

## Sustainable Development: Challenges and Strategies in South Asia, Spotlighting Pakistani Higher Education

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### ABSTRACT

An analysis of the Sustainable Development Goals (SDGs) in South Asian countries, including Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, highlights the presence of socio-economic and political obstacles. This research examines the challenges that are impeding the accomplishment of Sustainable Development Goals (SDGs), such as poverty (SDG 1), health (SDG 3), education (SDG 4), and economic growth (SDG 8), utilizing data from the World Bank, IMF, WHO, and FAO. The financial facts given highlight the immediate need for significant actions. The report recommends that Developed Countries (DCs) take on a crucial role by allocating at least one per cent of their Gross National Product (GNP) towards development aid. Achieving success in implementing the Sustainable Development Goals (SDGs) requires effective governance and the execution of structural changes. The report advocates for providing development aid from developed countries to underdeveloped countries (UDCs), aiming to foster the exchange of experiences to address common difficulties. The conclusions guide South Asian governments in formulating efficacious economic strategies to achieve the Sustainable Development Goals by 2030. In addition, the study examines 26 papers issued by the Higher Education Commission (HEC) that investigate sustainability in Pakistani Higher Education Institutions. An analysis of this research reveals both advancements and obstacles in pursuing Education for Sustainable Development (ESD). Various stakeholders actively participate in the transformational process, including administrators, leaders, instructors, and students. The examination focuses on governance, communication, coordination, and campus outreach and tackles problems. Aligning with the Sustainable Development Goals (SDGs), prioritizing logistical assistance and excellent education (SDG 4) is crucial. The study is a manual for educators, policymakers, and curriculum creators to promote Sustainable Development, assisting researchers in formulating inquiries for sustainable development objectives.

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## 1. INTRODUCTION

Education can bring about significant change by promoting originality, analytical thinking, and a dedication to fairness, which are fundamental to the progress of society[1]. A characteristic of superior education systems is their capacity to equip students with the skills and knowledge needed for success and production, think critically, behave civilly, and actively participate in society. The United Nations Convention on the Rights of the Child serves as the foundation for promoting high-quality educational opportunities and developing well-trained teachers[2]. Sustainable Development Goal 4 emphasises the importance of this matter, aiming to

substantially augment the number of proficient educators by 2030, underscoring the want for global collaboration in emerging nations[3], [4].

In higher education, sustainability is a comprehensive and diverse area of interest that includes research, teaching, university operations, and community involvement, all aimed at promoting sustainable development. Education for Sustainable Development (ESD) emphasises the crucial role of educational institutions in tackling social, economic, and environmental problems through their curricula[3], [5], [6]. It aims to promote sustainable behaviors by ensuring that teachers, administrators, students, and related communities have equal participation opportunities. An essential advancement entails understanding the endeavors and obstacles encountered by governments and associated sectors, particularly in the education sector, at local and worldwide levels. This research thoroughly analyses the advancements and difficulties of Education for Sustainable Development (ESD) in Pakistan's higher education system, leading to a systematic involvement in sustainable practices[7]. ESD in higher education goes beyond teaching knowledge and focuses on developing general sustainability competency. This entails developing skills for strategic planning, navigating ambiguity, fostering cross-disciplinary teamwork, promoting intercultural comprehension, and fostering collaboration. The worldwide need for Education for Sustainable Development (ESD) at Higher Education Institutions (HEIs) is apparent, as shown by efforts like the UNESCO chair programs established in 1992 to promote knowledge exchange across international boundaries[8]. An extensive evaluation of the United Nations Decade of Education for Sustainable Development (UN-DESD) highlights the crucial role of universities in promoting research, teacher training programs, community awareness, and cultivating individual and social responsibility [9], [10], [11].

Pakistan has adopted Education for Sustainable Development (ESD) as a national priority, in line with the United Nations' 2030 Agenda for Sustainable Development Goals (SDGs). SDG 4 prioritizes acquiring essential knowledge and skills to advance sustainable development. This study examines the advancements, challenges, and successful approaches towards achieving sustainability in Pakistan's many aspects of higher education. The research is unique because it provides a systematic review that addresses the lack of comprehensive studies, especially systematic reviews, that have focused on the difficulties of attaining sustainable development objectives in higher education institutions in Pakistan. This study aims to guide educators, managers, policymakers, curriculum writers, and researchers in various positions. It will also show the country's progress in reaching sustainable development objectives. This paper aims to comprehensively explore the progress and challenges in achieving sustainability in higher education in Pakistan. It will begin with background information and describe the materials and methods used. The findings will then be presented, along with the challenges encountered. A proposed model will be discussed, and the paper will conclude with suggestions, limitations, and future research directions.

