A Systematic Review on Green Finance and Sustainable Development

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**Purpose:** The emergence of green financing has come to be an important tool in advancing sustainable improvement and tackling environmental troubles. This research delves into the fame of green financing within Pakistan, elucidating the barriers it encounters and presenting techniques for its enhancement in the country. The research exhibits that green financing holds the ability to channel funds into green ventures, thereby curtailing the state's carbon emissions.

**Approach:** Pakistan faces various impediments in the realm of green financing, encompassing inadequate awareness, restrained engagement from the non-public sector, insufficient financial backing, and the absence of standardized practices. Analysis of various encompassed theoretical journals, administration reviews, and coverage papers have been used.

**Findings:** To surmount these hurdles, the research advocates for heightened consciousness, incentivizing private section involvement, providing financial help, and setting up uniform descriptions and processes.

**Implications:** In end, the studies assert that with continual energies and cooperative endeavors, the demanding situations obstructing green financing in Pakistan can be conquered, ushering in a greater sustainable future with increased capital mobilization.

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**Introduction**

Green finance is of utmost importance in promoting sustainable economic growth as it directs financial resources to projects that are environmentally friendly and socially acceptable. The recognition of the need to act against climate change by governments, businesses and individuals
has led to increased demand for green finance. As per a report by the Global Sustainable Investment Alliance, global sustainable investment stood at $35.3 trillion in 2021 and had grown by over 15 percent from its first records of about $48.9 billion done four years earlier (in terms of US dollars) according to their assessment table above (Table I). Green finance is defined as including a variety of financial mechanisms like green bonds, sustainable loans and sustainability-linked loan to back environmentally friendly projects. The implementation of green finance initiatives is not only important for tackling climate change but also avails opportunities to investors who can now match their portfolios with sustainable targets. To illustrate, green bonds were issued by corporations including Apple and Microsoft to convey corporate support for renewable energy as well low-carbon initiatives. Green finance does not stop at environmental conservation, but affects corporate behavior and accelerates the shift global economy toward a greener side.

As a third world country, Pakistan cultural has lots of challenges both environment and economic wise. People the country nowadays grown so big and rapid industrialization with a tremendous pressure on natural resources; that they bring large scale degradation of environment and unpredictable misbalance to nature. But what has drawn the attention of the legislators as well for people interested is climate change and so have depleted reservoirs. The current development practice defined the growing interest for sustainable development in general and reflected a focus on finance to be of central importance in its realization (United Nations Development Program, 2020).

European Investment Bank (2019) defines green financing technique as a method wherein financial instruments are used to assist environmentally responsible initiatives. It serves as one of major mechanisms to support sustainable development and minimize impacts of global warming, (Green Climate Fund 2019). The main goal of the green financing is among others to ensure adequate funding for initiatives that will stimulate uptake of greener approaches/practices, improve proliferation that leads to reduction in GHG emissions and foster transition towards low carbon climate-resilient economy (OECD, 2019).

Pakistan falls high in the category of most affected countries from a negative set conferred by climate change, where the population and economy are at risk through natural hazards (Climate Adaptation Fund, 2021). Hence, the importance of fostering sustainable development cannot be overestimated in the view of Pakistan within amounting to nature-based charity; This has subsequently led to realization that green financing is essential by the Pakistan Ministry of Climate Change, which does her part in nurturing sustainable development initiatives (Pakistan Ministry of Climate 2021). But important disparity is still present in the environment of green financing inside the country that seems to need more figure of money allocated to projects concerning ecological sustainability.

In seeking to make a pertinent contribution through the adoption of an in-depth analysis for aspect of green finance is done on the premises of sustainable development in Pakistan. It aims to describe problems and chances relating to the green financials’ development, zooming in on best-practice cases and positive examples in a specific country. Also, the analysis of current policies and regulations on green financing in Pakistan as a project that can be produced by recommendations for future policy initiatives.

In spite of the increasing regard for green finances in achieving sustainable development, a gap appears to be wide since little is known as to whether green financing has received approval stipulated and what are some bottlenecks that have to be worked upon before its implementation within Pakistan. In a bid to bridge this very loophole, this study seeks to obtain an in-depth perspective into the future of Pakistan’s Green Financing; challenges that threaten its viability
and solutions proposed within the contemporary context.

