Sustainable Development Goals in Pakistan: A Comprehensive Analysis of Progress, Challenges, and Recommendations

MALIK ZEEWAQAR^{1*}

1 PUBLIC ADMINISTRATION & GOVERNANCE

* Correspondence: m.zeewagar@yahoo.com

Abstract: The United Nations Global Sustainability Agenda 2030 introduces a transformative framework through its Sustainable Development Goals (SDGs), which are designed to achieve equitable, prosperous, and sustainable development globally. Unlike the incremental Millennium Development Goals (MDGs), the SDGs aim for systemic changes across economic, social, and environmental dimensions, ensuring that no one is left behind. This research paper provides a comprehensive examination of Pakistan's progress towards achieving the SDGs under the UN Global Sustainability Agenda 2030. Specifically, it includes an analysis of the prioritization of SDGs in Pakistan, highlights federal and institutional initiatives aimed at promoting sustainable development, and explores the role of the China-Pakistan Economic Corridor (CPEC) in advancing these goals. Additionally, the paper critically analyzes the SDGs in Pakistan's annual status report, identifies the key challenges faced by the nation in implementing these goals, and offers recommendations for enhancing the effectiveness of SDG implementation. Overall, the focus is primarily on the detailed analysis of the annual status report, the challenges encountered, and strategic recommendations for achieving excellence in SDGs in Pakistan.

Purpose: The objectives of this research are to assess how effectively Pakistan has prioritized the Sustainable Development Goals (SDGs) within its national framework, identifying the key areas of focus. This includes exploring the role of key federal institutions and initiatives, such as the China-Pakistan Economic Corridor (CPEC), in advancing the country's SDGs. Additionally, the study aims to analyze the development and framework of the 17 SDGs in Pakistan by evaluating the country's status report on SDGs implementation. Furthermore, the research will examine the challenges Pakistan faces in achieving significant outcomes on the SDGs and provide actionable recommendations for enhancing the effectiveness and success of these initiatives.

Keywords: Global Sustainability Agenda 2030, Inclusive development, Sustainability Framework, Pakistan's Status Report on SDG's, SDG's Challenges and Recommendations.

Methodology:

This research analyzes the Sustainable Development Goals (SDGs) in the context of Pakistan by synthesizing and critically evaluating existing research, official reports, and national data. The study focuses on the progress, challenges, and strategic frameworks associated with the SDGs in Pakistan. The analysis involves a detailed examination of Pakistan's SDGs Status Report, government policies, and institutional efforts, along with an exploration of how the China-Pakistan Economic Corridor (CPEC) contributes to the advancement of these goals. The research is primarily desk-based, utilizing secondary data from academic journals, government publications, and international development reports. An analysis is conducted to identify key trends, challenges, and recommendations for Pakistan's effective implementation of the SDGs.



Introduction:

The UN Global Sustainability Agenda 2030 provides a universal roadmap for achieving more equitable, prosperous, and sustainable development by 2030. Unlike incremental improvements, the Sustainable Development Goals (SDGs) aim for systemic changes. The SDGs present an opportunity to drive systematic change across economic, social, and environmental dimensions, facilitating sustainable development. The core objective of the SDGs is to ensure that "no one is left behind," a principle that promotes inclusive progress and benefits for all segments of society (McGregor, 2020).

The SDGs offer a comprehensive and integrated approach to addressing various challenges, including social, economic, and environmental issues(Riaz, Santoro, Ashfaq, Ali, & Ur Rehman, 2023). They provide a framework for diverse sectors—government, civil society, businesses, and individuals—to collaborate and work towards a more sustainable and inclusive future. Specifically, Pakistan has adopted the SDGs as a transformative agenda to tackle pressing challenges such as poverty, inequality, education, healthcare, and environmental sustainability (Ikram, Zhang, Sroufe, & Ferasso, 2021).

As the global community transitioned from the Millennium Development Goals (MDGs) to the SDGs under the UN Global Sustainability 2030 Agenda, the definition of sustainability has evolved (McGregor, 2020). Previously, the focus was on balancing the consumption of natural resources with their replenishment. Today, however, there is an urgent need for immediate action to preserve our planet and sustain life, emphasizing that the situation has become critically timesensitive.

