



THE ROLE OF STAKEHOLDERS IN LEADING AND MANAGING EDUCATIONAL RESILIENCE FOR SUSTAINABILITY

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Abstract

Educational resilience for sustainability refers to the ability of educational systems to adapt, recover, and thrive amid challenges, ensuring long-term viability and effectiveness. This concept involves continuous improvement and innovation to meet evolving socio-economic and environmental demands. Stakeholder involvement is crucial for enhancing educational resilience for sustainability. Research has shown that one key reason for the ineffectiveness of educational resilience for sustainability is the lack of broad stakeholder engagement; the government alone cannot shoulder this responsibility. Therefore, this study aims to explore the stakeholders who should be involved in leading and managing educational resilience for sustainability. Through the lens of a constructivist research paradigm, the study is located in a generic qualitative research design with the use of one-on-one semi-structured interviews with 38 participants from 12 stakeholder groups for the data collection and the use of qualitative content analysis techniques for analysing the data. The findings identify the political class, teachers, reform facilitators, proprietors of private schools, students, parents, the legislature, the government, traditional rulers, religious leaders, NGOs, teacher training institutions, teachers' unions, and the ministry of education as essential stakeholders that should be involved in leading and managing educational resilience for sustainability. The study recommends involving all stakeholders in every facet of resilience-building to achieve effective management and leadership in educational resilience for sustainability. Such inclusive involvement ensures diverse perspectives and expertise are integrated, fostering a comprehensive and effective approach to addressing sustainability challenges. Moreover, stakeholder engagement promotes shared responsibility and commitment, ultimately enhancing the capacity of educational systems to adapt and thrive in the face of adversity, thereby propelling sustainability.

Keywords: *Educational resilience, Government, Leadership and management, Resilience-building, Stakeholders engagement, Sustainability.*

Introduction

Educational resilience for sustainability is the capacity of educational systems to adapt, thrive, and endure challenges while ensuring long-term viability. With global pressures such as climate change, socio-economic inequalities, technological advancements, and public health crises, education systems must adopt innovative and sustainable approaches to maintain their integrity and relevance. Resilience entails not only recovering from disruptions but also evolving to meet emerging needs, positioning education as a cornerstone of societal development (Bridges et al., 2023). Sustainability in education emphasises proactive systems capable of addressing immediate challenges and long-term trends. It underscores the integration of resilience with broader social, economic, and environmental goals, fostering systems thinking, collaboration, and adaptability to sustain educational quality amid uncertain futures (Zabaniotou, 2020). This study highlights the essential role of stakeholders in fostering educational resilience. Effective stakeholder collaboration is crucial for addressing multifaceted challenges threatening educational stability and adaptability (Oloba, 2024). This research aims to identify the roles of various stakeholders, explore their contributions to resilience, and develop actionable insights for sustainable educational growth.

Educational systems worldwide face unprecedented challenges, driven by rapid technological change, environmental degradation, socio-economic disparities, and health crises. These pressures compromise the stability, quality, and sustainability of education. Resilience enables systems to recover and adapt, while sustainability ensures long-term alignment with broader societal goals (Scordato & Gulbrandsen, 2024). Traditionally, governments have led resilience efforts. However, limited resources and slow responses often hinder their effectiveness (Kapucu et al., 2024). A broader, multi-stakeholder approach is increasingly recognised as essential, incorporating contributions from teachers, students, parents, NGOs, private sectors, and local communities (Siarova & van der Graaf, 2022). Despite its potential, significant gaps remain in frameworks guiding such collaborations.

Despite growing recognition of educational resilience, many systems remain vulnerable to disruptions caused by crises such as natural disasters and economic shocks. Over-reliance on government agencies often results in fragmented and inadequate responses, missing the opportunity to leverage diverse stakeholder expertise and resources. Existing literature

emphasises the importance of cross-sector collaboration in fostering resilience. Ramolobe and Khandanisa (2024) highlight the value of involving local communities and private sectors, while Gannon et al. (2021) demonstrate how multi-stakeholder partnerships can create adaptive, context-specific solutions. However, empirical research on specific stakeholder roles and actionable frameworks remains scarce. Research has extensively addressed resilience in crisis recovery, often focusing on individual stakeholders or well-resourced contexts. However, it lacks emphasis on long-term sustainability, marginalised voices, and resource-constrained environments where resilience is most needed. The under-representation of community perspectives—such as those of students, parents, and cultural leaders—limits the development of comprehensive, context-sensitive resilience strategies (Esmail et al., 2023). This study adopts a holistic approach, addressing these gaps by exploring diverse stakeholder roles and fostering inclusive frameworks for resilience and sustainability.

This research seeks to redefine the conceptualisation and operationalisation of educational resilience by emphasising stakeholder engagement. It aligns with global priorities, such as the United Nations Sustainable Development Goal 4, advocating for inclusive, equitable, and quality education. Stakeholder collaboration fosters shared responsibility, innovation, and adaptability, particularly in contexts of resource constraints and socio-political complexities. Effective collaboration among diverse stakeholders strengthens educational systems' capacity to adapt and thrive (Oloba, 2024). By bridging theoretical frameworks with practical applications, this study contributes to developing educational systems that are resilient, sustainable, equitable, and responsive to diverse community needs. Its findings will provide actionable recommendations for promoting a culture of shared responsibility and collaboration, ensuring the sustainability of education amid evolving global challenges.

Objectives

To determine the stakeholders that should be involved in leading and managing educational resilience for sustainability.

To explore the roles of stakeholders in leading and managing educational resilience for sustainability.

Methodology

This study adopts a qualitative research approach, underpinned by a constructivist research paradigm, to explore the stakeholders involved in leading and managing educational resilience

for sustainability. The constructivist paradigm aligns with the study's aim to understand and interpret the lived experiences and perspectives of diverse stakeholders in the Nigerian educational context (Creswell & Poth, 2016). By focusing on the subjective meanings that individuals ascribe to their experiences, this paradigm facilitates an in-depth exploration of the roles and contributions of various stakeholder groups. The research design is phenomenological, chosen to capture and analyse the lived experiences of stakeholders regarding their involvement in educational resilience. Phenomenology provides a framework for understanding the essence of participants' experiences, emphasising the subjective and contextual nature of the phenomenon under investigation (van Manen, 2016). This design is particularly suited for exploring complex, multifaceted phenomena like educational resilience and sustainability, where stakeholders' insights are central to developing comprehensive solutions.