This research highlights the allocation and implementation of green finance in Pakistan to identify barriers, fill gaps underpinning and suggest policy recommendations leading to promotion of nation’s green finance. It attempts to portray the existing green financing landscape in Pakistan. This encompasses an analysis of the green financing instrument as well as roles played by private sector in promoting proper use thereof and including government counterpart involvement. Moreover, the green financial barriers in Pakistan will be discussed focusing on lack of awareness augmented by the primary private sector access followed by the low funds and absence of standard practices. Lastly, a set of recommendations will be presented based on first and last findings that could help the provision of green financing in Pakistan. The information will also include its recommendations whereby they may be attached to suggestions such as increase in the level of awareness, incentivizing public-private sector cooperation, financial assistance and uniform definitions & methodologies.

**Literature Review**

**Green Finance**

Green financing refers to the supply of financial capital for agricultural projects and initiatives that promote environmentally friendly activities while cutting down on greenhouse gas emissions (European Investment Bank, 2019). It represents a strategy for investment whose objective is to support the realization of initiatives that promote sustainability, reduce greenhouse gas emissions and underpin resilient low-carbon growth changes (OECD 2019). The main goal of green financing is to promote sustainable development and offset the impacts caused by climate change (Green Climate Fund, 2020).

**Types of Green Finance**

There are different forms of green financing. Green bonds are debt securities issued by firms, governments and other entities with the objective of raising capital for projects that promote environmentally sustainable development (World Bank 2018). Green loans are similar to other types of loan but have a unique focus on supporting global sustainable projects (OECD, 2019). At the same time, green finance equity savings are also in venture capital or as shareholdings through which emerging firms that fall under environmentally friendly sector receive financial support (European Investment Bank 2019).

**Green Finance and Sustainability**

Green financing is a key factor in the promotion of sustainable development by providing necessary financial support for projects supporting environmental sustainability (World Bank, 2018). It remains an essential tool in addressing the consequences of climate change and environmentally resilient, low-carbon economy (Green Climate Fund, 2020). In addition, green financing promotes new skills and means that have the potential to reduce emissions of GHG while fostering more sustainable economic development (European Investment Bank 2019).

In addition, green financing constitutes a response to this funding gap which is observable in many underdeveloped countries due lack of money sources for these eco sustainable initiatives (World Bank 2018). It also encourages higher levels of investment into the green sector, promoting employment and economic growth (European Investment Bank 2019).

While the importance of green financing is gradually rising, it still faces several challenges that deserve consideration (World Bank 2018). A problem among these issues is lack of investment in the green sector, which creates problems for projects aimed at promoting environmental sustainability (OECD 2019). However, an urgent need for increased transparency and accountability in green financing arises since allocated funds must be used as intended (European
Nevertheless, it is vital to understand that green financing has great opportunities mainly in less developed countries (World Bank 2018). By investing in projects that were founded on ecological sustainability, nations may achieve economic growth which is sustainable; create job opportunities and stimulate the economy (Nizam, 2021). In addition, green financing is vitally responsible for minimizing the effects of climate change and therefore furthers another safe future for individuals as well as nature (Green Climate Fund 2020).

It can be noted that green financing is a vital tool in promoting sustainable development and changing the impacts of climate change (World Bank, 2018). In spite of these threats, the green financing exists numerous opportunities to support sustainable initiatives and encourage a low carbon strong climate system (OECD, 2019).

Research Methodology
This study was conducted by a comprehensive review of the available literature sources which included theoretical journals, administrative reports and policy papers. The data collected went through screening under a qualitative research methodology to provide views on the current situation and future opportunities associated with green financing for sustainable growth in countries such as Pakistan.

Green Finance in Pakistan
Environment-related issues heavily faced by Pakistan as a nation include air pollution and water, resource scarcity, deforestation among many others (Pakistan Environmental Protection Agency 2019). Nowadays, green financing became a tool for the Pakistan administration to set in place measures aimed at promoting sustainable growth and addressing these ecological challenges. Despite efforts, it continues to be a significant gap in affordability of green finance across Pakistan as well (Pakistan Environmental Protection Agency, 2019).