Discussion:

The Sustainable Development Goals (SDGs) represent a universal call to action, encompassing a broad array of objectives such as eradicating poverty and hunger, improving health, advancing education, ensuring gender equality, providing clean water and sanitation, promoting clean energy, fostering decent work and economic growth, reducing inequality, developing sustainable cities,

and upholding peace and justice (Diemer, 2020). They also address the need for strong institutions, the protection of life on land and below water, responsible consumption and production, and climate change mitigation. The primary aim of the SDGs, alongside the Millennium Development Goals (MDGs), is to address significant global challenges and track partial progress in these areas. While the MDGs focused on reducing hunger, the SDGs emphasize ending hunger and poverty entirely(Nhamo, Dube, & Chikodzi, 2020). The MDGs were oriented towards addressing global common challenges, whereas the SDGs are designed to tackle both ongoing and emerging issues. This shift from MDGs to SDGs reflects a broader commitment to universal action, moving beyond the goals pertinent to developing countries alone(Parotto & Pablos-Méndez, 2023). Sustainable development, as promoted by the SDGs, aims to enhance long-term growth and well-being. Key factors influencing sustainable development include decision-making, management, advocacy, participation, consensus building, and research analysis(Ametepey, Aigbavboa, & Thwala, 2023).

The distinguishing features of the SDGs are their universality, comprehensiveness, and integrated ambition. They address the needs of vulnerable and marginalized segments of society and emphasize partnerships and a long-term vision. The central focus of the SDGs includes evidence-based decision-making, monitoring, and accountability. Effective partnerships and multistakeholder collaboration are crucial components of the SDGs (view, 2021). The fundamental principle of "leaving no one behind" is central to the SDGs, ensuring inclusive development that encompasses all segments of society. The significance of the SDGs lies in their role as a global framework for sustainable development, applicable to countries at all stages of development—whether they are developing, developed, or somewhere in between (Fonseca, Domingues, & Dima, 2020). The SDGs address a wide range of social, economic, and environmental challenges, striving to improve the lives of the most vulnerable and marginalized people, including women, children, individuals with disabilities, indigenous communities, and other deprived groups.

Key Priorities: Sustainable Development Goals in Pakistan's National Agenda:

In Pakistan, the 17 Sustainable Development Goals (SDGs) are categorized into three groups: Category 1, Category 2, and Category 3 (diplomacy, 2023). To achieve rapid results, goals in Category 1 require immediate attention. Each nation has different priorities based on its needs and challenges. For Pakistan, the highest-priority goals in Category 1 are:

Goal 2: Zero Hunger – This goal is crucial for achieving food security and eradicating global hunger. It is ranked at the top due to the ongoing food crisis and recent inflation, which have heightened the need for immediate action. Goal 3: Good Health and Well-Being – Pakistan's focus here includes improving healthcare facilities, implementing preventative strategies across all age groups, enhancing life expectancy, and addressing both epidemic and pandemic crises. Goal 4: Quality Education – This goal aims to provide education for all. In Pakistan, an estimated 22.8 million children are out of school. The goal includes not only sustainability in education but also the development of accessible and high-quality school and university infrastructure. Goal 6: Clean Water and Sanitation – This goal focuses on ensuring a hygienic living environment, combating water pollution, and reducing waterborne diseases. Clean water and sanitation are crucial for water efficiency and public health. Goal 7: Affordable and Clean Energy – This goal aims to extend electricity access across the nation, including to impoverished and hard-to-reach areas. Pakistan's

initiatives include the development of windmills, hydroelectricity projects, and solar power. Goal 8: Decent Work and Economic Growth – This goal emphasizes economic sustainability, social protection, and the creation of productive and decent employment opportunities.

In addition to Category 1, Pakistan's second priority goals include:

- Goal 2: No Poverty
- Goal 5: Gender Equality
- Goal 9: Industry, Innovation, and Infrastructure
- Goal 10: Reduced Inequality
- Goal 11: Sustainable Cities and Communities
- Goal 17: Partnerships for the Goals

Goals in Category 3 include:

- Goal 12: Responsible Consumption and Production
- Goal 14: Life Below Water
- Goal 15: Life on Land
- Goal 13: Climate Action Given the recent floods and environmental disasters in Pakistan, climate action has become a critical priority.

By focusing on these goals and categories, Pakistan aims to address its most pressing challenges and work towards sustainable development effectively.

