

Green Finance in Pakistan: A Path to Sustainable Economic Growth

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Introduction

Green finance is a revolutionary force that has the power to transform our economic sustainability and equity. As a tool for sustainable development, it is a concept that encompasses several different methods. By directing investments into eco-friendly sectors, sustainable agriculture, and renewable energy, it creates opportunities for marginalized communities and entrepreneurs.¹ It facilitates environmentally conscious projects by making loans and microcredit more accessible. It fosters community development and enhances employment opportunities through investment in green infrastructure. It also promotes environmentally friendly farming methods and facilitates access to green technologies, enhancing resilience and environmental stewardship. In all of this, it allows the integration of underprivileged populations into green supply chains and markets, fostering economic growth and reducing inequality. Despite all the aforementioned benefits, green finance remains underutilized in Pakistan. This article gives a comprehensive overview of the efforts made and challenges faced by Pakistan in this domain. It also explores what we can learn from regional giants like China and India in leveraging green finance to reap its benefits.

Efforts of Pakistan Towards Green Financing

Pakistan, the fifth most populated country with 245 million people, faces significant challenges related to climate change despite contributing less than 0.9% to global greenhouse gas emissions. It ranks 19th worldwide and 3rd regionally for CO₂ emissions. As per the *Economic Survey of Pakistan 2020–2021*, agriculture, which accounts for 60% of exports and 19.2% of GDP, employs 45% of the labour force and sustains approximately 68% of the rural population. Climate change poses threats to productivity, livelihoods, and human health, with Pakistan ranked 27th least prepared and 39th most susceptible to its effects. The country is increasingly exposed to natural disasters such as floods, tropical storms, and droughts, as seen in the catastrophic floods of 2022. Without proactive measures to enhance resilience across various sectors, these events could impede Pakistan's growth and development.²

Despite significant progress in reducing poverty during 2018-2021 and reaching lower-middle income levels, the country's unstable economy makes long-term growth difficult. Rural areas continue to experience disproportionate poverty in comparison to urban areas. Sluggish annual growth rates continue, made worse by political unpredictability, policy difficulties, and external imbalances.

To address these challenges, the State Bank of Pakistan in 2017 launched the green banking guidelines, a set of initiatives for banks to reduce carbon emissions. The guidelines encouraged the bank to establish green banking offices and to offer environment protection green loans. This step will help in reducing emissions and will restrain lending from banks for high-emission sectors. In green finance, the Pakistan Green Loan Policy is a driving force. The implementation of the policy serves as a reference point for banks and other regulatory bodies. Since then, there has been an increase in green and sustainable projects.

The Ministry of Climate Change (MoCC) has helped two national institutions, the JS Bank Limited and the Nationals Rural Support Programme (NRSP), access the Green Climate Fund (GCF) for a variety of financial instruments, such as grants, grant-equivalents, long-term concessional loans, stocks, and guarantees. Pakistan has also made significant new World Bank (WB) commitments. Its contribution to climate co-benefits, or CCBs17, has increased to 44% in FY21 (from 34% in FY20), the highest in South Asia's WB portfolio.

Pakistan completed 15 projects (of the 18 approved) from the Global Environment Fund (GEF), four from the GCF, and one project from the Adaptation Fund.³ By the end of 2022, Pakistan had also received GCF funds of \$131 million for seven projects out of which five are for adaptation and two are for mitigation.

Other green financing initiatives taken up by Pakistan over the years are given below:

Nature Performance Bonds (NPB)

In 2009, a debt swap agreement was signed between Pakistan and Italy. The NPBs were designed by the Finance for Biodiversity Initiative (F4B), which amalgamate biodiversity into financial matters. As per the

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rules, a creditor country may reduce Pakistan's repayment interest rates, if biodiversity and nature restoration targets are achieved.

Bus Rapid Transit (BRT) System

In 2017, the Asian Development Bank signed a \$335 million loan agreement with Pakistan for constructing an all-inclusive zero-emission BRT in Peshawar, which was inaugurated in 2020 as ZuPeshawar. This BRT has revolutionized the city's transport system by providing 30 stations and 80 bus stops for just \$0.18 for the consumers. After the success of BRT in Peshawar, the GCF is now financing the BRT project in Karachi. The project aims at building a completely segregated, 30-kilometer BRT system that runs on a fleet of 'world's first' bio-methane hybrid buses. Innovative aspects of the project include floodproofing the road, a dedicated biogas plant that can provide 100% of fuel demand, and last-mile connectivity via bikes and e-pedicabs. The expected lifespan of the project is 20 years.⁴

Environmental Bonds

In 2021, the Water and Power Development Authority (WAPDA) issued \$500 million in green bonds to fund the hydroelectric power project, and upon positive feedback, they might issue more bonds for other industries too.