Data were collected through one-on-one, semi-structured interviews, conducted both in person and online, to accommodate the diverse and geographically dispersed nature of the participants. Semi-structured interviews were selected for their flexibility, allowing the researcher to probe deeper into participants' responses while maintaining consistency across interviews (Kvale & Brinkmann, 2015). The interview guide was developed to align with the study's objectives, focusing on identifying stakeholders, exploring their roles, and understanding their contributions to managing educational resilience. The study's sample comprised 38 participants, purposefully selected from 12 stakeholder groups: students, teachers' associations, private school proprietors, parents, teacher training institutes, administrators, facilitators, traditional institutions, NGOs, religious bodies, legislatures, and political leaders. Purposeful sampling was employed to ensure the inclusion of diverse perspectives and expertise relevant to educational resilience (Patton et al., 2015). Participants were drawn from various regions in Nigeria to capture the contextual and cultural diversity of the educational landscape.

Thematic analysis was adopted to analyse the interview data. This method involves systematically identifying, organising, and interpreting patterns of meaning across the dataset (Braun & Clarke, 2006). Thematic analysis was chosen for its flexibility and suitability for qualitative research, allowing the researcher to generate rich and nuanced insights into stakeholders' experiences and perceptions. The analysis followed Braun and Clarke's six-phase framework: familiarisation with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. Ethical approval for the study was obtained from the relevant institutional review board. Participants were provided with

detailed information about the study's purpose, methods, and ethical safeguards, including confidentiality and voluntary participation. Written informed consent was obtained before participation, ensuring that participants' rights and autonomy were respected throughout the research process.

Result and Discussion

The data identify the political class, teachers, reform facilitators, proprietors of private schools, students, parents, the legislature, the government, traditional rulers, religious leaders, NGOs, teacher training institutions, teachers' unions, and the ministry of education as essential stakeholders that should be involved in leading and managing educational resilience for sustainability.

Political Class

The data highlights the political class as a critical stakeholder in fostering educational resilience for sustainability. Their role is central in formulating and implementing policies that enhance the education system, including improvements in infrastructure, curriculum, and teacher training. Participants emphasised the importance of policy-driven reforms, with one stating: *"Politicians and policymakers must prioritise education by developing policies that address the long-term challenges faced by schools, including inadequate infrastructure and outdated curricula."* Another participant reinforced this point, stressing the need for strategic action: *"Without strategic reforms from the political class, achieving a resilient and sustainable education system would remain a dream."* Beyond policy development, the political class plays a crucial role in raising awareness about educational resilience and sustainability. They advocate for the adoption of global frameworks, such as the UN's Sustainable Development Goals (SDGs). A participant highlighted this advocacy role: *"Political leaders must use their platforms to advocate for sustainable education practices that align with SDG 4."* Additionally, the political class is responsible for developing emergency education plans to mitigate the impacts of crises such as pandemics, conflicts, or natural disasters. A participant reflected on their role during the COVID-19 pandemic: *"During the pandemic, we saw the political class step in with emergency learning plans, but more proactive measures are needed for future crises."* Another key responsibility of the political class is encouraging the integration of technology to enhance education's accessibility, flexibility, and adaptability. One participant

underscored the urgency of this initiative: *"Investing in digital learning platforms and technology is essential, and the political class must lead this transformation."*

The data presentation underscores the political class as a fundamental stakeholder in fostering educational resilience for sustainability, with a range of responsibilities spanning policy development, resource allocation, advocacy, crisis management, and technological innovation. As noted by participants, policy development is central to creating a resilient educational system, with reforms addressing long-term challenges such as infrastructure and outdated curricula (Pillay & Shipalana, 2023). Advocacy and awareness-raising about educational resilience, including the promotion of global frameworks like the UN's SDGs, is another significant role of political leaders, as their platforms are critical for fostering broad-based support for sustainable education practices. Furthermore, in crisis management and response, the political class is instrumental in developing emergency education plans that ensure learning continuity during disruptions like pandemics or natural disasters, as the COVID-19 crisis exemplified (Lennox et al., 2021). Additionally, the promotion of technological innovation is essential, with the political class being responsible for facilitating the integration of digital learning platforms to enhance educational accessibility and adaptability, particularly in underserved regions (Haleem et al., 2022). Collectively, these roles reflect the political class's comprehensive influence in creating a resilient and sustainable education system capable of navigating present and future challenges.

Teachers

Teachers are focal stakeholders in fostering educational resilience for sustainability. Their diverse roles contribute significantly to promoting sustainable practices within educational institutions and beyond. Participants indicate that teachers play a vital role in adapting and integrating sustainability concepts into their lessons, fostering students' understanding and appreciation of sustainable practices. One participant emphasised the critical role of teachers in bridging knowledge and action: *"Teachers are the bridge between knowledge and action, integrating sustainability into lessons to inspire the next generation."* Another participant highlighted the importance of embedding sustainability themes in the curriculum: *"By weaving sustainability themes into the curriculum, teachers ensure that students see its relevance in daily life."* Beyond teaching, teachers also model sustainable practices in their daily actions, inspiring students to adopt eco-friendly habits. A participant noted: *"When students see their teachers practicing sustainability, they are more likely to emulate those behaviours."* Teachers

further encourage critical thinking and problem-solving, empowering students to address sustainability challenges creatively. One teacher shared: *"By challenging students to analyse sustainability problems, teachers empower them to become future change-makers."* Additionally, teachers actively advocate for sustainable practices within schools, often initiating programs such as recycling, energy conservation, and biodiversity projects. A student acknowledged their teachers' efforts, stating: *"Many sustainability initiatives in our school were led by teachers who saw the need for change and took action."* Finally, teachers equip students with essential life skills such as adaptability, collaboration, and resourcefulness, enabling them to tackle future sustainability challenges. A participant emphasised this role: *"Through teamwork and problem-solving tasks, teachers prepare students to navigate the complexities of sustainability issues."*

Teachers are central to fostering educational resilience for sustainability, acting as key agents in integrating sustainability practices into their schools and communities. As curriculum innovators, they play an essential role in adapting educational content to include sustainability, ensuring that students recognise its relevance in their everyday lives. Teachers also serve as role models, demonstrating sustainable practices that inspire students to adopt eco-friendly behaviours, a critical component of cultivating long-term sustainable habits (Rahmania, 2024). Furthermore, by fostering critical thinking and problem-solving skills, teachers empower students to address complex sustainability challenges with creativity and resourcefulness, a necessary competency in a rapidly changing world. As agents of change, teachers initiate and lead sustainability projects, such as recycling and energy conservation, directly contributing to reducing the environmental footprint of schools (Uzorka et al., 2024). By developing life skills such as collaboration and adaptability, teachers equip students to navigate the challenges of sustainable development. Overall, teachers are indispensable in leading and managing educational resilience for sustainability, empowering future generations to contribute to sustainable development in both local and global contexts.