Analysis of Pakistan's Annual Status Report on SDGs:

Based on national and provisional data, Pakistan's SDGs status report for 2021 presents a comprehensive overview. This report, the first of its kind, was published by the Federal SDGs Support Unit at the Ministry of Planning, Development, and Special Initiatives. According to the Sustainable Development Goals (SDGs) report, Pakistan ranked 129th out of 165 countries in 2021, compared to Bangladesh at 120 and India at 116.

The report highlights that Pakistan's progress on SDG 1 (No Poverty) is somewhat steady. There was a decline in poverty from the period between 2014 and 2015 to 2018 and 2019. Approximately 9.3 million people were lifted out of poverty, based on the national poverty line. On SDG 2 (No Hunger), the report indicates a 4.2% decrease in undernourishment, from 20.2% in 2015 to 16% in 2019. Only 4.1% of the population reported being poor. For the frequency of poverty at \$1.90 per day, the performance further improved to 0.2%. The Multidimensional Poverty Index shows that the government-approved district development plans and public sector development programs have led to equity-based investments in Pakistan's most backward districts, as noted in the second voluntary national report by the UN High-Level Political Forum (UNHLPF).

On SDG 3 (Good Health and Well-Being), progress is described as modest. From 2007 to 2019, there was a 32.6% reduction in maternal mortality during childbirth and pregnancy. From 2013 to 2018, there was a 10% increase in births attended by skilled health personnel, and a 11.5% improvement in national vaccination coverage was observed. However, progress on SDG 4 (Quality Education) is reported as dismal. The primary school completion rate stagnated at 67% from 2015 to 2020, and the national literacy rate remained constant at 60% during the same period. Despite these challenges, Pakistan has shown progress on several fronts. On SDG 5 (Gender Equality) there has been a notable increase in the proportion of women in managerial positions, doubling from 2.7% in 2015 to 4.53% in 2019. Despite this progress, the rates of physical violence against women have seen mixed results. The overall rate of physical violence was reduced by 5.3% from 2012-13 to 2017-18. However, regional disparities persist, with Khyber Pakhtunkhwa (KPK) and Baluchistan experiencing the highest rates, initially 31% and later 23.4%, though these figures increased to 34.6% in the subsequent period.

Significant improvements have been observed in SDG 6 (Access to Clean Water and Sanitation) As of the 2021 progress report, 94% of Pakistan's population has access to drinking water. In Baluchistan, access to clean drinking water increased by 17% from 2015 to 2020. For SDG 7 (Affordable and Clean Energy) there was a substantial increase in reliance on clean fuels, with usage rising from 41.3% in 2014-15 to 47% in 2018-19. Regarding SDG 8 (Decent Work and Economic Growth) progress has been slow. The economy experienced a downturn in 2014-2015, with GDP per capita declining by -3.36% in the fiscal year 2019-2020 from a positive growth of 2.04% in 2014-2015. SDG 9 (Industry Innovation and Infrastructure) has shown some advancement, with the contribution of small-scale industries to total industry value added increasing from 8.4% in 2014-2015 to 10.5% in 2019-2020. This progress was somewhat impacted by the negative effects of the COVID-19 pandemic.

For SDG 10 (Reduced Inequality) the Pakistan SDGs Status Report 2021 indicates a 2% reduction in income inequality from 2016 to 2019. Although this represents a slight improvement, it highlights the ongoing challenge of achieving significant reductions in inequality. On SDG 11, (Sustainable Cities and Communities) an analysis of statistics shows a 7% decline in the urban population living in slums and a 38% decrease in inadequate housing from 2014 to 2018. However, 45% of the population still resides in informal settlements. For SDG 12, (Responsible Consumption and Production) Pakistan remains committed to addressing waste management issues, adhering to the Basel Convention requirements. On SDG 13, (Climate Action) the country has made minimal contributions to National Disaster Risk Reduction but has adopted strategies in line with the Sendai Framework, improving its index score from 0.4 in 2018 to 0.8 in 2020. Nevertheless, greenhouse gas emissions have increased by approximately 375.03 million tons, reflecting a 2.6% annual rise since 2015.