### 1.1 Justification of the Study

The motivation for this study arises from the primary aim of the Sustainable Development Goals (SDGs) to exceed the Millennium Development Goals (MDGs) and provide a comprehensive vision for the advancement of all countries. The SDGs are formulated as universally applicable goals, posing significant difficulties for impoverished nations and rich ones[12], [13], [14], [15]. They advocate for a fundamental shift in communities and economies towards sustainability, contributing substantially to the worldwide effort for sustainable development. Although the Sustainable Development Goals (SDGs) are relevant to all countries, their specific impacts differ depending on the circumstances[13], [16], [17].

This research is specifically pertinent to South Asian nations, as it aims to identify the most significant transformative obstacles presented by various sustainable development goals (SDGs) and goals within their distinct implementation settings. The study seeks to illuminate the difficulties South Asian nations may have in adopting and implementing SDGs, as they now exist, in their society and economy. This will be achieved via a preliminary analysis. This inquiry is in line with the overarching subject of the research paper, which centres on examining the difficulties and approaches associated with sustainable development in South Asia, with a particular focus on the higher education system in Pakistan.

### 1.2. Sustainability and Educational Initiatives for Sustainable Development (EISD)

This section offers a thorough analysis and historical background of Sustainable Development (SD). Sustainable development (SD) was first described in the Brundtland report (1987) by the World Commission on Environment and Development, titled "Our Common Future". It refers to a development that addresses current demands while guaranteeing positive consequences for future generations[13], [18], [19], [20]. The paper examined the factors contributing to environmental problems, investigating the impact of social, economic, and political progress on ecological difficulties. Universally adopted by governments and non-governmental organizations, the concept of sustainable development gained traction, particularly after the 1992 Rio de Janeiro conference, which resulted in an action plan for promoting socio-economic progress and preserving natural resources. This plan emphasized the importance of Education for Sustainable Development (ESD) in fostering a heightened understanding of navigating uncertain circumstances. Sustainable development involves three dimensions: society, economics, and environment. Education for Sustainable Development (ESD) is crucial in providing people with the necessary information, skills, and attitudes to make informed choices that improve the overall quality of life. Higher Education Institutions (HEIs) must advance Sustainable Development (SD) via their operations, research, and outreach endeavors[21], [22], [23]. The 2030 Agenda for Sustainable Development highlights the need for an education system that effectively cultivates people who can engage in lifelong learning, successfully navigate future difficulties, and flourish in a rapidly changing society and environment. According to UNESCO, sustainable development (SD) may

be accomplished by employing comprehensive and diverse methods in education for sustainable development (ESD). The thorough approach emphasizes theoretical knowledge and understanding of the subject, while the pluralistic approach focuses on teaching methods. The content of ESD attempts to improve the conceptual understanding of the three elements of sustainability, with a focus on highlighting their interconnection. Pluralism, including a wide range of views and viewpoints, is essential for tackling sustainability challenges and promoting creative, learner-centered democratic practices. Integrating holism and pluralism in ESD aims to improve students' cognitive abilities, facilitating the adoption of practical, sustainable practices. Implementing a comprehensive strategy at an advanced academic level substantially affects knowledge acquisition, whilst adopting a diverse approach has a favorable effect on attitude. Universities worldwide participate in many sustainability projects, such as the 'greening the campuses' movement, curriculum enrichment for sustainability, and specialized programs that raise awareness and encourage community participation[17]. An example of this may be seen in the School of Earth and Environmental Sciences at the University of Guyana. Universities worldwide are collaborating and developing networks in the Education for Sustainable Development (ESD) to achieve greater sustainability. These strategic partnerships enable sharing experiences and technical skills, leading to enhanced outcomes. A consortium of six institutions in Chile evaluates management practices that promote sustainability. The focus is on teaching approaches that may be used at different academic levels. The literature analysis also emphasizes the favorable reaction of the government of Pakistan to the mission of sustainable development. The National Education Policy (2017) acknowledges the significance of Education for Sustainable Development (ESD) in improving the overall quality of human existence via education. Suggested measures include: modifying educational programs to prioritize environmental sustainability, creating autonomous environmental departments within agriculture and engineering colleges, and adopting environmentally friendly practices in higher education institutions[24], [25], [26]. Overall, higher education institutions worldwide are actively involved in transforming their approaches to teaching, learning, and research. This effort has created new models, skills, and innovations that contribute to sustainable development.

## 2. RESEARCH METHODOLOGY

To award relative ratings to each Sustainable Development Goals (SDGs) objective, the study makes use of a technique that is both visible and replicable. This approach takes into consideration the varying relevance of each SDG target in a variety of settings. This approach comprises several evaluators independently evaluating objectives based on three criteria: applicability, implementability, and transformative effect (both inside the particular nation and for South Asian countries). The aggregated and averaged scores are intended to give an objective evaluation and direct effort focused on individual countries to areas essential for developing sustainable development locally and globally[7], [11], [27], [28]. This method makes it easier to develop implementation plans that are targeted and efficient for attaining the Sustainable Development Goals (SDGs) within the specific local context of South Asian nations, with a particular emphasis on increasing the quality of higher education in Pakistan.