Reform Facilitators

The data revealed that reform facilitators play an essential role as stakeholders in promoting educational resilience for sustainability. Their contributions span systemic, institutional, and individual levels, ensuring that education systems adapt effectively to emerging challenges. Participants emphasised that reform facilitators are drivers of change, ensuring that educational reforms align with sustainability goals. One participant noted: *"Reform facilitators drive the*

change needed to adapt education systems to global sustainability goals.” Another participant highlighted the importance of effective implementation, stating: *“They ensure that reforms are not just policies on paper but are implemented effectively to address real-world challenges.”* Reform facilitators also focus on empowering teachers, students, and school leaders through training and development programs that enhance essential skills such as critical thinking, problem-solving, and adaptability. A participant shared: *“Through workshops and capacity-building programs, reform facilitators help students, teachers, and school leaders become more resilient and prepared for the demands of sustainable education.”* Additionally, reform facilitators collaborate with policymakers to advocate for policies that support the SDGs and resilience-building. One respondent explained: *“Their advocacy ensures that educational reforms reflect the goals of sustainability and resilience.”* Another critical role reform facilitators play is in introducing innovative teaching and learning practices, such as project-based learning and the integration of technology. This approach fosters both academic resilience and sustainability. As one participant stated: *“They bring fresh ideas and innovative methods that transform traditional classrooms into hubs of sustainable learning.”* Furthermore, reform facilitators work on building partnerships between schools, communities, and external organisations to create a strong support network for implementing sustainable practices. One participant described this role as follows: *“Reform facilitators connect schools with community resources, fostering collaboration that strengthens educational resilience.”* Lastly, they continuously assess the impact of sustainability initiatives and educational reforms, using data-driven approaches to refine strategies and improve outcomes. Participants noted: *“Reform facilitators use data to monitor progress, ensuring reforms achieve their intended goals.”* *“Their evaluations help refine strategies and ensure continuous improvement in education systems.”*

Overall, reform facilitators are vital stakeholders in fostering educational resilience for sustainability, as they contribute across multiple dimensions of education systems, ensuring their adaptability and long-term viability in the face of emerging challenges. As change agents, they guide the implementation of educational reforms aligned with sustainability goals, ensuring that policies are effectively put into practice to address real-world issues (Buerkle et al., 2023). Their role as capacity builders is essential in empowering teachers, students, and school leaders through training programs that enhance critical thinking, adaptability, and problem-solving skills, all of which are fundamental for sustainability in education. Reform facilitators also act as advocates for policy, bridging the gap between schools and policymakers

to ensure that educational reforms prioritise the SDGs. Their collaboration with schools, communities, and external organisations fosters partnerships that enhance educational resilience, while their resource management ensures that financial, human, and material resources are efficiently allocated to support sustainable practices (Zickafoose et al., 2021). Additionally, as monitoring and evaluation experts, reform facilitators use data-driven approaches to refine strategies and ensure continuous improvement in education systems, which is key for maintaining resilience (Buerkle et al., 2023). Collectively, these roles highlight the multifaceted contributions of reform facilitators in leading and managing educational resilience, ensuring that education systems are both sustainable and capable of navigating the complexities of a rapidly changing world.

Proprietors of Private Schools

Proprietors of private schools are vital stakeholders in promoting educational resilience for sustainability. Their leadership, policy-making, and strategic initiatives significantly impact the adoption of sustainable practices in private education. Proprietors set the long-term vision and direction for their schools, ensuring that educational practices align with sustainability goals, such as environmental awareness and resource efficiency. One proprietor highlighted the influential role they play in shaping the school's sustainability direction: *"Proprietors have the ability to influence the school's overall direction, ensuring sustainability becomes a core value."* Another proprietor emphasised their role in integrating sustainability into the curriculum, ensuring that students are equipped with knowledge on environmental conservation, renewable energy, and social responsibility: *"Proprietors ensure the curriculum addresses key sustainability topics, preparing students for a greener future."* Beyond curriculum development, proprietors also collaborate with parents, teachers, students, and the wider community to foster a supportive environment for sustainability. A proprietor described this collaborative approach: *"Proprietors actively involve parents and teachers in sustainability initiatives, building a strong community commitment."* Another participant added how this engagement extends to local community partnerships, enhancing the impact of sustainability efforts: *"Their engagement with local communities creates opportunities for joint sustainability projects."* In addition to fostering collaboration, proprietors establish policies that promote sustainability and resilience within their schools. One proprietor explained their role in implementing practical measures: *"School proprietors set policies that encourage sustainable practices like recycling and energy conservation."* Lastly, proprietors also

advocate for sustainable education practices beyond their institutions, influencing the broader private education sector. One proprietor reflected on the importance of this advocacy: *“Their advocacy helps position sustainability as a priority in private education, which inspires others in the sector to adopt resilience-focused education practices.”*

Proprietors of private schools serve as key stakeholders in fostering educational resilience for sustainability, with their roles encompassing strategic leadership, curriculum innovation, stakeholder engagement, professional development, policy-making, monitoring and evaluation, and advocacy. Their leadership ensures that schools' long-term vision aligns with sustainable practices, such as environmental conservation and resource efficiency, positioning sustainability as a core value (Abo-Khalil, 2024). By promoting the integration of sustainability into the curriculum, proprietors shape students' attitudes towards social responsibility and environmental awareness, preparing them for a sustainable future. Additionally, proprietors' engagement with parents, teachers, and communities strengthens the school's support system for sustainability, creating collaborative partnerships that enhance resilience (Oloba, 2024). Furthermore, the development of policies related to sustainability, waste management, and energy conservation ensures that schools maintain a consistent focus on resilience (Ramos, 2024). In addition, their advocacy for sustainable education practices positions sustainability as a priority in the private education sector, inspiring broader adoption of resilience-focused practices. Through these concerted efforts, private school proprietors significantly contribute to building resilient and sustainable educational systems that benefit not only their institutions but also the broader society.