Regarding SDG 14, (Life Below Water) Pakistan has maintained fish stocks within biologically sustainable levels, with a stability of 30% from 2015 to 2020. For SDG 15 (Life on Land), the proportion of total land covered by forests remains around 5% despite rapid urbanization and population growth. In terms of SDG 16 (Peace, Justice, and Strong Institutions), an 8.2% improvement in under-five children's birth registration was observed from 2013 to 2018. Finally,

SDG 17 (Partnerships for the Goals) has shown significant progress, with a 20% increase in fixed Internet broadband subscriptions per 100 inhabitants between 2017 and 2020. Looking ahead to 2030, Pakistan must enhance its implementation mechanisms for various SDGs by collaborating with experts and focusing on balanced outcomes, particularly at the Planning Commission level.

Federal and Institutional Initiatives Towards Sustainable Development in Pakistan:

Pakistan's commitment to the Sustainable Development Goals (SDGs) became evident when, on February 16, 2016, the Parliament of Pakistan was the first to formally approve the SDGs as part of the national development agenda. This step underscored the urgency and importance of addressing the gaps that were evident from the country's performance on the Millennium Development Goals (MDGs).

To effectively coordinate and implement the SDGs, three distinct SDGs units have been established at the federal level:

- Prime Minister's Office SDGs Unit: This unit oversees the implementation of SDG-related initiatives and is allocated significant funds annually, estimated at Rs 55 billion for the Prime Minister's SDG program. This funding supports various projects, including clean drinking water and electricity for all, with Rs 12 billion specifically dedicated to these initiatives.
- Parliament SDGs Unit: Led by the Speaker of the National Assembly, this unit plays a
 crucial role in policy coordination and implementation, with a substantial annual budget of
 Rs 30 billion.
- Planning Commission SDGs Unit: This unit focuses on policy coordination and the integration of SDGs into national development plans.

In addition to these units, several key institutions in Pakistan are working to advance the SDGs:

- Ministry of Climate Change: This ministry is responsible for addressing environmental challenges and promoting sustainable development practices in line with SDG 13 (Climate Action). It plays a pivotal role in shaping environmental policies and aligning them with global climate goals.
- Ministry of Federal Education and Professional Training: This ministry focuses on improving access to quality education and promoting lifelong learning opportunities, in alignment with SDG 4 (Quality Education) (Abbas, Nadeem, & Majoka, 2021). It works on initiatives aimed at enhancing educational infrastructure and accessibility.
- National Commission on the Status of Women (NCSW): An autonomous body dedicated to advancing gender equality and women's empowerment, aligning its efforts with SDG 5 (Gender Equality). The NCSW works to address gender disparities and promote women's rights.
- National Rural Support Program (NRSP): This non-governmental organization works to alleviate poverty and promote sustainable rural development. NRSP's programs target

multiple SDGs, including poverty reduction, education, healthcare, and clean water and sanitation.

- Pakistan Poverty Alleviation Fund (PPAF): A government-funded organization focused on poverty reduction. PPAF supports initiatives that align with SDG 1 (No Poverty), working to empower marginalized communities through social and economic development.
- Sustainable Development Policy Institute (SDPI): A think tank that conducts research, advocacy, and policy analysis on sustainable development issues. SDPI contributes to the SDG discourse by providing policy recommendations and supporting evidence-based decision-making.

Through these concerted efforts and institutional frameworks, Pakistan aims to address its development challenges and make significant progress toward achieving the SDGs by 2030.

CPEC's Contribution to Advancing Sustainable Development in Pakistan:

Complementing these institutional efforts, the China-Pakistan Economic Corridor (CPEC) is a significant development initiative aimed at enhancing connectivity and fostering economic cooperation between China and Pakistan. This project has the potential to contribute to several Sustainable Development Goals (SDGs) through its emphasis on infrastructure development, energy projects, and socio-economic cooperation.

<u>Infrastructure Development</u>: CPEC involves the construction of roads, railways, ports, and other critical infrastructure projects. These developments are set to improve transportation networks, facilitate trade, and contribute to SDG 9 (Industry, Innovation, and Infrastructure) (MAB Omer, 2020). By upgrading infrastructure, CPEC aims to bolster economic efficiency and connectivity in the region (Khalid, Ahmad, & Ullah, 2022).

<u>Energy Projects:</u> The corridor includes a range of energy-related projects, such as coal-fired power plants, hydroelectric dams, and renewable energy initiatives. These projects are designed to increase Pakistan's energy capacity, thereby contributing to SDG 7 (Affordable and Clean Energy). By enhancing the country's energy infrastructure, CPEC supports efforts to provide reliable electricity and meet growing energy demands (Zubedi, Jianqiu, Ali, Memon, & Zubedi, 2022).

