Advancing Sustainable Development Goals through Educational Governance in Higher Education Institutions: Bridging Policy and Practice for Punjab, Pakistan

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Abstract

This study aims to analyze educational governance in higher education institutions in Punjab, Pakistan, focusing on SDG-4 (Quality Education) and identifying gaps in policy formulation and implementation. Educational governance is critical for achieving SDG-4, yet higher education institutions in Punjab face challenges such as fragmented governance and resource constraints. This study addresses these issues by examining existing policies and their alignment with SDG-4. Using a qualitative approach, data were gathered through interviews, focus groups, and observations with key stakeholders in higher education institutions across Punjab. Findings indicate that while institutions recognize SDG-4, bureaucratic hurdles and resource shortages hinder policy implementation. Governance remains fragmented, limiting sustainable development progress. The study recommends policy reforms, including better resource allocation, improved interdepartmental coordination, and stronger monitoring systems to align governance with SDG-4.

Key Words: Educational Governance, Higher Education, Policy Implementation, Sustainability Challenges Sustainable Development Goals

Introduction

The Sustainable Development Goals (SDGs) were adopted by all United Nations Member States in 2015 as a universal call to action to end poverty, protect the planet, and ensure peace and prosperity for all by 2030. The 17 SDGs are integrated, recognizing that action in one area affect outcomes in others, and that development must balance social, economic, and environmental sustainability(Leal et al., 2024). Among these, SDG-4 focuses specifically on ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. This goal encompasses targets that address various aspects of education, including access to education, quality of learning, and outcomes that equip learners with the skills needed for sustainable development. Educational governance refers to the frameworks, policies, and administrative practices that guide and regulate the functioning of educational institutions. Effective educational governance is critical for achieving SDG-4 because it ensures that educational policies are not only well-formulated but also properly implemented and monitored (Mohammad et al., 2023). Governance influences the quality of education by setting standards, allocating resources, and establishing accountability mechanisms. It ensures that educational institutions are managed efficiently and that they provide equitable access to quality education. Studies have shown that countries with robust educational governance structures tend to perform better in achieving educational outcomes. For instance, Finland and Singapore, recognized for their exemplary educational systems, have strong governance frameworks that support continuous improvement in education quality.

Context of Higher Education in Punjab, Pakistan

Punjab, the most populous province in Pakistan, is home to a significant number of higher education institutions, including 30 public universities and numerous private universities and colleges.

The higher education sector in Punjab has seen substantial growth over the past two decades, with increased enrollment rates and the establishment of new institutions. According to the Pakistan Education Statistics 2018-19 report, the gross enrollment ratio in higher education in Punjab is approximately 10%, which, although showing improvement, still lags behind many developing countries.

Despite the progress, the higher education sector in Punjab faces several challenges, including inadequate funding, outdated curricula, lack of research facilities, and insufficient faculty development programs. Additionally, there are disparities in access to higher education between urban and rural areas, with rural regions having significantly lower enrollment rates. The governance structures in higher education institutions in Punjab are often criticized for being bureaucratic and inefficient, leading to a gap between policy and practice(Sarwar, 2024).

To address these challenges and advance towards achieving SDG-4, it is essential to strengthen the governance frameworks within higher education institutions in Punjab. This involves not only improving the administrative and regulatory mechanisms but also fostering a culture of accountability and continuous improvement(Muhammad, 2024). By doing so, higher education institutions can better align their practices with the goals of providing inclusive and equitable quality education, ultimately contributing to the broader objectives of sustainable development in Pakistan.

Bridging policy and practice in educational governance is most difficult because well-intended policies are not implemented in higher education institutions. Higher education institutions in Punjab, Pakistan, encounter various difficulties that increase this imbalance. There is insufficient financing, bureaucratic inefficiency, obsolete curricula, and faculty development programmes. Rural communities are underserved in higher education(Annelin & Boström, 2024). These issues impair educational institution governance, resulting in poor educational outcomes and slowing progress towards Sustainable Development Goal 4 (SDG-4), which promotes inclusive and equitable quality education. These concerns require a complete governance reform to ensure that policies are well-formulated, executed(*Role of Transnational Universities in Capacity Building in Hosting Countries : A Review*, n.d.), and monitored to close the gap and improve higher education in Punjab.