Students

Students are vital stakeholders in fostering educational resilience for sustainability. Their engagement in leadership, innovation, and advocacy plays a significant role in building a sustainable future within the educational community. Participants highlighted that students often assume leadership roles by mentoring peers, sharing knowledge on sustainable practices, and cultivating an eco-friendly mindset. One participant noted, *“Students are effective in influencing their peers by demonstrating sustainable practices and encouraging others to join environmental initiatives.”* Another participant emphasised the impact of student-led mentoring programs: *“Through mentoring programs, students create awareness and build a culture of sustainability among their peers.”* Students' involvement extends beyond leadership to practical problem-solving in sustainability. They contribute creative solutions in areas such as

waste management, energy conservation, and sustainability education. A participant shared, *“Students often come up with creative ideas for reducing waste and conserving energy within the school.”* Collaboration is another area where students excel. By engaging in joint projects with peers, educators, and community members, they strengthen networks that bolster educational resilience and sustainability. As one participant expressed, *“Collaborative projects between students and teachers have strengthened our school’s sustainability initiatives.”* The influence of students also reaches into the broader community. Participants highlighted the positive outcomes of partnerships with local organisations, noting, *“By connecting with community organisations, students bring fresh ideas and resources into school projects.”* Moreover, students play a critical role in policy-making dialogues within their schools. Their advocacy for sustainable institutional changes—such as implementing energy-efficient infrastructure and adopting green practices—drives tangible improvements. A participant remarked, *“When students voice their concerns during policy discussions, it often leads to actionable changes.”* Another added, *“Student representation in policy forums ensures their perspectives on sustainability are heard and valued.”*

The data revealed that students play a vital role in promoting educational resilience for sustainability, actively engaging in initiatives that enhance long-term environmental and educational stability. As peer educators and mentors, students demonstrate sustainable practices, fostering a culture of sustainability within their school communities. Additionally, students contribute significantly to problem-solving by suggesting innovative solutions for sustainability challenges, such as waste reduction and energy conservation. Through collaboration and networking, students build essential connections with teachers and community stakeholders, enhancing resilience through shared knowledge and resources (Armstrong et al., 2021). Furthermore, students play a crucial role in policy discussions, ensuring that sustainability initiatives are integrated into school governance and decision-making. This active involvement underscores the importance of empowering students as change-makers in sustainability efforts, demonstrating that their engagement is not just beneficial but essential for building resilient educational systems.

Parents

Data shows that parents play a paramount role as stakeholders in fostering educational resilience for sustainability. Their involvement spans from the home environment to school collaboration and community initiatives, significantly contributing to the sustainability and

resilience of education systems. One of the key ways parents support educational resilience is by providing emotional, physical, and mental support. They create conducive learning spaces at home that enable students to focus and thrive during disruptions. A parent explained: *“When schools were closed, parents stepped up by turning their homes into mini-classrooms to ensure learning continued.”* Another parent emphasised the impact of a structured home environment on their child’s academic performance: *“My child’s focus improved because we ensured a quiet and organised space for studying.”* Beyond emotional and environmental support, parents also play a critical role in ensuring access to essential educational resources, such as books, technology, and other materials, particularly during times when schools face resource limitations. One parent shared: *“Providing my child with a laptop during the pandemic made it easier for them to attend online classes and complete assignments.”* Similarly, another parent highlighted their efforts in supplementing school resources: *“We invested in additional learning materials to supplement the limited resources provided by the school.”* Parents also actively engage with teachers and school administrators, participating in meetings, decision-making, and advocacy to ensure smooth and sustainable learning experiences. One parent noted: *“Attending school meetings helped us stay informed and collaborate on strategies to support students during challenging times.”* In addition to direct engagement with schools, parents monitor their children’s academic progress, identify challenges early, and work with educators to address obstacles that may hinder sustainable learning outcomes. A parent described their approach: *“By monitoring my child’s assignments, I could identify when they needed additional help and communicate this to their teacher.”* Furthermore, parents advocate for reforms and policies that support sustainable and resilient educational systems. This includes promoting inclusive education, technological integration, and environmental education. One parent explained their advocacy efforts: *“We pushed for the inclusion of digital literacy in the curriculum to prepare our children for the future.”*

Parents are fundamental stakeholders in fostering educational resilience for sustainability, significantly shaping students' learning experiences and the overall adaptability of education systems. Their involvement extends beyond the home environment to active collaboration with schools and community-based initiatives, all of which are essential for ensuring long-term educational sustainability. The creation of supportive learning environments at home, where parents provide emotional and academic support, has been shown to contribute significantly to student focus and success, especially during disruptions such as school closures (Butler et al., 2022). Moreover, parents play a critical role in resource provision, ensuring that students have

the tools needed to engage in remote or hybrid learning, which is particularly important when schools face resource constraints. Active collaboration with schools, such as attending meetings and engaging with teachers, enables parents to support decision-making and enhance communication, ensuring that challenges are addressed promptly (Fullan, 2020). Additionally, parents' involvement in monitoring progress allows for early identification of academic challenges, fostering a partnership with educators to ensure students' needs are met. By participating in these diverse roles, parents significantly contribute to educational resilience, ensuring that education systems remain adaptive, inclusive, and sustainable in the face of global challenges.

Legislature

Participants highlight that the legislature plays a key role as a stakeholder in promoting educational resilience for sustainability by shaping policies, allocating resources, and ensuring effective governance. Legislators are instrumental in creating and reforming policies that address the challenges faced by education systems, such as infrastructure needs, curriculum updates, and funding shortages. One participant emphasised the importance of policy development, stating: *“Legislators need to ensure that policies prioritise resilience by addressing infrastructure gaps and promoting sustainability in education.”* Another participant highlighted the role of the legislature in budget allocation, stressing that financial support is essential for sustaining educational resilience: *“Without adequate budget approvals from the legislature, schools cannot meet the growing demands for sustainable infrastructure and resources.”* Legislatures also oversee the implementation of policies and regulations, ensuring adherence to standards that promote sustainability in education. As one participant noted: *“Oversight by legislators ensures that policies are not just written but also effectively implemented at all levels.”* Another participant reinforced this point by emphasising the role of compliance monitoring: *“The legislature guarantees compliance with sustainability guidelines in schools.”* Moreover, participants highlighted that engaging with educators, parents, students, and community organisations enables legislators to craft policies that are responsive to real-world educational challenges. One participant explained: *“By consulting teachers and parents, the legislature ensures that policies are relevant to the actual needs of schools.”*

The legislature plays a crucial role as a stakeholder in promoting educational resilience for sustainability, as its actions directly influence the development, implementation, and sustainability of educational systems. Legislative involvement in policy development and

reform is vital for addressing infrastructure needs, curriculum updates, and funding shortages, which are key to enhancing resilience (Pillay & Shipalana, 2023). Legislators also ensure the allocation of necessary resources, as funding approvals are essential for providing quality education and supporting sustainable infrastructure. Regulatory oversight is another significant area, where legislators ensure that policies are not only enacted but also effectively implemented at all levels, promoting adherence to sustainability guidelines (Drago & Gatto, 2022). Furthermore, engaging with various stakeholders, such as educators, parents, and community organisations, enables legislators to craft responsive policies that meet real-world needs. Collectively, these roles underscore the legislature's decisive function in shaping educational systems that are adaptive, sustainable, and capable of withstanding future challenges.