<u>Economic Growth and Job Creation:</u> CPEC also focuses on establishing Special Economic Zones (SEZs), which are expected to attract investment, promote industrialization, and create employment opportunities. This initiative aligns with SDG 8 (Decent Work and Economic Growth) by fostering inclusive and sustainable economic growth, thus generating job opportunities and stimulating economic development.

<u>Poverty Reduction and Social Development:</u> The development of infrastructure, industries, and job opportunities under CPEC can have positive spillover effects on poverty reduction and social development (Kanwal, Pitafi, Rasheed, Pitafi, & Iqbal, 2022). These outcomes support SDG 1 (No Poverty) and SDG 10 (Reduced Inequalities), aiming to enhance living standards and reduce social disparities.

<u>Regional Connectivity:</u> CPEC aims to boost regional connectivity and promote trade relationships between China, Pakistan, and other neighboring countries. By enhancing regional collaboration, CPEC supports SDG 17 (Partnerships for the Goals), fostering international and regional partnerships for sustainable development.

The support provided by China is crucial for Pakistan's progress towards achieving social, economic, and environmental sustainability. The second phase of CPEC focuses on sustainability, economic development, and the education sector, including investments in technical education institutes and study exchange programs. This phase is expected to contribute to an improved quality of life, increased GDP, reduced poverty, better working conditions, and enhanced living standards in Pakistan (John, Mahesar, & Sahito, 2020).

Conclusion:

Issues Confronting Pakistan's SDGs Implementation:

The implementation of the Sustainable Development Goals (SDGs) in Pakistan faces numerous challenges that hinder progress and effectiveness. Economic instability, marked by sluggish growth, high inflation, and persistent unemployment, severely limits the country's ability to allocate resources effectively toward SDG initiatives (Xu et al., 2023). The lack of sufficient financial resources is a significant obstacle, as many SDGs require substantial investments in infrastructure development, social services, and environmental protection (Razzaq, Qin, Zhou, Mahmood, & Alnafissa, 2024). The government's limited budget and competing priorities often result in inadequate funding for SDG-related initiatives (Waheed, Shah, & Mahmood, 2024). Ongoing fiscal deficits and financial constraints, exacerbated by excessive fiscal deficits and funding shortages, further hinder the government's capacity to invest in crucial SDG projects (Isgut, 2024). Global and regional crises, such as the COVID-19 pandemic, recent floods, and international conflicts, have diverted resources away from SDGs and delayed progress due to the need for immediate emergency responses (Ahmad, Asad, & Irtaza, 2023). Political instability and frequent changes in government disrupt policy continuity and affect the effective execution of long-term SDG strategies. Additionally, a weak institutional framework, characterized by inadequate coordination among government departments and agencies, leads to fragmented efforts and inefficiencies in policy execution (Rahman, Khan, & Sadique, 2020).

The limited involvement of local communities in the decision-making process has resulted in top-down approaches that often fail to address specific local needs, leading to ineffective implementation strategies (Aftab, Kamal, & Irfan, 2020). This issue is compounded by a significant lack of awareness about the SDGs among the public and stakeholders, as well as insufficient technical expertise and resources to support the effective implementation and monitoring of SDG projects (Nazir & Sharifi, 2024). The poor integration of sustainability into national policies, driven by a short-term focus on economic gains, further hinders progress toward environmental sustainability. The absence of integrated planning and a robust prioritization framework contributes to fragmented implementation and inefficient resource allocation (Isgut, 2024).

Political and administrative challenges, including inconsistent political will and centralized decision-making, limit the capacity of local governments to address SDG-related issues effectively (Dwivedi, 2024). Bureaucratic inefficiencies and outdated data systems contribute to ineffective monitoring and evaluation, resulting in poor accountability and slow progress (Gnaldi & Del Sarto, 2023). Pakistan also faces significant challenges in data collection and analysis, hampering its ability to track progress accurately and make informed decisions. Capacity constraints, particularly limited technical and human resources within institutions responsible for SDG implementation, further restrict the effectiveness of development programs(Bank, 2021). Additionally, persistent socio-economic inequalities, including poverty, gender disparity, and regional disparities, pose significant challenges to achieving SDGs. Addressing these inequalities requires targeted interventions and inclusive policies (Kouser, Subhan, & Abedullah, 2020).

