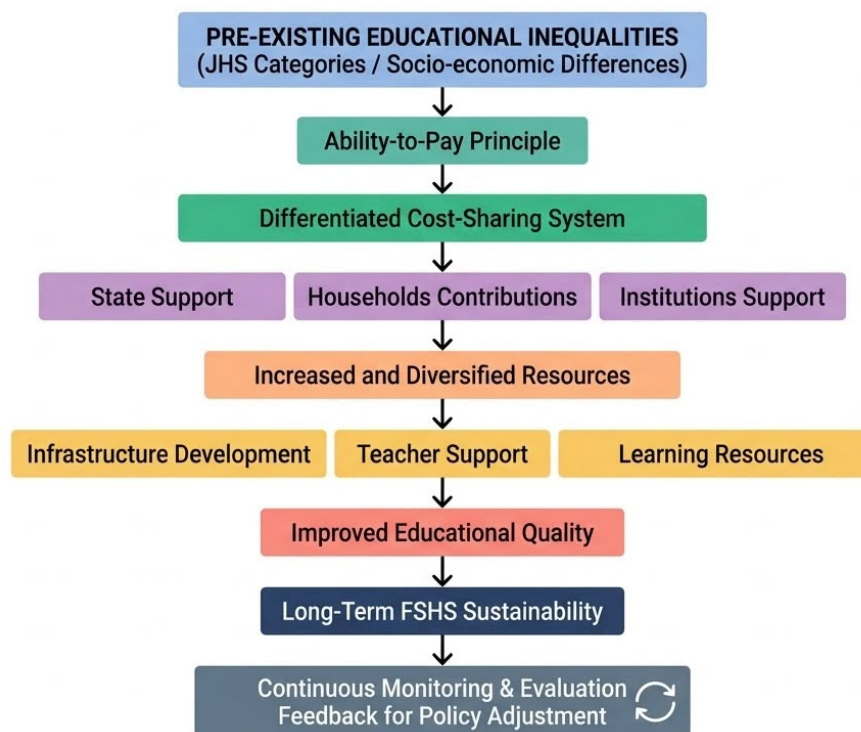


Figure 3. Operational Framework of the SCSM.

Source: Authors' construct.

6.7. Explanatory Notes on the Illustrative Cost-Sharing Scenarios

The contribution rates shown below are indicative scenario values developed to illustrate the principle of progressively differing financial responsibility in the SCSM. The percentages were not based on data on family income, econometric modelling, willingness-to-pay analysis or fiscal simulation. Rather they were selected as indicative contribution bands to represent different assumed levels of family capacity and public subsidy. The 100% scenario represents full family contribution where relative capacity to pay is assumed to be highest; 50% represents the sharing of approved costs between families and the state; 40% represents a moderate contribution with the state retaining the larger financing responsibility; 25% represents a limited contribution where greater public protection is required; and 20% represents a minimal contribution for comparatively lower capacity situations where substantial state support remains necessary. Full fee support represents the lowest capacity to contribute assumed. Thus these values provide graduated scenario points for illustrating operational logic of the model rather than established affordability thresholds or recommended national fee levels. The purpose is to illustrate how the financing burden could progressively shift from families to the state as assumed capacity to pay declines.

Methodologically the rates were generated through a conceptual scenario building approach rather than an empirical cost model. Three principles informed their selection: progressive differentiation according to assumed capacity to pay, preservation of substantial public support for lower capacity groups, and the use of sufficiently distinct percentage bands to illustrate how shared financing could operate across different socio-economic circumstances. Thus the scenarios should not be interpreted as evidence that a family in a particular category can afford the specified contribution. Determining implementable rates would require empirical estimation of household income and expenditure, ability and willingness to pay, the actual cost of secondary education per student, enrolment distribution across categories and the fiscal implications of alternative subsidy levels. **Table 6** presents the conceptual rationale underlying the illustrative contribution rates and explains the financing logic associated with each contribution level within the SCSM.

Table 6. Conceptual Rationale for the Illustrative Contribution Rates.

Illustrative Rate	Conceptual Interpretation	Financing Logic
100%	Full household contribution	Represents the upper-bound scenario where relative capacity to contribute is assumed to be highest and no household subsidy is illustrated.
50%	Equal cost sharing	Represents a midpoint scenario in which household and state financing responsibilities are equally shared.
40%	Moderate household contribution	Represents a below-midpoint contribution in which government retains the larger share of financing responsibility.
25%	Limited household contribution	Represents a lower contribution scenario designed to illustrate greater public protection where assumed household capacity is more constrained.
20%	Minimal household contribution	Represents a low-contribution scenario in which the state assumes most of the financing responsibility.
0%/Full support	Full public subsidy	Represents circumstances in which household contribution is not assumed and access is protected through full state support.

Note: The percentages are conceptual scenario values rather than empirically estimated affordability thresholds. Their inclusion illustrates progressive cost sharing within the SCSM and does not constitute a recommendation for immediate policy implementation.