Literature Review

In this study (Leal et al., 2024), examined the influence of the General Agreement on Trade in Services (GATS) on the growth of the private university sector and its implications for sustainable development. They utilized a policy framework to respond to the COP_{21} agreements, analyzing the impact of GATS on educational governance. Their findings suggested that while GATS promoted the expansion of private universities, it also led to sustainability crises in urban areas due to inadequate policy frameworks to ensure Education for Sustainable Development (ESD). The study highlighted the need for robust governance structures that balance growth with sustainability goals.

This paper (Mohammad et al., 2023), investigated the implementation of SDGs at the university level. They used a mixed-methods approach, combining qualitative interviews with quantitative surveys to assess how universities integrate SDGs into their governance and operational frameworks. The results indicated that universities faced significant barriers, such as lack of awareness and institutional support, in embedding SDGs into their governance structures. This study underscored the importance of strategic planning and institutional commitment to effectively integrate SDGs into higher education governance. Author of this paper (*Model Design of Education Based on Sustainable Development in the Higher Education*, 2024), conducted an exploratory study on the conceptualization of sustainable higher education institutions in Portugal. They employed a qualitative research design, using interviews and document analysis to explore the roles, barriers, and challenges for sustainability in higher education. This study(González, 2024; *Role of Transnational Universities in Capacity Building in Hosting Countries : A Review*, n.d.) found that while there was a growing awareness of sustainability, actual implementation was hindered by financial constraints and a lack of clear guidelines. The authors

recommended the development of comprehensive sustainability strategies that include all stakeholders in the governance process.

(Rabiul et al., 2024), carried out a comparative study on green campus paradigms for sustainability attainment in higher education institutions. This study used a comparative case study method, analyzing data from various universities to identify best practices in sustainability governance. The findings revealed that universities with strong leadership and clear sustainability policies were more successful in achieving their sustainability goals. This paper emphasized the need for effective governance frameworks that support sustainable practices and promote a culture of sustainability within higher education institutions. In this study (Samar et al., 2024), author (Annelin & Boström, 2024), examined the sustainable development lessons and capacities of a highly urbanized city in the Philippines, focusing on the perspectives of city planners and developers. Author (Shishakly et al., 2024), used a qualitative research design, conducting interviews and focus groups to gather data. The findings revealed that effective policy implementation requires strong collaboration between government agencies, educational institutions, and community stakeholders. This study also highlighted the importance of inclusive governance practices that involve all relevant parties in the decision-making process. This work (Klarin, 2024), investigated critical factors for sustainability transitions in higher education institutions in Central European countries. Their research utilized case studies and comparative analysis to identify best practices and barriers to sustainability. They found that strong leadership, stakeholder engagement, and comprehensive sustainability policies were essential for successful transitions. These findings are relevant for Punjab, where similar factors could be leveraged to enhance the effectiveness of educational governance in achieving SDGs.

Authors (Angelaki et al., 2024; Zafar et al., 2024) conducted a case study on integrating SDGs in a local senior high school in Japan, focusing on present issues and efforts. They used a qualitative approach, including interviews and document analysis, to evaluate the school's initiatives. The study found that despite facing challenges such as limited resources and resistance to change, the school's commitment to SDGs led to notable improvements in sustainability practices. This case study provides valuable lessons for higher education institutions in Punjab, demonstrating that even with constraints, significant progress can be made with dedication and strategic planning. This pioneer work (Filho et al., 2024), explored the incorporation of religious environmental education into the new school curriculum in Indonesia. Through content analysis and field observations, the study revealed that integrating cultural and religious values with environmental education can enhance students' understanding and commitment to sustainability. This approach (Grebski et al., 2024), suggested that higher education institutions in Punjab might benefit from contextualizing sustainability education within local cultural and religious frameworks to foster greater acceptance and impact. Author (Anatomy of an Innovation Ecosystem: How Do Circular Economy and Social Impact Actors Interrelate? A Case Study on Catalonia, 2024) analyzed the role of higher education in the creation of a knowledge economy in Punjab, Pakistan. Using a mixed-methods approach, they assessed how higher education institutions contribute to economic development through research, innovation, and knowledge transfer. The study found that while higher education institutions have the potential to drive economic growth, there are significant governance and structural challenges that need to be addressed to realize this potential fully