Pakistan's limited engagement in global partnerships and reliance on foreign aid without fostering self-sustaining collaborations restrict the exchange of knowledge and resources necessary for achieving the SDGs (Uddin, 2024). Governance and corruption issues, including a weak rule of law and financial corruption, further undermine efforts to ensure transparency and justice in SDG implementation (Kazma Baqi, 2024). Finally, the insufficient integration of SDGs into national planning and inconsistent reporting on progress create disjointed efforts and a lack of strategic focus on priority areas, ultimately hampering Pakistan's overall progress toward sustainable development. Addressing these challenges requires a comprehensive and coordinated approach that strengthens governance (view, 2021), builds resilience, and ensures that sustainable development is prioritized across all sectors.

Recommendations for Strengthening SDGs Implementation in Pakistan:

To effectively address the challenges Pakistan faces in implementing the Sustainable Development Goals (SDGs), the following strategic recommendations are proposed:

Economic Stability and Growth

- Stimulate Economic Growth: Develop and implement policies that promote economic growth, such as creating incentives for investment in high-potential sectors and supporting entrepreneurial ventures
- Control Inflation: Strengthen monetary policies and improve supply chain efficiencies to manage inflation and stabilize prices.
- Leverage Projects like CPEC: Utilize the China-Pakistan Economic Corridor (CPEC) to enhance connectivity, economic cooperation, and contribute to multiple SDGs.

Increase Financial Resources for SDGs

 Diversify Funding Sources: Explore various funding mechanisms such as public-private partnerships, international aid, and innovative financing to ensure adequate resources for SDG initiatives. • Strengthen Fiscal Management: Improve fiscal discipline by enhancing tax collection, reducing non-essential expenditures, and ensuring effective management of public finances.

Strengthen Global Partnerships

- Collective Action: Foster global partnerships through collective action, sharing of knowledge, and mobilizing resources. Engage in collaborative decision-making processes and ensure political commitment to drive sustainable development.
- Role of International Agencies: Leverage foreign investment and support from international agencies to achieve SDGs. Strategic partnerships can provide financial and technical resources needed for effective implementation.

Strengthen Policy and Planning Frameworks

- Integrate SDGs into National Planning: Incorporate SDG targets into national development plans, including sectors like education, health, economic well-being, water, peace, security, and affordable energy.
- Establish Prioritization Frameworks: Create structured frameworks for prioritizing SDG targets based on urgency, impact, and resource availability.
- Annual Reports: Consistently publish annual status reports on SDG progress to maintain transparency and track advancements.

Reinforce the Rule of Law

• Legal Framework: Reinstate and strengthen the rule of law to support justice and accountability. Develop a professional framework for enforcing legal standards and combating financial corruption.

Enhance Collaboration and Coordination

- Expert Collaboration: Work with relevant experts to develop and implement a targetoriented approach for SDG achievement. Coordinate efforts under a unified federal framework to ensure comprehensive implementation.
- Increased Citizen Engagement: E-governance platforms can facilitate greater public participation and feedback, allowing citizens to actively engage in policy-making and program implementation. This can ensure that development initiatives are more aligned with the needs and preferences of the population.
- Local Government Engagement: Strengthen collaboration between federal, provincial, and local governments to ensure alignment and effective execution of SDG initiatives.

Foster Political Will and Commitment

• Engage Political Leaders: Build strong political support for the SDGs through advocacy, dialogue, and demonstrating the benefits of achieving SDG targets.

• Ensure Policy Continuity: Promote continuity in SDG-related policies and programs to maintain momentum and achieve long-term objectives.

Address Administrative and Local Governance Challenges

- Empower Local Governments: Delegate administrative and financial powers to local governments to enhance their capacity to address SDG-related issues effectively at the grassroots level.
- Improve Administrative Efficiency: Streamline administrative processes and enhance coordination among government agencies to improve the efficiency of SDG implementation.

Adopt a Bottom-Up Approach

- Involve Local Communities: Engage local communities in decision-making and implementation processes to ensure that SDG initiatives are tailored to local needs and conditions.
- Customize Implementation Strategies: Adapt SDG strategies to address specific local challenges and priorities, ensuring that interventions are relevant and impactful.