Government

The government plays a pivotal role in ensuring educational resilience for sustainability by shaping policies, providing financial support, raising awareness, and fostering partnerships. Participants emphasised that government intervention is essential in integrating sustainability into education through policy development, funding, and collaborative efforts. Several participants highlighted that the government is responsible for formulating and enforcing policies that integrate sustainability into the education system. These policies influence curriculum development, promoting initiatives such as environmental education and green schools. One participant noted: *“Government policies mandating environmental education have significantly influenced the curriculum across all levels of schooling.”* Another participant emphasised the importance of national guidelines, stating: *“National guidelines on green schools provide a framework for promoting sustainability in education.”* Participants also acknowledged that providing financial support is a core government responsibility, ensuring adequate resources for sustainability-driven projects in schools. This includes funding for renewable energy solutions and research on educational resilience. One participant shared: *“Government grants have enabled schools to install solar panels, reducing their ecological footprint.”* Another participant reinforced this point by stating: *“Funding from the education ministry has supported research projects that explore sustainable practices in teaching.”* In addition to policy-making and funding, participants pointed out that the government plays an advocacy role by raising awareness about sustainability and resilience in education. One participant remarked: *“Public campaigns led by the government have highlighted the need for*

resilient education systems.” Furthermore, participants emphasised that the government fosters collaborations between schools, local communities, businesses, and international organisations. These partnerships enable the sharing of expertise, resources, and best practices. A participant highlighted this by stating: *“Government-led initiatives have fostered collaborations with private organisations to fund sustainable education projects.”* Another participant discussed the value of international partnerships: *“Partnerships with international bodies have introduced global best practices in sustainability to local schools.”*

The government's role as a stakeholder in educational resilience for sustainability is multifaceted and crucial for ensuring that educational systems can thrive amid contemporary challenges. One of the key areas of government involvement is policy development and implementation, where policies that mandate environmental education and support green schools create a foundation for sustainability in education. Furthermore, the government plays a vital role in funding and resource allocation, directing financial resources towards renewable energy projects and research on sustainable educational practices. As highlighted in the data presentation, government-funded initiatives such as grants for solar panels and research projects are essential in advancing sustainability goals. Finally, public awareness campaigns and collaboration with various stakeholders, including NGOs and international organisations, help expand the reach and impact of sustainability efforts, fostering a shared responsibility for educational resilience. The government's involvement is indispensable in shaping an educational system that is both resilient and sustainable through policies, funding, infrastructure, professional development, and partnerships.

Traditional Rulers

The data revealed that traditional rulers play a critical role in promoting educational resilience for sustainability. They are influential leaders who provide cultural guidance, engage with their communities, and advocate for educational improvements. One participant shared how traditional rulers emphasise the importance of education, stating: *“Our traditional ruler frequently reminds us that education is the foundation of our community's future.”* Another key aspect of traditional rulers' involvement is their role in engaging the community. They foster a culture that values education and resilience, with one participant noting: *“The traditional council organises annual community meetings where the importance of education is always a priority topic.”* Additionally, traditional rulers are instrumental in mobilising resources for educational initiatives. For instance, one participant mentioned: *“Our king approached local*

businesses to secure funding for new school materials.” Cultural relevance is also a key focus for traditional rulers. They ensure that educational content aligns with cultural values, making education more meaningful for students. As one participant explained: *“The chief emphasised the inclusion of cultural studies in the school curriculum to preserve our heritage.”* Finally, traditional rulers contribute to monitoring and evaluating educational initiatives to ensure accountability and sustainability. One participant observed: *“The traditional council regularly visits schools to assess progress and address challenges.”*

Traditional rulers play a significant role in promoting educational resilience for sustainability, offering leadership, cultural guidance, and advocacy that fosters community support and educational development. Their contributions extend across various domains, such as advocacy and awareness, where they raise the importance of education within their communities. For instance, traditional rulers’ leadership often galvanises local efforts to send children to school and improve educational infrastructure. Furthermore, community engagement is central to their role, as they organise meetings and workshops that emphasise the importance of education, cultivating a shared commitment to educational resilience (De Weger et al., 2016). Traditional rulers are also key in resource mobilisation, securing funding and materials to support educational initiatives, thus strengthening the educational system's sustainability (Oloba, 2024). Additionally, traditional rulers integrate cultural values into education, ensuring that it remains relevant to the local context and contributes to preserving cultural heritage. Their role in monitoring and evaluation also enhances accountability, ensuring that educational initiatives are assessed and adjusted for long-term success (Oloba, 2024). Overall, traditional rulers are integral in ensuring that educational resilience is not only maintained but also thrives in alignment with local cultural and social dynamics, contributing to the long-term sustainability of education systems.

Religious Leaders

Religious leaders play a crucial role in fostering educational resilience and sustainability through their moral authority, community influence, and extensive networks. Their contributions span advocacy, resource mobilisation, and spiritual guidance, making them essential stakeholders in promoting sustainable education. Participants highlight how religious leaders use their platforms to advocate for education and sustainable practices within their communities. By integrating these messages into sermons and religious teachings, they emphasise the long-term value of education: One participant shared, *“During sermons, our*

pastor consistently emphasises the value of education in shaping a sustainable future." Another added, *"The imam reminded us of our responsibility to ensure children in the community have access to quality education."* Religious leaders help align educational and sustainability efforts with ethical and community values by reinforcing moral responsibilities: A participant noted, *"Our spiritual leader spoke about how education and sustainability are moral duties for everyone."* Another shared, *"Religious teachings remind us to protect resources for future generations through sustainable practices."* Beyond advocacy, religious leaders actively facilitate collaborations among various stakeholders to strengthen educational resilience: A participant explained, *"Our church partnered with an NGO to provide scholarships for vulnerable students."* Religious leaders also provide spiritual and emotional support to both educators and students, helping them navigate challenges and remain motivated: One participant recalled, *"Our spiritual leader held a prayer session to uplift teachers and students during exam preparation."* Another noted, *"The priest's encouragement helped students stay motivated despite challenges caused by the pandemic."*