**Table 1:** SDGs Evaluation Criteria Overview

Evaluation Criteria	Description
<b>Applicability</b>	Evaluates how relevant each SDG target is in different settings
<b>Implementability</b>	Assesses the feasibility of implementing the SDG objectives
<b>Transformative Effect</b>	Considers the impact of achieving the SDGs both nationally and regionally in South Asian Countries

**Source:** Compiled by the Authors

## 3. RESULT AND DISCUSSION

Analyzing the Sustainable Development Goals (SDGs) in South Asian countries, such as Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka, reveals widespread socio-economic and political difficulties [22]. An in-depth examination, using data from the World Bank, IMF, WHO, and FAO, highlights the intricate obstacles that impede the attainment of Sustainable Development Goals (SDGs), particularly in the areas of poverty (SDG 1), health (SDG 3), education (SDG 4), and economic development (SDG 8). The financial facts in this report underscore the pressing need for significant and prompt actions to tackle the highlighted difficulties, focusing on the role of Developed Countries (DCs). The report acknowledges the importance of DCs in achieving the SDGs by promoting good governance and structural changes and advocates for allocating at least one per cent of GNP to development aid. The proactive role of Developed Countries (DCs) in aiding underdeveloped countries (UDCs) is given particular importance, focusing on building shared experiences to overcome problems. This study's objective is to guide South Asian nations, particularly Pakistan, in developing and executing efficient economic policies that would facilitate the achievement of Sustainable Development Goals (SDGs) by the year 2030. Examining sustainability in Pakistani Higher Education Institutions, the study analyzes 26 papers issued by the Higher Education Commission (HEC) [21]. Combining this research uncovers advancements and difficulties in the Education for Sustainable Development (ESD) field. Key stakeholders, including administrators, leaders, teachers, and students, are recognized as essential participants in the transformation process. The paper highlights the importance of governance, communication, and collaboration in Pakistani higher education institutions, particularly campus outreach. It is essential to tackle the difficulties associated with adopting sustainable practices. Furthermore, the research

emphasizes the significance of providing logistical assistance and ensuring high-quality education in line with Sustainable Development Goal 4. It underscores the alignment of institutional initiatives with the larger aims of the Sustainable Development Goals.

#### 4. CONCLUSION

Overall, this study article has thoroughly investigated the Sustainable Development Goals (SDGs) in South Asian countries, specifically examining the complex obstacles encountered by Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka. The thorough examination, using data from renowned international organizations, has highlighted the several complex obstacles that hinder the attainment of SDGs, particularly in the areas of poverty (SDG 1), health (SDG 3), education (SDG 4), and economic development (SDG 8). The financial figures highlight the immediate need for significant and focused actions, emphasizing the importance of Developed Countries (DCs) actively participating by devoting at least one per cent of their Gross National Product (GNP) towards development aid. The report emphasizes that achieving SDG implementation depends on the foundations of effective governance and structural changes. Moreover, the study focuses on Pakistani Higher Education Institutions and thoroughly examines 26 studies issued by the Higher Education Commission (HEC). This assessment has shown both advancements and obstacles in the Education for Sustainable Development (ESD) field. Stakeholders, such as administrators, leaders, instructors, and students, are recognized as crucial participants in the transformation process. The importance of governance, communication, and coordination within Pakistani Higher Education Institutions is highlighted, focusing on campus outreach and tackling implementation issues. The research highlights the significance of providing logistical assistance and high-quality education (SDG 4) while ensuring that institutional endeavors are in line with the broader aims of the Sustainable Development Goals. This study provides essential guidance for educators, politicians, and curriculum creators. Additionally, it significantly adds to the continuing discussion on sustainable development in South Asia. The report provides valuable insights and suggestions that might guide the area in achieving the Sustainable Development Goals (SDGs). These strategic orientations and considerations contribute to the joint effort of creating a sustainable and inclusive future for the nations being examined.

#### 5. FUTURE RESEARCH AND LIMITATIONS

This research offers valuable insights into the Sustainable Development Goals (SDGs) in South Asian countries and the issues specific to Pakistani Higher Education. However, there are openings for future analysis and evaluation of some constraints. Future studies might undertake a comprehensive comparative analysis of SDG progress across South Asian nations, focusing on particular sectors, conducting longitudinal studies to monitor advances, and evaluating the effect of proposed policies. Nevertheless, it is essential to recognize that there are limits regarding data restrictions, area specificity, temporal breadth, and subjective evaluations. Not with these limitations in mind, this study establishes the foundation for further investigation to foster continuous dialogues on sustainable development in South Asia.

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