Acumen Climate Action Pakistan Fund (ACAP)

The GCF seeks to create an investment fund of \$80 million in Pakistan with a complete focus on climate adaptation, offering patient finance to agribusinesses. The main objective of the ACAP is to give smallholder farmers access to climate adaptation options to increase the climatic resilience of the farmers along with their standard of living. Furthermore, a \$10 million Technical Assistance envelope will offer focused assistance to enhance the sustainability of business models of investee enterprises and to increase the climate resilience of the ecosystem.⁵

Challenges

Despite these efforts, Pakistan faces difficulties in involving the private sector to accelerate green financing for economic growth. Compared to South Asia's average investment-to-GDP ratio, which is 30%, Pakistan stands at a lower rate of only 15%. Over the last decade, private investment as a percentage of GDP has stagnated, suggesting a lack of active investment. Furthermore, the ratio of Foreign Direct Investment (FDI) to GDP in 2020 is low at 0.7%, due to an unfavourable investment climate and heightened risk perception.⁶ Pakistan faces the following main obstacles in the way of climate financing:

Overarching Constraints

To secure financing for green projects, basic capabilities are required. Pakistan encounters comprehensive obstacles in all investment categories, such as data and reporting, policy roadmaps, and implementation plans. Sectoral action plans are insufficient, data access is restricted, and national and provincial levels have not clearly articulated climate priorities despite the existence of policy frameworks such as the National Climate Change Policy and Nationally Determined Contributions (NDCs). Furthermore, fragmentation and poor alignment with external stakeholders impair the governance and coordination of climate financing, making it more difficult to allocate resources effectively.

Obstacles to Bankable Climate Mitigation Opportunities

Low return on investments, currency risk from the depreciation of the rupee, and the perception of political instability discourage foreign investors. Similar difficulties arise for local investors due to credit risk and the long duration of climate projects. Financing for renewable energy projects is further restricted by the banking sector's traditional approach towards the private sector.

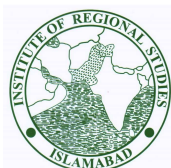
Obstacles to the Development of the Disaster Risk Financing System in Pakistan

A robust local insurance industry is necessary to develop an efficient ecosystem for financing disasters, but Pakistan does not have one. A national climate disaster model is being developed, but strong claims management procedures and long-term funding sources have not yet been set up.

Other challenges include a lack of awareness, standardization, and private partnerships.

India and its Green Financing Practices

India is poised for significant growth with a projected \$7 trillion economy by 2030 and a current population of 1.44 billion. It faces the challenge of balancing development with environmental sustainability. As the world's third-largest emitter of greenhouse gases, contributing 7% to global emissions, India has committed to ambitious climate goals to mitigate global warming. At the 2015 United Nations Sustainable Development Summit, it pledged to reach 175GW of renewable energy by 2022. At COP26, India introduced the "Panchamrit" strategy to enhance Paris commitments, targeting half its energy from renewables,



establishing 500 GW of non-fossil capacity, cutting carbon emissions, achieving a sharper emissions reduction relative to GDP, and reaching net zero by 2070.⁷

In 2022, India revised its NDC to emphasize policy commitments for sustainable consumption and to reduce GDP-adjusted carbon intensity by 45% by 2030, up from 33-35%. Despite a 3.6% rise in energy-related CO₂ emissions from 2012 to 2022, India's economy expanded by 6.8%, with growth expected to accelerate. Since Prime Minister Narendra Modi's 2015 renewable energy goal, capacity has surged to 174 GW by June 2023, making India's growth the third-largest globally.⁸

Since 2007, green financing has been a focus, with the Ministry of Finance establishing the Climate Change Finance Unit in 2011. Strategies such as sustainability disclosure requirements in 2012 and significant contributions from commercial funding and Multilateral Development Banks, which increased their climate finance to India from \$1.9 billion in 2015 to \$3.7 billion in 2022, have supported this. The Reserve Bank of India has also prioritized renewable energy, leading to an increase in bank credit for the sector.⁹