It is evident that religious leaders play a critical role in promoting educational resilience and sustainability, leveraging their community influence, ethical guidance, and resource mobilisation abilities. They serve as powerful advocates for education, often using their platforms to create awareness about the importance of quality education and sustainable practices. Through sermons, religious leaders emphasise the societal value of education, urging their communities to prioritise both learning and sustainable development, as seen in the quotes from pastors and imams in the data presentation. Religious leaders also provide ethical guidance, framing education and sustainability as moral imperatives, thus reinforcing community values that align with sustainable development (Tushar, 2017). Additionally, by offering spiritual and emotional support, they help maintain the mental and emotional well-being of educators and students, particularly in challenging times, such as during crises or exam periods. Their ability to mediate conflicts and promote collaboration further enhances their role in strengthening educational resilience. As evidenced by the examples of churches and synagogues facilitating partnerships, religious leaders are vital in creating networks of support that bridge gaps and contribute to building more sustainable and resilient educational systems. Overall, the contributions of religious leaders are indispensable in leading efforts to integrate education with sustainable practices, ensuring long-term stability and resilience.

NGOs

NGOs play a critical role in fostering educational resilience and sustainability through advocacy, capacity building, resource mobilisation, and strategic collaborations. Participants highlighted various ways in which NGOs contribute to these efforts. One participant emphasised the advocacy role of NGOs in shaping policies that support resilient and sustainable educational systems: *“Our NGO worked closely with the education ministry to push for policies that integrate disaster preparedness into school curricula.”* Another participant discussed how NGOs enhance the capacity of educators, administrators, and communities by providing training and workshops: *“The training program organised by the NGO taught us how to implement sustainability projects in our schools.”* In terms of resource mobilisation, NGOs help secure financial and material support for educational initiatives. A participant shared how this assistance helped sustain learning during crises: *“The NGO provided laptops and internet access to help students continue learning during the pandemic.”* Another participant highlighted the role of NGOs in supporting sustainable infrastructure in schools: *“They offered grants that enabled us to set up solar energy systems in our school.”* Collaboration with multiple stakeholders is another key function of NGOs. One participant described how partnerships between NGOs, schools, and local businesses contributed to resilience programs: *“Our partnership with an NGO brought together schools and local businesses to create a community-based resilience program.”* Similarly, another participant noted how NGOs facilitate connections between schools and expert organisations: *“The NGO connected us with other organisations, which provided technical expertise for our sustainability projects.”*

NGOs play an essential role in fostering educational resilience and sustainability, particularly through their work in advocacy, capacity building, resource mobilisation, monitoring and evaluation, and strategic partnerships. In terms of advocacy, NGOs have been instrumental in influencing policy development aimed at integrating resilience strategies into educational systems. For example, they collaborate with governments to push for the inclusion of disaster preparedness in curricula, as seen in statements from stakeholders who noted the NGOs' role in policy advocacy (Lassa et al., 2023). In capacity building, NGOs provide essential training and workshops that enhance the ability of educators and administrators to manage crises and implement sustainable practices, a critical aspect highlighted by several stakeholders involved in such programs (Fullan, 2020). NGOs are also key players in resource mobilisation, securing financial and material resources to support educational resilience projects, such as providing

laptops for online learning during the pandemic. Through partnerships, NGOs foster collaborations among multiple stakeholders, thereby amplifying the effectiveness of resilience-building initiatives and ensuring a more sustainable and inclusive approach to education (Lassa et al., 2023). Overall, NGOs' multifaceted contributions strengthen educational systems, making them more adaptive and capable of withstanding future challenges while ensuring long-term societal benefits.

Teacher Training Institutions

Teacher training institutions play a significant role in shaping future educators who can lead and manage educational resilience and sustainability. The data revealed that these institutions design and integrate curricula that emphasise sustainability, resilience, and adaptability. By incorporating these concepts into teacher education, they ensure that future teachers are well-prepared to address them in their classrooms. One participant from a teacher training institution explained how their curriculum has evolved to prioritise sustainability: *"Our teacher training program now includes a module on integrating sustainability into daily teaching practices. This prepares our students for the challenges of the future."* Another participant highlighted their institution's efforts in fostering resilience through curriculum revisions: *"We have revamped our curriculum to focus on resilience and adaptive learning, ensuring our teachers can manage classroom challenges and promote sustainable education."* Beyond curriculum development, teacher training institutions provide ongoing professional development opportunities for teachers, focusing on innovative teaching practices, resilience-building strategies, and sustainability education. A faculty member emphasised the importance of continuous learning for educators: *"Through professional development programs, we are helping teachers learn how to incorporate sustainability into their classrooms and develop resilient mindsets."* In addition to training, these institutions conduct research on best practices for educational resilience and sustainability, ensuring that their findings translate into actionable strategies for educators. One respondent explained: *"Our research department regularly publishes findings on best practices for teaching sustainability, which has influenced how we train our future teachers."*

Teacher training institutions also build partnerships with schools, community organisations, and other stakeholders to support and implement sustainability and resilience initiatives. A participant shared how such collaborations enhance teacher preparation: *"We collaborate with local schools to pilot sustainability programs and share insights with our future teachers about*

real-world applications of these practices.” Furthermore, these institutions play an advocacy role by influencing educational policies to incorporate sustainability and resilience-building practices. A respondent described their institution’s engagement with policymakers: *“Our institution actively engages with policymakers to ensure teacher training programs incorporate sustainable and resilience-building practices.”* Another participant highlighted their direct involvement in shaping educational policies: *“We’ve worked closely with educational authorities to push for policies that integrate sustainability into teacher education.”* Finally, teacher training institutions implement systems to assess and evaluate the effectiveness of sustainability and resilience practices in education. They use this data to continuously refine their training programs. A respondent explained: *“We use feedback from our graduates and school partners to assess how well our training programs prepare teachers for integrating sustainability in education.”* Another participant emphasised the importance of ongoing evaluation: *“Regular evaluations help us refine our programs to ensure we are equipping teachers with the skills necessary to manage challenges and sustain educational growth.”*

Teacher training institutions play a paramount role in shaping educators who can lead and manage educational resilience and sustainability. Their contributions span multiple domains, including curriculum development, professional development, research, leadership training, and community engagement. As noted in Abo-Khalil (2024), these institutions are integrating sustainability and resilience into their curricula, preparing future teachers to tackle both current and emerging challenges. By embedding sustainability in training programs, institutions ensure that educators are well-equipped to foster adaptable, resilient classrooms. Professional development programs further reinforce this foundation, offering educators ongoing support and strategies to build resilient learning environments, especially during disruptions such as pandemics or natural disasters (Fu & Zhang, 2022). Moreover, the focus on research and innovation helps translate theoretical frameworks into actionable practices, guiding educators in implementing effective resilience strategies. Furthermore, the emphasis on partnerships with schools, community organisations, and policymakers strengthens the alignment between teacher training and real-world applications, fostering a collaborative environment for resilience (Levinson et al., 2020). Overall, teacher training institutions serve as crucial hubs for preparing educators to navigate the complexities of sustainable education, ensuring that teachers possess the skills to foster resilient and adaptive learning communities.