6.8. Illustrative Scenario

- Learners progressing from Category A schools to any SHS/TVET institution may be considered for a contribution level of up to 100% of approved fees.
- Learners progressing from Category B schools to SHS/TVET Categories A, B, and C may be considered for a contribution level of up to 50%, while those placed in Category D institutions may be considered for a contribution level of up to 40%.
- Learners progressing from Category C schools to SHS/TVET Categories A and B may be considered for a contribution level of up to 25%, while those placed in Categories C and D may receive full fee support.
- Learners progressing from Category D schools to SHS/TVET Categories A and B may be considered for a contribution level of up to 40%, while those placed in Categories C and D may be considered for a contribution level of up to 20%.
- Learners progressing from Category E schools may receive full fee support irrespective of placement category.

6.9. Advantages of the SCSM

The above-mentioned SCSM model has several advantages for enhancing secondary education in Ghana. Firstly, it ensures that the government diverts its scarce resources to support students whose parents cannot afford to pay the approved school fees. Secondly, government will exploit the differences of approved school fees to expand infrastructure in SHS Category B and C schools as well as the TVET institutions. Conceptually, it has the potential to reduce existing equity gaps by channelling more public support towards learners with lesser capacity to contribute. In addition, it encourages sharing of secondary education financing responsibility by providing a conceptual basis for those with greater capacity to contribute in addition to the state. It also offers a potential mechanism for enhancing support for TVET by embedding it in a differentiated financing framework, though the extent to which this could influence its participation, skills development or employment outcomes needs to be established empirically.

7. Limitations and Recommendations for Future Research

This study is based on a qualitative conceptual approach and integrative review of existing literature. Therefore, the SCSM represents a conceptual framework rather than an empirically validated policy instrument. The proposed contribution rates have not been derived from household income surveys, willingness-to-pay studies, or national fiscal simulations. Similarly, the categorisation framework used in the model has not been empirically validated using nationally representative educational or socio-economic data. These limitations suggest that the model should be interpreted as a theoretical and policy proposal rather than a final implementation framework. Four analyses would be needed to evaluate the future validity of the above proposals: (1) analysis of household income and expenditures, to identify ability-to-pay distributions; (2) analysis of willingness-to-pay, to establish acceptable levels of household contributions; (3) fiscal simulation using enrolment, per student expenditure and alternative subsidy scenarios, in order to estimate government savings and financing requirements; and (4) consultation and pilot testing in order to evaluate administrative, equity and acceptability implications. These analyses would be the basis for revising, replacing or validating the illustrative contribution rates proposed in this conceptual model.

8. Conclusions

The current research explored the sustainability concerns surrounding Ghana's FSHS policy via an integrative review and thematic synthesis. The results suggest that although it has significantly increased secondary education access, its long-term viability is threatened by financing, institutional, implementation, and policy assessment-related barriers. These findings highlight the need to reformulate the financing strategies to ensure the sustainability of the benefits accrued while addressing the disparities in needs and capacities.

The primary value of this study lies in developing the SCSM, which goes beyond the accepted sharing principles to acknowledge the multi-tiered nature of secondary education and the corresponding heterogeneity of financing responsibilities. Illustrative examples should not be considered the SCSM's innovation, as its main strength lies in linking the linkages between financing, ability to contribute, and target protection to meet the sufficiency-based FSHS financing objective under the fiscal constraints. Overall, this research offers a theoretical policy framework to conceptualize the FSHS financing reform process.

Since the current analysis was theoretical, the SCSM has not been subjected to any empirical analyses. Thus, the proposed categories should not be considered hard thresholds, and the illustrative contribution rates should be seen as approximate figures. Future studies should explore the SCSM's practical implications by focusing on the target population's income and expenditure, willingness and ability to pay, fiscal simulations, consultative processes, and pilot testing. These practical applications will demonstrate whether the model can serve as a valid basis for reform and highlight the required policy shifts, administrative intricacies, and fiscal risks affecting sufficiency-based FSHS sustainability.

Supplementary Materials

The supporting information can be downloaded at https://ojs.ukscip.com/uploads/2/asset-file/2026/10/asset-file_2d3aa28802673b768acffe2e5a836b33.docx.

Author Contributions

Conceptualization, methodology, thematic analysis, model development, writing, and manuscript preparation, M.R.A.; literature review, theoretical development, manuscript review, and editing, A.A.A.-A.; policy analysis, interpretation, critical review of model development, supervision, and manuscript revision, I.S. All authors have read and agreed to the published version of the manuscript.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Institutional Review Board Statement

This study was based exclusively on secondary sources, including peer-reviewed journal articles, policy documents, scholarly books, and postgraduate theses. No human participants were involved, and no interviews, surveys, experiments, or identifiable personal data were collected or analyzed. Consequently, ethical approval from an institutional review board or ethics committee was not required.

Informed Consent Statement

Not applicable.

Data Availability Statement

The data supporting the findings of this study are derived from published literature and policy documents. Additional information may be obtained from the corresponding author upon reasonable request.

Conflicts of Interest

The authors declare that they have no known financial or personal conflicts of interest that could have influenced the work reported in this study.

AI Use Statement

During the preparation of this manuscript, the authors used Microsoft Copilot solely for language editing and clarity enhancement. No AI tools were used for data analysis, interpretation, conceptual development, or generation of scientific content. All outputs were critically reviewed and edited by the authors, who take full responsibility for the integrity, accuracy, and originality of the manuscript.

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