Initiatives of Green Finance in Pakistan
However, the last few years have seen green financing programs introduced in Pakistan including bond for both state and corporate created by State Bank of Pakistan (2020). The government has taken more steps by creating a Green Energy Fund to support projects aimed at ensuring environmental sustainability and promoting sources of reusable energy (Ministry of Climate Change, 2020). Additionally, numerous international stakeholders such as the Asian Development Bank and WB have provided financial support to promote green projects in Pakistan (PEPA 2019).

Position of Green Finance in Pakistan
Despite sweats created towards the endorsement of green financing in a nation like Pakistan, it is still one glaring gap gaps when accessing financial resources for environmentally sustainable projects State Bank of any insufficient speculation in the green sector emerged as a serious challenge to Pakistan’s green financing (Pakistan Environmental Protection Agency, 2019). Furthermore, urgency for more transparency and accountability in the area of green financing is necessary to ensure that these funds are used as intended (Ministry of Climate Change, 2020).

Opportunities and Challenges of Green Finance in Pakistan
Countless opportunities offer green financing initiatives in Pakistan especially for the development of renewable energy springs (State Bank of Pakistan, 2020). In the same way, it is significant possible in sustainable environmental schemes such as forestation and water reserves wits (Pakistan Environmental Protection Agency 2019).
However, there are several challenges facing the growth of green finance in Pakistan such as shortage of investments to green industry, limited access to financial resources for environmentally sustainable plans and lack awareness regarding the benefits arising from it. As per State Bank of Pakistan (2020), it is essential to promote larger investments in green sector, extensive accessibility the financing niche for development on those that support environmental sustainability and create awareness around benefits from usage Green Financing.

Green financing has potential to play leading role in promoting sustainable growth and minimizing environmental issues within the country (Pakistan Environment Protection Agency, 2019). However, there are many challenges that need to be addressed which include limited investments in the green sector funding as well restricted access of financial resources and also lack awareness about benefits associated with green financing (Ministry of Climate Change, 2020). Through meaningful discussion of these contacts, green financing can play a huge role in the promotion of sustainable growth and relief from environmental issues in a country like Pakistan (State Bank of Pakistan, 2020).

**Green Finance Strategies for Pakistan**

**National Green Finance Strategy**
An all-embracing national green financing plan is critical to successfully advocate for Pakistan with green finances (State Bank of Pakistan, 2020). The strategy is to define what the administration hopes to achieve in its broad picture of green finance and measures aimed at catalyzing investments toward eco-friendly ventures (Ministry of Climate Change, 2020). Secondly, the strategy should address potential barriers to green financing and develop ways of addressing them (Pakistan Environmental Protection Agency, 2019).

**Private Sector and its Participation in Green Finance**
The role of the private sector plays an essential part in ensuring that Pakistan makes progress with green financing (State Bank of Pakistan, 2021). It is to stimulate the private segment’s engagement that inducements for investments in plans dedicated to environmental sustainability and green finance, regulated framework. Secondly, cooperation between administrative and private sector can be promoted to facilitate green financing initiatives (Pakistan Environmental Protection Agency 2019).

**Awareness and Education of Green Finance**
To build up more investments into green financing, it is essential to boost awareness regarding the benefits of environmentally sustainable initiatives and its importance (Ministry of Climate Change 2020). It could be realized by carrying out community education and awareness campaigns alongside the development of educational resources and participants’ training programs specifically designed for green financing arena (State Bank of Pakistan, 2020).

**Best Practices of Green Finance in Pakistan**
Numerous exemplary approaches for green financing implementation adapted in Pakistan, as follows:

a) Preparation of a reading national green financing policy defining the government’s vision, mission and activities that promote investment in environmentally friendly business ventures.

b) Increasing, through tax and subsidy incentives for environmentally conscious investments under green financing, the private sector involvement in this scheme with an appropriate regulatory framework.

c) Empowerment of mindfulness understanding and know how in the green financing by undertaking campaigns spirit; provision of educating materials that should be imparted to participants of Green Financing units.
d) Building on the economic support of eco-friendly initiatives and projects via green funds and introduction of green bonds.
e) The visibility and transparency in the implementation of green finance so that it is only applied to appropriate use.

