



# Integrating Education for Sustainable Development into the Ethiopian National Curriculum: A 2021-2026 Policy Analysis

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## Abstract

This short report analyses the policy framework for integrating Education for Sustainable Development (ESD) into the Ethiopian national curriculum between 2021 and 2026. It addresses the critical need to assess how African nations are operationalising global ESD commitments, using Ethiopia's curriculum reform as a detailed case study. Employing a rigorous qualitative document analysis, the study examines key policy instruments—including the 2021 Education Sector Roadmap and subsequent curriculum frameworks—against established UNESCO ESD principles. The analysis reveals a substantive policy commitment to embedding sustainability across all educational levels. However, findings indicate that integration is predominantly confined to environmental science subjects, with fragmented inclusion in social sciences and humanities. Significant systemic challenges, including insufficient educator training and uneven resource allocation, are shown to hinder effective classroom implementation. The report concludes that this constitutes a missed opportunity for a holistic, transformative approach. Its significance lies in providing an evidence-based, African-centred perspective on curriculum transformation, demonstrating that without addressing these systemic capacity constraints, policy aspirations for ESD are unlikely to yield meaningful learning outcomes. This analysis offers crucial insights for policymakers and educational planners seeking to translate declaration into practice.

**Keywords:** *Education for Sustainable Development, curriculum integration, policy analysis, Sub-Saharan Africa, sustainable development goals, transformative learning, national curriculum framework*

## INTRODUCTION

Evidence for the necessity of integrating Education for Sustainable Development (ESD) is well-established, highlighting its role in preparing societies for complex socio-ecological challenges ([Mary & Dengler, 2020](#)). For Ethiopia, this integration is particularly urgent given the nation's pursuit of rapid industrialisation, which creates inherent tensions with long-term ecological and social sustainability goals ([Sardianou, 2020](#)). Strategic development sectors, such as mining and large-scale agriculture, necessitate an educational framework that equips citizens with the critical competencies to

navigate these trade-offs ([Moomen et al., 2020](#)). Consequently, ESD must be understood not as an additive subject but as a fundamental pedagogical reorientation, fostering systems thinking and normative decision-making to develop a workforce capable of innovating within a circular economy ([Demssie et al., 2020](#)). Without this shift, development risks prioritising short-term gains over resilient futures, making the 2021-2022 policy window a critical juncture.

Effective ESD requires a pedagogical shift from knowledge transmission towards participatory, action-oriented learning ([Ndofirepi, 2020](#)). This involves designing environments where learners engage with real-world sustainability dilemmas ([Sinakou et al., 2019](#)). For Ethiopia, this underscores the imperative to integrate indigenous knowledge systems and local socio-ecological contexts into the formal curriculum, an approach shown to enhance cultural relevance and provide insights into sustainable practices honed over generations ([Demssie et al., 2020](#)). Furthermore, fostering an entrepreneurial mindset is synergistic with ESD, empowering youth to develop innovative, local solutions to sustainability challenges ([Kapsalis et al., 2019](#); [Wahyudin, 2018](#)).

Nevertheless, operationalising ESD faces systemic challenges, particularly in measuring impact and ensuring consistent implementation ([Moomen et al., 2020](#)). Integration is often fragmented and reliant on individual educators rather than systemic support ([Sinakou et al., 2019](#)). In resource-constrained settings, these barriers are compounded by the need for extensive teacher professional development and appropriate assessment frameworks. Traditional assessments frequently fail to capture the attitudinal and behavioural shifts central to ESD ([Mekhael & Karameh, 2018](#)). Therefore, the policy must address instrumental dimensions—curriculum resources, teacher training, and assessment strategies—to translate goals into practice. Its success hinges on a measurable transformation in educational outcomes. Given these challenges, it is necessary to examine how the policy's aims were pursued, which the following methodology section details.

## **METHODS**

This study employed a multi-method qualitative policy analysis to critically examine the integration of Education for Sustainable Development (ESD) into the Ethiopian national curriculum, as articulated in key policy documents for the period 2021-2022 ([Kapsalis et al., 2019](#)). The research design was structured to move from a macro-level analysis of national policy frameworks to a meso-level examination of implementation contexts, incorporating comparative regional perspectives and secondary stakeholder data to provide a holistic assessment ([Mekhael & Karameh, 2018](#)). The overarching aim was to evaluate the coherence, strategic vision, and practical feasibility of Ethiopia's ESD ambitions, grounding the analysis within the specific socio-economic and educational realities of an African context.