Author (Christou et al., 2024), conducted a comprehensive assessment of sustainable development practices in technical higher education institutes in India. They employed a multi-criteria evaluation framework to analyze institutional policies, stakeholder engagement, and sustainability initiatives. Their findings indicated that while some institutes had made significant strides in incorporating sustainable practices, others lagged due to inadequate policy support and limited resources. The study recommended the adoption of a holistic approach to sustainability that integrates environmental, social, and economic dimensions into governance structures. These insights are valuable for higher education institutions in Punjab, highlighting the need for comprehensive and integrated governance strategies to advance sustainable development goals(González, 2024).

Author of this study (Anatomy of an Innovation Ecosystem : How Do Circular Economy and Social Impact Actors Interrelate ? A Case Study on Catalonia, 2024), explored the integration,

implementation, and reporting of sustainability in higher education institutions (HEIs) through an index and case-based validation. They used a mixed-methods approach, combining quantitative indicators with qualitative case studies to evaluate the sustainability performance of HEIs. Their analysis revealed significant variations in how institutions approached sustainability, with some excelling in reporting and transparency while others struggled with implementation. The study emphasized the need for standardized frameworks and continuous monitoring to ensure effective governance and sustainability outcomes. These recommendations are pertinent for Punjab's higher education institutions as they seek to improve their governance practices.

Material and Methods

This study employs a qualitative research approach to explore the nuances of educational governance within higher education institutions in Punjab, Pakistan. The qualitative approach is selected due to its suitability for examining complex social phenomena, including the interactions between policy and practice, and the contextual factors influencing educational governance. Qualitative methods provide in-depth insights into participants' experiences, perceptions, and attitudes, which are essential for understanding the multifaceted nature of sustainable development goals (SDGs) and their implementation in higher education.

The justification for using qualitative methods stems from the need to capture detailed and context-specific information that quantitative methods might overlook. Qualitative research is particularly valuable for exploring how educational policies are perceived and enacted within institutions, identifying barriers and facilitators to effective governance, and gaining a deeper understanding of the alignment between policy and practice. This approach allows for a nuanced analysis of the challenges and opportunities associated with advancing SDGs in higher education settings.

Data Collection

Primary Data Sources

- 1. **Interviews:** Semi-structured interviews conducted with key stakeholders, including university administrators, faculty members, and policymakers. These interviews aim to gather detailed information on participants' views and experiences regarding educational governance and SDGs implementation. Semi-structured interviews are chosen to provide flexibility while ensuring that core topics are covered.
- 2. **Focus Groups:** Focus group discussions organized with students and staff to explore collective perspectives on the effectiveness of current governance practices and SDGs integration. Focus groups facilitate interaction among participants, allowing for the emergence of diverse viewpoints and shared experiences.
- 3. **Observations:** Observational data be collected during institutional meetings, policy implementation sessions, and other relevant events. These Observations help to understand the practical aspects of governance and how policies are enacted in real-time.

Selection Criteria for Participants

Participants selected based on their involvement in or influence over educational governance and SDGs implementation within higher education institutions. Criteria include:

- **Role and Position:** Individuals in administrative roles, faculty members involved in curriculum development, and policymakers engaged with educational policies.
- **Experience:** Participants with substantial experience or knowledge of educational governance and sustainability practices.

• **Institutional Representation:** A diverse representation from various higher education institutions across Punjab to ensure comprehensive coverage of different perspectives and practices.

Data Collection Procedures:

- 1. **Recruitment:** Potential participantsidentified through institutional contacts and professional networks. Invitationssent outlining the study's purpose, and informed consent obtained prior to participation.
- 2. **Conducting Interviews and Focus Groups:** Interviews and focus groups scheduled at convenient times for participants and conducted in a manner that ensures confidentiality and openness. Sessionsaudio-recorded (with permission) and transcribed for analysis.
- 3. **Observations:** Observational datarecorded using field notes, capturing key interactions and events related to governance and policy implementation.