The green financing has significant importance in supporting sustainable development and environment issues that develop Pakistan overall (Ministry, 2019). But this approach becomes total advocating the all-comprehensive national strategy that explicitly stimulates the private sector participation and awareness about environmentally friendly projects but offers handy financial assistance (State Bank of Pakistan). Under these policies and through implementing best practice, green financing can prove to be a vital cog in the wheel of promoting sustainable development not just in Pakistan but on an international front as well (Pakistan Environmental Protection Agency, 2019).

Challenges and Recommendations
However, green financing faces a variety of challenges despite its potential to promote sustainable growth and address environmental problems in Pakistan (State Bank of Pakistan, 2020). Few of the significant issues are:

Challenges of Green Finance

a) Lack of Mindfulness: There is a lack of awareness regarding green financing and benefits of environmentally sustainable plans among several stakeholders from the civil population, private businesses entities, and government bodies remains an enormous obstacle (Ministry of Climate Change, 2020).
b) Partial Private Segment Engagement: While the role played by private sector in facilitating green financing is significant, its contributions are limited for lack of incentives and unfavorable policy environment (State Bank of Pakistan 2020).
c) Inadequate Backing: There is a need to grow the economic funding for activities focused on environmental sustainability. This can be facilitated by mechanisms such as creation of green funds and issuance of environmentally friendly bonds (Pakistan Environmental Protection Agency, 2019).
d) Absence of Standardization: One important challenge that green financing faces is the lack of consistent meanings, practices and commentary requirements. This leads to confusion in interpretation as well due to a relative absence of clarity within this market segment (State Bank of Pakistan, 2020).

Recommendations of Green Finance

a) To successfully endorse green financing and tackle issues confronting this sector, the below advises are put forth:
b) a) Amplifying Awareness: Both the public administration and private industry should be encouraged to make awareness regarding green funding benefits of environmentally sustainable practices. These can be done through public education drives, information materials distribution and programs on trainings (Ministry of Climate Change 2020).
c) b) Encouraging Private Sector Engagement: The administration should provide incentives to enhance private sector participation in green financing that may come with tax breaks and other reliefs. Moreover, getting an appropriate investment climate for investments into environmentally sustainable schemes is vital (State Bank of Pakistan, 2020).
d) Extending Financial Backing: Therefore, management have to growth financial support for initiatives geared toward environmental sustainability. This can manifest during the status quo of green fund and with inexperienced bond (Pakistan Environmental Protection Agency, 2019).
e) Establishing Consistent Definitions and Approaches: In order to enhance transparency
and accountability within the realm of green financing, collaboration among the authorities and applicable stakeholders have to be fostered to formulate uniform definitions, methodologies, and reporting requirements (State Bank of Pakistan, 2020).

**Conclusion**

Pakistan has made great strides in promoting green economy to promote sustainable development. The country recognizes the importance of aligning economic actions with environmental objectives to address pressing issues such as climate change and depleting infrastructure. Initiatives such as the Green Banking Guidelines introduced by the State Bank of Pakistan have played an important role in integrating environmental considerations into the financial sector. Implementing sustainable economic practices not only helps to reduce environmental hazards but also stimulates economic growth by supporting environmentally friendly industries however sustained efforts and policy reforms are critical to ensure the successful integration of green economic principles into Pakistan’s broader economic landscape. For latest and accurate information, please refer to recent publications and reports from reputed sources such as National Bank of Pakistan and related environmental ministries.

Green financing is a new and even more compelling way of promoting sustainable power and dealing with environmental problems within Pakistan. The green finance plays an important role in development and this section defines the critical areas to be addressed for sustainability, analyses the current status of green finance in Pakistan, identify challenges and suggests measures to overcome these problems according to Ministry of Climate Change (2020).

While some of the challenges in green financing are pretty daunting, the unbridled potential benefits yielded by roads weed known. In fact, green financing can also be considered as a motive for eventually distributing resources into environmentally sound policies thus promoting investment in recyclables.

**References**


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