<u>Promote Sustainable Development Practices</u>

- Integrate Sustainability in Policies: Ensure that all policies and programs incorporate sustainability principles and contribute to achieving SDG targets.
- Encourage Responsible Consumption: Promote practices that support responsible consumption and production, including waste reduction, recycling, and efficient resource use.

Increase Public Awareness and Education

- Conduct Awareness Campaigns: Implement public awareness campaigns to educate citizens about the SDGs and their importance.
- Localized Awareness: Translate SDG materials into regional and local languages to improve understanding and foster local engagement in sustainability efforts.

Empower and Engage Youth

• Youth Involvement: Utilize the energy and creativity of the youth to drive local action and promote sustainability. Educate and engage young people in SDG-related activities and initiatives.

Enhance Data Collection and Monitoring

• Modernize Data Systems: Adopt advanced data collection and monitoring techniques to replace outdated methods, ensuring accurate and real-time data tracking of SDG progress.

• Accountability Mechanisms: Implement robust monitoring and evaluation systems to track progress, identify challenges, and adjust strategies as needed.

Leverage Technology and Innovation

- Promote Technological Solutions: Use technology and innovation to address SDG challenges. This includes adopting new technologies for better data collection, resource management, and service delivery.
- Build Technical Expertise: Invest in capacity-building initiatives to enhance the technical skills of personnel involved in SDG implementation through training programs, workshops, and knowledge-sharing platforms.

Mitigate the Impact of Global and Regional Crises

- Develop Resilient Systems: Build robust systems for disaster preparedness and response to manage the impacts of global crises like pandemics and conflicts.
- Leverage International Support: Seek international assistance and collaboration to address the consequences of global crises and support SDG efforts.

By implementing these recommendations, Pakistan can address existing challenges and make significant progress toward achieving the Sustainable Development Goals, leading to a more sustainable and prosperous future.

References:

- Abbas, S., Nadeem, M. A., & Majoka, M. I. J. P. J. o. I. A. (2021). The United Nations Sustainable Development Goal-4: A case study of Pakistan. 4(4). Retrieved from http://pjia.com.pk/index.php/pjia/article/view/254
- Aftab, I., Kamal, M., & Irfan, A. (2020). Mapping sustainable development goal indicators for Pakistan: Way Forward. *Journal of Strategic Innovation and Sustainability, 15*(1).
- Ahmad, M., Asad, M., & Irtaza, A. (2023). Analysis of climate change policy of Pakistan; hurdles & loopholes. *Pakistan Review of Social Sciences (PRSS), 4*(2), 4-17.
- Ametepey, S. O., Aigbavboa, C. O., & Thwala, W. D. (2023). Overview of Sustainable Development. In Sustainable Road Infrastructure Project Implementation in Developing Countries: An Integrated Model (pp. 9-19): Emerald Publishing Limited.
- Bank, W. (2021). Europe and Central Asia Economic Update, Spring 2021: Data, Digitalization, and Governance: The World Bank.
- Diemer, A., Ndiaye, A., & Khushik, F. (2020). SDG 4 "Quality Education", the
- Cornerstone of the SDGs: Case Studies of Pakistan and Senegal. Retrieved from Diemer, A., Ndiaye, A., & Khushik, F. (2020, March). SDG 4 "Quality Education", the