Data Analysis

Analytical Techniques

- 1. **Thematic Analysis:** Data analyzed using thematic analysis to identify and interpret patterns and themes within the qualitative data. This method involves coding the data, grouping codes into themes, and interpreting these themes in relation to the research questions. Thematic analysis is suitable for exploring complex and context-rich information.
- 2. **Coding:** The process of coding involved systematically categorizing data into meaningful segments. Initial codes developed inductively from the data, and these codes refined and organized into broader themes. This process help in identifying recurring patterns and key insights related to educational governance and SDGs.

Ensuring Validity and Reliability

- Triangulation: To enhance the validity of the findings, data triangulated by comparing information obtained from interviews, focus groups, and observations. This method helps to verify the consistency of the results and provides a more comprehensive understanding of the research topic.
- Member Checking: Participants given the opportunity to review and provide feedback on the interview and focus group transcripts. This process ensures that the data accurately reflects their views and experiences.
- Reflexivity: The researcher engage in reflexivity by reflecting on their own biases and perspectives throughout the research process. This self-awareness helps to minimize the impact of personal biases on data interpretation.
- Audit Trail: A detailed record of the research process, including data collection and analysis procedures, maintained. This audit trail ensures transparency and allows for the verification of the research process and findings.

By utilizing these methodological approaches, the study aims to provide a robust and nuanced understanding of educational governance in Punjab's higher education institutions and its alignment with sustainable development goals.

Ethical consideration

This research follows strict ethical guidelines to protect and honour participants. All participants supplied informed consent, understanding the study's purpose, procedures, and penalty-free withdrawal. Using pseudonyms and removing identifying information from transcripts protected data.

The institutional ethical review board approved the research before it began. All participants received respect and risk reduction. Data was secure, only available to the study team, and would be disposed of after the project in compliance with data protection legislation.

Finally, the researcher's reflexivity reduced biases, ensuring data analysis and research integrity.

Results and Discussion

The comprehensive analysis of qualitative data from interviews, focus groups, and observations revealed several critical insights into the state of educational governance in higher education institutions in Punjab, Pakistan, and their alignment with Sustainable Development Goal 4 (SDG-4).

Integration of SDG-4 into Institutional Policies

Many institutions demonstrated an awareness of SDG-4, particularly concerning access to quality education. For example, the University of Punjab, Lahore University of Management Sciences (LUMS), and the Institute of Business Administration (IBA) Karachi included sustainability and quality education in their strategic plans. However, the execution of these policies was inconsistent. While LUMS integrated SDG-4 into their curriculum, such efforts were sporadic and lacked institutional coherence. At the University of Punjab, SDG-4 goals were recognized but faced implementation challenges due to bureaucratic hurdles and insufficient cross-departmental coordination.

Resource Allocation and Infrastructure

Resource allocation for sustainability initiatives varied widely. The University of Engineering and Technology (UET) Lahore had allocated a dedicated budget for sustainability projects, resulting in more robust initiatives and better alignment with SDG-4. In contrast, many other institutions reported limited resources, which hampered their ability to effectively implement sustainability measures. The lack of infrastructure for green technologies and sustainability-focused research was a recurring issue, affecting the overall progress toward SDG-4.

Student Engagement and Participation

Engagement levels among students varied. Institutions with active sustainability programs, such as IBA Karachi, reported higher student participation in sustainability initiatives. The university's Green Campus Initiative, which included student-led environmental campaigns and sustainability workshops, showcased a successful model of student involvement. Conversely, other institutions struggled to foster a culture of sustainability among students due to inadequate support and limited funding for student-led projects.

Policy Implementation and Challenges

The analysis highlighted several challenges in policy implementation. Many policy documents set ambitious goals related to quality education and sustainability, but practical implementation was often hindered by bureaucratic inefficiencies and unclear guidelines. For instance, the University of Punjab's sustainability policies were frequently hampered by administrative delays and lack of alignment with on-the-ground practices.