Teachers' Unions

Teachers' unions are crucial stakeholders in fostering educational resilience and sustainability. Their influence is evident across several key areas, including policy advocacy, enhancing teacher working conditions, fostering collaboration, and ensuring equity and inclusion. The insights gathered from participants highlight these roles in depth. Teachers' unions play a significant role in advocating for policies that promote resilience within the education system. These policies are designed to support teachers, students, and schools, especially during challenging times. According to one union representative, *"Teachers' unions have been instrumental in pushing for policies that ensure schools are resilient in the face of challenges like economic downturns or natural disasters."* Another essential role of teachers' unions is to foster collaboration and networking among educators. Through various forums and conferences, unions enable teachers to share best practices and strategies for overcoming educational challenges, which is vital for building resilience and sustainability. As one participant noted, *"The union organises forums and conferences where teachers can share successful strategies for building resilience in their classrooms."* Another teacher added, *"Through our networks, teachers can collaborate across schools to tackle common challenges and learn from one another's experiences in promoting sustainability in education."* During crises, such as the COVID-19 pandemic, teachers' unions provide critical support, offering resources, guidance, and advocacy for essential educational tools. These actions ensure that the education system can swiftly adapt and recover. One union leader explained, *"During the COVID-19 pandemic, our union was at the forefront of advocating for remote learning resources, ensuring that teachers had the tools necessary to continue teaching and supporting students."* Teachers' unions also focus on ensuring that educational policies and practices promote equity and inclusion, which is key to building a more resilient system. This approach ensures that all students, especially those from marginalised communities, receive the support they need. As one union member shared, *"Our union has been a strong advocate for inclusive policies that ensure marginalised students receive the support they need to succeed in resilient education systems."*

Teachers' unions play a central role in fostering educational resilience and sustainability, influencing policy, improving working conditions, and promoting collaboration among educators. Their advocacy efforts are critical in shaping policies that ensure education systems can withstand challenges such as economic instability or natural disasters. Furthermore, unions facilitate collaboration and networking, enabling educators to share best practices and

strategies for addressing educational challenges, which strengthens the overall system's adaptability and sustainability (Stevenson & Milner, 2021). Additionally, unions are pivotal during crises, offering immediate support, advocating for remote learning resources, and ensuring the continuity of education during emergencies like the COVID-19 pandemic. Finally, their work in promoting equity and inclusion ensures that marginalised groups are not left behind, contributing to a more resilient and sustainable education system for all students (Ainscow, 2020). Teachers' unions, through their multifaceted roles, are indispensable in leading the charge toward a more resilient and sustainable educational framework.

Ministry of Education

The Ministry of Education plays a pivotal role in leading and managing educational resilience for sustainability. Through a range of functions, including policy development, resource allocation, capacity building, and curriculum design, the ministry ensures that education systems are resilient, adaptable, and aligned with sustainability principles. Data revealed that the ministry formulates and implements policies that promote educational resilience and sustainability. These policies integrate sustainable practices into curricula and school operations, ensuring that education systems are capable of responding to challenges while contributing to long-term sustainability goals. One participant shared: *"The Ministry of Education has been instrumental in developing national policies that integrate sustainability into the core of education, ensuring that schools are prepared to teach resilience and sustainability practices."* The ministry also ensures equitable distribution of resources to support schools in building resilience. This includes funding for infrastructure improvements, teacher training, and crisis preparedness, all of which enhance the sustainability and resilience of the education system. Another participant noted: *"By allocating funds to improve school infrastructure and support teacher training, the Ministry is laying the foundation for educational resilience, especially in vulnerable regions."* In terms of professional development, the ministry provides training for educators and school leaders. This training focuses on resilience strategies, sustainable practices, and adaptive teaching methods, equipping teachers with the necessary skills to manage challenges and promote sustainability in their classrooms. One participant commented: *"Professional development programs provided by the ministry have empowered educators with the knowledge to teach sustainability and build resilience in their classrooms."* Another added: *"The ministry's capacity-building initiatives have*

strengthened the ability of teachers to respond to crises and incorporate sustainability into their teaching.”

The ministry also plays a key role in developing and revising curricula to include sustainability education and resilience-building components. This ensures that students gain an understanding of environmental, social, and economic sustainability, preparing them to become resilient citizens. A participant explained: *“Curriculum revisions driven by the ministry emphasise sustainability, ensuring that students not only learn about environmental issues but also how to act on them in their communities.”* Another participant highlighted: *“Through incorporating resilience into educational frameworks, the Ministry ensures that the curriculum fosters critical thinking about sustainable practices and adapts to future global challenges.”*

The ministry establishes systems to monitor and evaluate the effectiveness of resilience and sustainability initiatives in schools. These systems ensure that policies and programs are achieving their intended impact and that necessary adjustments can be made. A participant shared: *“The ministry’s monitoring systems have provided essential data on the success of resilience and sustainability programs, enabling us to make informed decisions about necessary adjustments.”* Another added: *“By conducting regular evaluations, the ministry ensures that schools’ efforts to build resilience are on track and aligned with sustainability goals.”* Additionally, the ministry offers technical support and guidance to schools on best practices for resilience and sustainability. This includes advice on disaster risk reduction strategies and managing sustainable school operations. One participant said: *“The Ministry’s technical support teams have provided schools with expert guidance on disaster risk management and how to implement sustainability practices in their daily routines.”* Finally, the ministry raises awareness about the importance of educational resilience and sustainability among all stakeholders, including policymakers, educators, students, and the public. This advocacy fosters a collective commitment to sustainable education. A participant emphasised: *“The Ministry has been a leading advocate for integrating sustainability into the educational agenda, emphasising its importance at national conferences and community forums.”*