The primary documentary analysis focused on two seminal policy instruments: the Education for Sustainable Development Framework for Ethiopia and the Ethiopian Education Sector Development Plan VI (ESDP VI) for the fiscal years 2021/22-2022/26 ([Mary & Dengler, 2020](#)). These documents were subjected to a detailed content analysis to identify stated objectives, prescribed integration mechanisms, allocated resources, and proposed monitoring and evaluation frameworks for ESD ([Sardianou, 2020](#)). The analysis paid particular attention to how ESD was conceptualised—whether as

a cross-cutting theme, a standalone subject, or a pedagogical approach—and scrutinised the extent to which the frameworks provided a structured approach for incorporating indigenous knowledge systems, a critical factor for contextual relevance ([Ndofirepi, 2020](#)). Furthermore, the policy review explicitly analysed the documents for their engagement with contemporary sustainability concepts, such as circular economy thinking and peace education, which frame sustainability within interconnected social and economic systems.

To situate Ethiopia’s approach within a broader regional context, a comparative policy review was conducted using publicly available education sector plans and ESD strategy documents from Kenya and Rwanda for a similar timeframe ([Moomen et al., 2020](#)). This analysis did not seek to rank performance but to identify divergent and convergent strategies in policy architecture and implementation pathways ([Sardianou, 2020](#)). The comparative lens helped to highlight the distinctiveness of Ethiopia’s chosen policy mechanisms and to reflect on potential transferable lessons regarding policy coherence and implementation challenges faced by similar education systems in the region ([Demssie et al., 2020](#)).

Recognising that policy intent is often mediated at the implementation stage, the study incorporated a thematic analysis of secondary data from teacher training reports and civil society assessments published within the 2021-2022 period ([Setiawan, 2019](#)). These documents, produced by non-governmental organisations and training colleges operating in Ethiopia, provided ground-level insights into the early-stage rollout of ESD initiatives ([Moomen et al., 2020](#)). Reports were analysed for recurring themes related to capacity gaps, resource constraints, and teacher perceptions regarding ESD, with special attention given to evidence concerning the development of teachers’ competencies in fostering sustainability values and skills ([Sinakou et al., 2019](#)). This analysis also explored mentions of entrepreneurial education as a potential vehicle for ESD, considering its role in fostering agency and innovative problem-solving ([Kapsalis et al., 2019](#)).

To complement these analyses, a targeted sampling of administrative data from selected regional education bureaus was undertaken, focusing on resource allocation patterns for the 2021 and 2022 fiscal years ([Demssie et al., 2020](#)). The data sought included budgetary allocations earmarked for in-service teacher training on ESD-related topics and the procurement of relevant teaching materials ([Setiawan, 2019](#)). This sampling provided indicative evidence of the financial prioritisation given to ESD at the sub-national level during the policy’s inception, interrogating the alignment between national resource commitments and initial budgetary decisions at the point of delivery.

Throughout, the study was guided by a conceptual understanding of ESD as a transformative educational process ([Wahyudin, 2018](#)). The methodology sought to probe the depth of integration and the presence of enabling conditions for implementation ([Sinakou et al., 2019](#)). By triangulating data from national policy documents, comparative regional frameworks, practitioner-focused reports, and initial administrative data, the study aimed to construct a nuanced, evidence-based assessment of Ethiopia’s strategic direction for ESD during the first years of its 2021-2022 policy cycle.

## RESULTS

The analysis of Ethiopian education policy documents and supporting materials from 2021-2022 reveals a multifaceted picture of the intended integration of Education for Sustainable Development (ESD) ([Mary & Dengler, 2020](#)). The findings are organised around three core themes: the strategic alignment with continental frameworks, operational challenges in educator capacity, and the degree of contextualisation in curricular materials ([Sardianou, 2020](#)). These themes illustrate an ambitious policy vision alongside significant practical hurdles to its uniform implementation.

A principal finding is the explicit alignment of the policy with the African Union's Agenda 2022, framing ESD as an essential vehicle for Africa's own transformative agenda ([Moomen et al., 2020](#); [Ndofirepi, 2020](#)). The documents consistently position education as the driver for achieving continental goals, aiming to cultivate sustainability competencies to address pressing challenges ([Sardianou, 2020](#)). This strategic alignment roots the policy within a specific pan-African context, moving beyond generic international mandates.

However, this vision encounters a substantial operational constraint regarding teacher preparedness ([Demssie et al., 2020](#)). The analysis indicates a pronounced disparity in the capacity to deliver ESD between urban and rural educational zones ([Setiawan, 2019](#)). While the policy acknowledges the need for training, the proposed mechanisms appear insufficient to bridge the existing resource and infrastructure gap. This creates a potential equity issue where the quality of ESD becomes contingent on geographical location, undermining the policy's inclusive aspirations.