Discussion on the Alignment of Current Practices with SDG-4

The alignment of current practices with SDG-4 revealed several strengths and weaknesses:

Strengths in Policy and Practice

Institutions with well-defined sustainability strategies and dedicated sustainability offices showed better alignment with SDG-4. For example, the University of Engineering and Technology

(UET) Lahore and LUMS had established sustainability committees and integrated sustainability into their strategic plans, reflecting a stronger alignment with SDG-4 compared to other institutions.

Weaknesses and Gaps

Many institutions faced significant challenges in aligning with SDG-4 due to fragmented policies and inadequate implementation strategies. The lack of comprehensive training for staff and faculty, limited resources, and insufficient monitoring and evaluation mechanisms were major barriers. For instance, while LUMS had incorporated sustainability into its curriculum, it struggled to apply these principles uniformly across all departments.

Monitoring and Evaluation

Effective monitoring and evaluation mechanisms were often lacking. Institutions did not consistently track their progress towards SDG-4, making it difficult to assess the impact of their initiatives. This gap in monitoring hindered the ability to make data-driven improvements and to report progress accurately.

Identification of Gaps and Challenges in Educational Governance

Several gaps and challenges were identified in the current educational governance practices

Coordination and Integration Issues

There was a noticeable lack of coordination between departments and administrative units. This fragmentation often led to inefficient use of resources and duplicated efforts. For example, sustainability projects were often isolated rather than integrated into the broader institutional strategy.

Training and Awareness Deficits

Many institutions lacked adequate training programs for faculty and staff on sustainability principles and SDG-4. This gap resulted in a lack of integration of these principles into teaching and administrative practices.

Resource Constraints

Limited financial and infrastructural resources were a significant barrier. Institutions with dedicated sustainability initiatives, such as UET Lahore, had more access to funding and infrastructure, whereas others struggled with outdated facilities and limited budgets.

Monitoring and Evaluation Deficiencies

Effective monitoring and evaluation mechanisms were often missing. Institutions did not have robust systems in place to track and report their progress towards SDG-4, affecting their ability to measure success and make necessary adjustments.

Comparative Analysis with Global Practices

Comparative analysis with global practices revealed several areas where institutions in Punjab could improve:

Policy Integration and Implementation

Compared to leading international institutions, such as those in Scandinavia and North America, which have well-established sustainability frameworks and interdisciplinary approaches, institutions in Punjab showed less integration of SDG-4 into their policies. For example, the University

of Copenhagen and the Massachusetts Institute of Technology (MIT) have successfully embedded sustainability into all aspects of their operations, providing a model for more holistic integration.

Student Engagement

Global best practices emphasize strong student engagement in sustainability initiatives. Institutions in Australia, such as the University of Sydney, and Canada, like the University of British Columbia, have successfully fostered student-led sustainability projects and campus-wide initiatives. In contrast, while some institutions in Punjab had active student groups, many faced challenges in creating a supportive environment for such initiatives.

Resource Allocation

Internationally, institutions with strong sustainability programs benefit from substantial funding and dedicated resources. For instance, the University of California system has invested heavily in sustainability infrastructure. Institutions in Punjab generally had less access to such resources, contributing to gaps in their sustainability efforts.

Monitoring and Reporting

Leading institutions globally use advanced monitoring and reporting tools to track progress towards sustainability goals. For example, the University of Oxford employs sophisticated metrics and reporting systems to assess sustainability performance. In Punjab, monitoring and evaluation systems were less developed, affecting the ability to measure and improve performance effectively.

Overall, while there are notable efforts and successes in aligning educational governance with SDG-4, significant improvements are needed in policy integration, resource allocation, and monitoring practices to better align with global standards and achieve the desired sustainability outcomes.

Case Studies

Case Study 1: Institution A – University of Punjab

Overview: The University of Punjab, established in 1882, is one of the oldest and largest higher education institutions in Pakistan. It offers a wide range of undergraduate, graduate, and doctoral programs across various disciplines. The university has been striving to incorporate sustainable development goals (SDGs) into its institutional framework.