The Ministry of Education plays a crucial role in leading and managing educational resilience for sustainability by integrating strategic initiatives that foster adaptability and long-term viability in education systems. Policy development is one of the key areas where the ministry ensures that resilience and sustainability are incorporated into educational frameworks. As highlighted by Abo-Khalil (2024), policies that promote sustainability can equip schools with the necessary tools to respond to challenges. The ministry also ensures the equitable allocation

of resources, focusing on infrastructural improvements and teacher training, which are critical to building resilience, particularly in vulnerable areas. This resource distribution helps create a foundation for sustainable educational practices. Furthermore, capacity building through professional development programs empowers educators with skills to adapt to evolving challenges, such as climate change or public health crises (Leonardi et al., 2024). Curriculum design, too, is key, as it integrates sustainability into educational content, fostering a generation capable of addressing global challenges. Monitoring and evaluation systems ensure that initiatives are continually assessed, allowing for adjustments to maintain their effectiveness. The ministry's advocacy and awareness campaigns mobilise broad support, making educational resilience a priority across various sectors. Together, these initiatives form a comprehensive approach to ensuring that educational systems remain resilient, adaptable, and aligned with global sustainability goals.

Recommendations

Based on the findings, the following recommendations were made:

- **Foster Inclusive Stakeholder Engagement**

To ensure a holistic approach to building educational resilience, all identified stakeholders, including policymakers, educators, students, parents, and community representatives, should be actively involved in decision-making processes. This can be achieved through inclusive forums, focus groups, and participatory workshops where diverse voices are heard and valued. Educational administrators and the Ministry of Education can spearhead these initiatives, ensuring that marginalised groups are also represented. By integrating multiple perspectives, educational systems could gain a comprehensive understanding of challenges and co-develop innovative, context-specific solutions. This inclusivity not only strengthens ownership of decisions but could also enhance the relevance and effectiveness of interventions.

- **Promote Collaborative Leadership**

Building educational resilience requires the shared leadership of diverse stakeholders, including government entities, local communities, traditional authorities, and religious groups. Local governments and school boards should facilitate collaboration by creating structures where all parties can participate in leadership roles. This distributed responsibility fosters a collaborative environment that promotes resource sharing, joint problem-solving, and collective ownership of educational outcomes. For example, religious leaders could help mobilise communities to support school initiatives, while traditional authorities could lend

cultural legitimacy to resilience-building efforts. Collaborative leadership ensures that resilience strategies are rooted in local contexts, enhancing their acceptance and sustainability.

- **Establish Continuous Stakeholder Dialogue Platforms**

Formal channels for ongoing dialogue are critical to keeping stakeholders aligned with the goals of educational resilience and sustainability. The Ministry of Education and local education offices can establish these platforms by organising regular stakeholder meetings, creating digital communication hubs, and hosting community-based forums. For instance, digital platforms like WhatsApp or Zoom can be used to share updates and gather feedback, while community forums allow for face-to-face interaction and problem-solving. Continuous dialogue ensures transparency, fosters trust, and allows for real-time adjustments to resilience strategies, making them more adaptive to emerging challenges.

- **Leverage Local Leadership and Community Support**

Local leaders, such as traditional rulers and religious figures, can play essential roles in encouraging community involvement and fostering support for schools. These leaders should be engaged through targeted outreach by school administrators and education officials to participate in school governance, advocacy, and fundraising efforts. For example, a village chief might organise community clean-up days for school maintenance, or a religious leader might promote educational initiatives during sermons. Leveraging local leadership creates stronger bonds between schools and their communities, encourages localised solutions, and enhances the cultural relevance of resilience and sustainability efforts.

- **Develop Policy Frameworks that Encourage Resilience**

Policymakers, legislators, and the Ministry of Education must collaborate to design and implement policies that prioritise resilience through adaptability and sustainability. This process could involve consulting education experts, researchers, and community stakeholders to ensure the policies are evidence-based and contextually relevant. Policies should focus on supporting innovation, promoting investment in educational technology, and aligning national education strategies with global sustainability goals, such as the United Nations Sustainable Development Goal 4. Effective policy frameworks provide a clear roadmap for building resilient educational systems, fostering accountability, and ensuring long-term sustainability.

- **Integrate Environmental and Socio-Economic Issues in Curriculum**

Curriculum reform should be guided by reform facilitators, curriculum developers, and education experts to reflect contemporary socio-economic and environmental challenges. This process can involve integrating topics such as climate change, renewable energy, and social

justice into lesson plans and teaching materials. Schools can collaborate with environmental organisations to provide practical learning experiences, such as planting trees or managing recycling programs. Equipping students with knowledge and skills to address these challenges prepares them to become environmentally conscious leaders who can contribute to sustainable development and resilience in their communities.

- **Strengthen Public-Private Partnerships (PPP)**

Collaboration between public education systems and private entities can significantly enhance the financial and infrastructural capacity of schools. Ministries of Education, in partnership with business councils and educational NGOs, should establish frameworks for PPPs that include clear roles, responsibilities, and benefits for all parties. For example, private companies could sponsor technology upgrades in rural schools, while public institutions provide regulatory support. By pooling resources and expertise, PPPs could enable schools to build more resilient systems capable of maintaining quality education during crises while fostering innovation and scalability in resilience strategies.

- **Monitor and Evaluate Resilience-Building Initiatives**

Developing robust mechanisms for monitoring and evaluation is essential to ensure the effectiveness of resilience-building initiatives. It is recommended that the Ministry of Education, in collaboration with research institutions and community stakeholders, establish metrics to measure the success of interventions, such as school preparedness during crises or improvements in sustainability practices. Regular data collection, feedback sessions, and impact assessments allow for identifying areas that require improvement. Findings from monitoring and evaluation efforts can be used to refine strategies, ensuring continuous improvement and accountability. This iterative process builds confidence among stakeholders and strengthens the long-term sustainability of educational resilience initiatives.

Conclusion

Leading and managing educational resilience for sustainability requires a holistic and collaborative approach that actively involves diverse stakeholders. By fostering inclusive engagement, promoting shared leadership, and establishing continuous dialogue platforms, educational systems can build resilience that adapts to local contexts and challenges, enabling them to thrive in the face of adversity and thereby promoting sustainability. Engaging local leadership and leveraging community support are essential for developing sustainable, context-specific solutions. Policy frameworks that encourage flexibility and innovation, along with an

updated curriculum that integrates socio-economic and environmental issues, will equip students to tackle future sustainability challenges. Strengthening public-private partnerships and establishing robust mechanisms for monitoring and evaluating initiatives ensure that resilience-building efforts remain adaptive and effective. These collective efforts form the foundation for a sustainable and resilient education system that can thrive amid changing global conditions.

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