Cornerstone of the SDGs: Case Studies of Pakistan and Senegal. Journal of

- Economics and Development Studies, 8(1).
- diplomacy, m. (2023). Pakistan's Priority Ranking of SDGs. Retrieved from https://moderndiplomacy.eu/2023/03/29/pakistans-priority-ranking-of-sdgs/
- Dwivedi, J. (2024). Comparative Study of Bureaucratic System in Pakistan and Bangladesh. *International Research Journal of Humanities and Interdisciplinary studies*, *5*(4).
- Fonseca, L. M., Domingues, J. P., & Dima, A. M. (2020). Mapping the sustainable development goals relationships. *Sustainability*, 12(8), 3359.
- Gnaldi, M., & Del Sarto, S. (2023). Validating corruption risk measures: a key step to monitoring SDG progress. *Social Indicators Research*, 1-27.
- Ikram, M., Zhang, Q., Sroufe, R., & Ferasso, M. (2021). Contribution of certification bodies and sustainability standards to sustainable development goals: an integrated grey systems approach. *Sustainable Production and Consumption*, 28, 326-345.
- Isgut, A. (2024). Towards an integrated national financing framework for Pakistan.
- John, S., Mahesar, P. A., & Sahito, Z. H. J. G. R. R. (2020). China Pakistan Economic Corridor (CPEC)-A Project of Assurance for Inclusive and Quality Education in Pakistan. *5*(1), 616-622. Retrieved from https://ideas.repec.org/a/aaw/grrjrn/v5y2020i1p616-622.html
- Kanwal, S., Pitafi, A. H., Rasheed, M. I., Pitafi, A., & Iqbal, J. (2022). Assessment of residents' perceptions and support toward development projects: A study of the China–Pakistan Economic Corridor. *The Social Science Journal*, *59*(1), 102-118.
- Kazma Baqi, M. A. (2024). Pakistan's Institutional Strengthening and Capacity Building: Challenges and Strategies towards Sustainable Development Goals (SDGs). *Jahan-e-Tahqeeq*, 7(3), 98-105.
- Khalid, I., Ahmad, T., & Ullah, S. (2022). Environmental impact assessment of CPEC: a way forward for sustainable development. *International Journal of Development Issues*, 21(1), 159-171.
- Kouser, S., Subhan, A., & Abedullah. (2020). Uncovering Pakistan's environmental risks and remedies under the China-Pakistan economic corridor. *Environmental Science and Pollution Research*, 27, 4661-4663.
- MAB Omer, T. N.-S. C. a. S. (2020). A conceptual framework for understanding the contribution of building materials in the achievement of Sustainable Development Goals (SDGs. Retrieved from https://www.sciencedirect.com/science/article/pii/S2210670719313009
- McGregor, E. (2020). Migration, the MDGs, and SDGs: Context and complexity 1. In *Routledge Handbook of Migration and Development* (pp. 284-297): Routledge.
- Nazir, L., & Sharifi, A. (2024). An analysis of barriers to the implementation of smart grid technology in Pakistan. *Renewable Energy*, 220, 119661.
- Nhamo, G., Dube, K., & Chikodzi, D. (2020). Sustainable development goals: Concept and challenges of global development goal setting. *Handbook of global health*, 1-40.
- Parotto, E., & Pablos-Méndez, A. (2023). From MDGs to SDGs. In *Global Health Essentials* (pp. 463-468): Springer.
- Rahman, M., Khan, T. I., & Sadique, M. Z. (2020). SDG Implementation progress: What does the Asian experience reveal?
- Razzaq, A., Qin, S., Zhou, Y., Mahmood, I., & Alnafissa, M. (2024). Determinants of financial inclusion gaps in Pakistan and implications for achieving SDGs. *Scientific Reports*, *14*(1), 13667.
- Riaz, A., Santoro, G., Ashfaq, K., Ali, F. H., & Ur Rehman, S. (2023). Green competitive advantage and SMEs: is big data the missing link? *Journal of Competitiveness*(1).
- Uddin, A. (2024). Opportunities and Challenges in Implementing a Rights-Based Approach to Community Development Projects in Pakistan: A Social Responsibility and Human Rights Perspective. *Bridging Human Rights and Corporate Social Responsibility: Pathways to a Sustainable Global Society*, 255-282.

- view, C. C. g. o. S. a. w. e. (2021). Chapter 18: Collaborative governance of SDGs: a welfare economics view.

 Retrieved from https://www.elgaronline.com/display/edcoll/9781789901900/9781789901900.00031.xml
- Waheed, A., Shah, S., & Mahmood, T. (2024). Managing barriers to resource allocation for the rehabilitation services in Pakistan: a review article. *Anaesthesia, Pain & Intensive Care, 28*(4), 776-782.
- Xu, D., Abbasi, K. R., Hussain, K., Albaker, A., Almulhim, A. I., & Alvarado, R. (2023). Analyzing the factors contribute to achieving sustainable development goals in Pakistan: A novel policy framework. *Energy Strategy Reviews, 45*, 101050.
- Zubedi, A., Jianqiu, Z., Ali, Q., Memon, I., & Zubedi, E. (2022). Impact of energy consumption, economic growth, and FDI through environmental Kuznets Curve: Perspective from belt and road initiative and Pakistan. *Mathematical Problems in Engineering*, 2022(1), 3130605.