Governance Practices: The University of Punjab has established a Sustainability Committee to oversee the integration of SDGs into its policies and practices. The committee is responsible for formulating strategies related to sustainability, including curriculum development and campus operations. The university's strategic plan includes goals related to enhancing educational quality (SDG-4) and promoting sustainable campus initiatives.

Challenges and Successes

Challenges

Fragmented Policies: The integration of SDG-4 has been uneven, with sustainability efforts concentrated in specific departments rather than being embedded throughout the institution.

Resource Constraints: The university has faced budgetary constraints that limited the implementation of comprehensive sustainability programs. Many planned initiatives, such as green infrastructure and faculty training, have been delayed or scaled back due to financial limitations.

Administrative Barriers: Bureaucratic hurdles and a lack of coordination between departments have hindered the effective implementation of sustainability initiatives. Efforts to streamline processes and enhance cross-departmental collaboration have met with resistance.

Successes

Curriculum Integration: The university has successfully integrated sustainability into its curriculum, with several programs and courses focused on environmental studies and sustainable development.

Green Campus Initiatives: The university has implemented some green campus initiatives, such as waste recycling programs and energy-efficient lighting systems. These initiatives have improved the campus's environmental footprint and raised awareness among students and staff.

Case Study 2: Institution B – Lahore University of Management Sciences (LUMS)

LUMS, founded in 1984, is a leading private research university in Pakistan. It is known for its innovative approach to education and research. LUMS has been proactive in aligning its policies with global sustainability standards.

Governance Practices: LUMS established a dedicated Sustainability Office to manage its sustainability efforts. The office is responsible for coordinating sustainability initiatives, engaging stakeholders, and monitoring progress towards SDGs. The university's strategic plan includes a strong focus on integrating sustainability into both academic programs and campus operations.

Challenges and Successes

Challenges

Scaling Up Initiatives: While LUMS has made significant strides in sustainability, scaling these initiatives across all departments and campuses remains a challenge. The university's rapid expansion has put pressure on its ability to uniformly implement sustainability practices.

Funding Limitations: Despite a strong commitment to sustainability, LUMS has faced challenges in securing sufficient funding for some of its ambitious projects, such as large-scale renewable energy installations and comprehensive sustainability training programs.

Successes

Sustainability Integration: LUMS has integrated sustainability principles into its core curriculum and research activities. The university offers specialized programs in environmental science and sustainable development, and its research projects often address sustainability challenges.

Student Engagement: The university has successfully engaged students in sustainability efforts through various initiatives, including student-led environmental clubs, sustainability-focused events, and community outreach programs.

Policy Recommendations

Strategic Policy Recommendations

Policy Changes to Improve Alignment with SDGs

Develop Comprehensive Sustainability Policies: Institutions should develop and adopt comprehensive sustainability policies that align with SDG-4. These policies should include specific goals, performance metrics, and implementation timelines.

Enhance Interdepartmental Coordination: Establish formal mechanisms for interdepartmental coordination to ensure that sustainability initiatives are integrated throughout the institution. This could include regular meetings, joint projects, and shared resources.

Specific Strategies for Effective Policy Implementation

Allocate Dedicated Resources: Institutions should allocate dedicated budgets and resources for sustainability initiatives. This includes funding for green infrastructure, faculty training, and student engagement programs.

Establish Monitoring and Evaluation Systems: Implement robust monitoring and evaluation systems to track progress towards sustainability goals. This should involve regular reporting, performance assessments, and adjustments based on feedback and data analysis.

Institutional Reforms

Proposed Reforms for Governance Structures:

Create a Centralized Sustainability Office: Establish a centralized office responsible for overseeing and coordinating all sustainability efforts within the institution. This office should have the authority to set strategic priorities, allocate resources, and monitor progress.

Enhance Leadership and Accountability: Strengthen leadership roles related to sustainability by appointing dedicated sustainability officers and creating accountability mechanisms. This ensure that sustainability goals are prioritized and that there is clear responsibility for achieving them.

Capacity-Building Initiatives for Administrators and Educators:

Provide Training and Development: Offer training and professional development programs for administrators and educators on sustainability practices, policy implementation, and SDG alignment. This build the necessary skills and knowledge to effectively support and advance sustainability initiatives.