Initiatives such as the Bank of Baroda's small and medium enterprises (SME) financing programme and the State Bank of India's Green Home Loan programme further promote green initiatives, offering discounts on interest rates and profits to support ecologically friendly projects and developments. India has invested in energy efficiency and green projects, including electric vehicles and sustainable buildings, with domestic banks and international organizations being key green finance providers. The issuance of green bonds has been another avenue for raising funds, with \$43 billion raised between 2014 and 2023, 80% of which was allocated to local power providers. In 2023, the government issued its first sovereign green bonds worth approximately \$2 billion, and with GCF funds of \$566.8 million, India has embarked on 10 climate change projects.¹⁰

Efforts of Other Countries in the Region Towards Green Financing China

China has committed to reach carbon neutrality by 2060, as its emissions are expected to peak by 2030. To meet this objective, China is concentrating on green finance, especially the green bonds. It has a huge Green finance market of \$2.3 trillion,¹¹ which includes a \$100 million fund from GCF for "Catalyzing Private Financing in Shandong."

Bangladesh

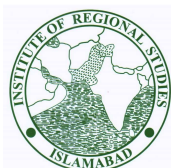
Bangladesh Bank has initiated several green finance programmes and policies to support national sustainable development, which include the creation of green banking norms—a 5% cap on direct green and sustainable finance for banks and a 15% cap on total investments for other financial organizations.¹² Furthermore, its central bank has backed numerous green refinancing schemes and established various green funds at concessional rates. The \$50 million Asian Development Bank brick kiln project and the \$200 million Green Transformation Fund for export-oriented enterprises are two examples of similar programmes. It has been receiving GCF funds of \$441 million for its nine ongoing projects.

Nepal

Compared to its neighbours, China and India, Nepal has lesser carbon emissions, putting it in a good position to reach zero carbon emissions by 2050. Nepal needs \$28.4 billion to reach its mitigation targets specified in NDCs. Along with UNDP, the NMB Bank, has partnered with the International Finance Corporation (IFC) to get a \$25 million green loan to launch a department dedicated to renewable energy.¹³ Other than private investments, the Nepal Rastra Bank has implemented policies to encourage green investing and environmental considerations through the Environment and Social Risk Management (ESRM) framework, incorporated into Unified Directives issued in 2020. It has received funding of \$112 million for four ongoing projects.

Conclusion and Recommendations

Green finance has enormous potential to address climate change in the region and to promote sustainable economic development. Although Pakistan has made significant progress in green finance, it must overcome several obstacles to fully reap the rewards of green financing. Considering the challenges faced by Pakistan in the domain, India's focus on climate policies, inter-agency collaboration, and international cooperation offers insights relevant to Pakistan's pursuit of a greener and more resilient future. Furthermore, initiatives of other South Asian countries, such as Bangladesh and Nepal, highlight the importance of regional collaboration to construct a future that is more robust and sustainable. While the relative sizes of Pakistan and other economies are not always meaningfully comparable, the following are some recommendations that emerge from the practices observed above, made relevant to Pakistan:



- Pakistan should focus on establishing the project development units, one each at the MoCC, the National Disaster and Risk Management Fund (NDRMF), and the Pakistan Planning and Management Institute (PPMI). These units will focus on creating projects to attract international funds for climate finance.
- MoCC needs to establish standard operating procedures (SOPs) and regulations for public and private projects to unlock climate finance opportunities.
- Similar to India, Pakistan should rely on domestic banks for green financing and focus on internal financing to attract FDI and improve the economy.
- The Alternative Energy Development Board (AEDB) should collaborate with the Private Power and Infrastructure Board (PPIB) to develop advanced energy technologies aligned with NDCs, supported by the State Bank of Pakistan (SBP) funding and Islamic financial solutions for distributed energy suppliers.
- Pakistan lacks clear national and provincial climate policies, unlike its neighbours. A comprehensive climate finance policy is crucial to demonstrate government commitment and encourage private sector participation.
- Concessional funding for priority energy projects, such as renewables, is vital for Pakistan. While SBP's Renewable Energy Financing Scheme disbursed \$350 million from 2017 to 2020,¹⁴ additional funding from donors is needed to sustain the programme due to IMF regulations limiting subsidies.

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