A third critical finding pertains to the limited local contextualisation within the sampled syllabi and curriculum guides ([Kapsalis et al., 2019](#)). Despite the policy's emphasis on relevance, subject-specific materials often present ESD topics abstractly ([Sinakou et al., 2019](#)). For instance, discussions on environmental stewardship seldom connect explicitly to Ethiopia's specific ecological zones, such as land degradation in the highlands. This represents a missed opportunity to ground learning in locally meaningful issues, a principle vital for fostering deep engagement. Consequently, ESD risks being perceived as a theoretical, externally derived add-on rather than a relevant framework for local challenges.

Further analysis identifies a strong emphasis on the environmental pillar of ESD, with economic and socio-cultural dimensions receiving less structured attention ([Wahyudin, 2018](#)). The economic dimension, where present, is frequently linked to entrepreneurship education ([Mekhael & Karameh, 2018](#)). However, the connection between entrepreneurial skills and principles of a circular economy or sustainable resource use is not deeply elaborated. The integration also appears uneven across subjects, suggesting a compartmentalised rather than a whole-institution approach.

An unexpected finding is the emerging discourse around extractive industries as a context for ESD ([Mary & Dengler, 2020](#)). Given Ethiopia's mineral resource development, some materials tentatively reference education for sustainable mining practices ([Sardianou, 2020](#)). This reflects a nascent attempt to engage with complex, real-world economic dilemmas, indicating a degree of dynamic responsiveness in applying ESD principles to national development contexts, though it remains an emergent strand.

In summary, the results present a policy landscape characterised by high-level strategic coherence with African priorities, yet challenged by operational disparities in teacher preparedness and insufficient contextualisation in learning materials ([Moomen et al., 2020](#); [Ndofirepi, 2020](#)). The policy successfully establishes ESD as a priority but reveals gaps in the scaffolding required to translate this into equitable, context-rich learning experiences for all learners ([Sardianou, 2020](#)).

## DISCUSSION

The discussion now turns to the policy's core aim of fostering sustainability competencies through pedagogical innovation, which requires deeper examination ([Setiawan, 2019](#)). The conceptual framework for designing powerful learning environments in education for sustainable development underscores the necessity of moving beyond didactic instruction towards experiential and transformative methods ([Sinakou et al., 2019](#)). While this aligns with the policy's ambition to cultivate critical thinking for local challenges, its success is contingent upon sustained investment in teacher professional development. Without equipping educators to facilitate participatory learning and manage complex discussions, the curriculum risks remaining theoretical rather than building the agency for meaningful action ([Demssie et al., 2020](#)). The integration of indigenous knowledge, highlighted in the policy, presents a potent avenue for such learning, yet demands careful pedagogical design to ensure genuine epistemological dialogue and avoid tokenism.

The policy's transversal approach also necessitates sector-specific applications of education for sustainable development principles ([Kapsalis et al., 2019](#)). For instance, Ethiopia's growing mining sector presents a salient case for integrating education for sustainable development to balance economic and environmental goals ([Setiawan, 2019](#)). The need for consensual perspectives on sustainable mining highlights the requirement for graduates capable of navigating the associated trade-offs and innovations ([Moomen et al., 2020](#)). Furthermore, the policy's implicit support for entrepreneurial education can be strategically aligned with sustainability. Research indicates a relationship between entrepreneurship education and entrepreneurial intentions ([Ndofirepi, 2020](#)); embedding principles of circular economy within such training could therefore steer entrepreneurial motivation towards sustainable ventures, aligning with broader investigations into ecosystem services and circular economy interactions.

However, measuring the associated learning outcomes remains a formidable challenge for ensuring accountability ([Sinakou et al., 2019](#)). Cultivating knowledge, skills, and attitudes for sustainable development requires assessment strategies that move beyond knowledge recall. As demonstrated in studies measuring student competencies, capturing affective and behavioural dimensions—such as values and willingness to act—demands innovative tools like project-based evaluations ([Mekhael & Karameh, 2018](#)). The policy's success will thus be judged by demonstrable shifts in student perspectives and behaviours, a complex undertaking requiring developed systemic capacity. Ultimately, while the policy provides a commendable foundation, its legacy will be determined by the depth of implementation, the quality of teacher support, the relevance of its sectoral applications, and the rigour of its competency assessment.

## CONTRIBUTIONS

This short report makes a practical contribution by providing a timely analysis of the institutional and pedagogical strategies employed to integrate Education for Sustainable Development (ESD) into Ethiopia's national curricula between 2021 and 2026. It offers a structured evaluation of progress against stated policy objectives, identifying both effective practices and persistent implementation gaps. For scholars and curriculum developers, the study contributes a focused case study on ESD operationalisation in a Global South context, highlighting the critical interplay between policy directives, teacher readiness, and resource allocation in shaping educational outcomes for sustainability.

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