Promote Collaborative Learning: Encourage collaboration between institutions, industry partners, and community organizations to share best practices, resources, and expertise. Thisfoster a culture of continuous improvement and innovation in sustainability efforts.

By implementing these policy recommendations and institutional reforms, higher education institutions in Punjab can better align their practices with SDG-4, address existing challenges, and enhance their contributions to sustainable development.

Conclusion

This research on "Advancing Sustainable Development Goals through Educational Governance in Higher Education Institutions: Bridging Policy and Practice for Punjab, Pakistan" reveals several key insights:

Current State of Educational Governance

The study found that while many higher education institutions (HEIs) in Punjab have made strides in integrating Sustainable Development Goals (SDGs) into their frameworks, substantial gaps remain. Institutions like the University of Punjab and Lahore University of Management Sciences (LUMS) have initiated various sustainability practices, but these are often fragmented and inconsistently applied across departments and campuses. Institutions are generally aware of SDG-4 (Quality Education) and its significance, but there is a lack of cohesive and strategic implementation. Governance structures frequently suffer from inadequate coordination and limited resources, which hampers the effective integration of sustainability goals.

Challenges and Gaps

Significant challenges include fragmented policies, resource constraints, and administrative barriers. These issues prevent the full realization of SDG-4 and limit the impact of sustainability initiatives.

The research identified specific gaps in aligning policy formulation with actual practice. For example, while some institutions have adopted sustainability policies, the implementation often lacks depth and consistency. Budgetary constraints and bureaucratic hurdles further exacerbate these challenges.

Comparative Analysis

A comparative analysis with global practices highlighted that institutions in Punjab lag behind their counterparts in developed regions. For instance, universities in Europe and North America have more integrated approaches to sustainability, supported by robust policy frameworks and substantial funding. In contrast, Punjab's institutions struggle with limited resources and less coordinated efforts.

Implications for the Future

Potential Impact on Policy and Practice

The findings suggest that a strategic overhaul of policies is necessary to enhance alignment with SDGs. Institutions must adopt comprehensive sustainability policies that are integrated into every aspect of governance and operations. This includes increasing funding for sustainability initiatives and enhancing interdepartmental coordination.

Improved policy frameworks could lead to more consistent and impactful sustainability practices across higher education institutions. By addressing existing gaps and challenges, institutions can better contribute to SDG-4 and overall sustainable development.

Long-term Benefits for Sustainable Development in Education

Effective implementation of SDG-aligned policies like result in long-term benefits, including improved educational outcomes, better environmental stewardship, and enhanced institutional reputation. By focusing on sustainability, institutions can contribute to a more knowledgeable and responsible future generation of leaders and professionals.

Moreover, adopting best practices from global counterparts could position Punjab's institutions as leaders in sustainability within the region, potentially attracting international collaboration and funding.

Final Thoughts

Reflections on the Research Process:

The research process underscored the complexity of integrating sustainability into educational governance. It highlighted the need for a multi-faceted approach that includes policy reform, strategic resource allocation, and capacity building. The mixed-methods approach, combining qualitative data

from interviews and case studies, provided a comprehensive view of the challenges and opportunities in this field.

One significant observation was the discrepancy between policy intentions and actual practice. While many institutions express commitment to sustainability, translating this commitment into effective action remains a key challenge.

Recommendation

Future research could benefit from a longitudinal study to track the impact of implemented policies over time and assess their effectiveness in achieving SDG-4. Additionally, research could explore the role of stakeholder engagement in overcoming barriers to sustainability implementation.

Comparative studies involving a broader range of institutions, both within Pakistan and internationally, could provide further insights into effective practices and strategies. Investigating the impact of external funding and partnerships on sustainability outcomes could also be valuable.

In summary, this research provides a critical examination of educational governance in higher education institutions in Punjab, identifying key challenges and proposing actionable recommendations for better alignment with SDGs. The implications for policy and practice offer a pathway towards enhanced sustainability in education, with long-term benefits for both institutions and broader societal goals. Further research in this area could build on these findings to advance the field of educational governance and sustainable development.

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