Journal of Marketing & Social Research

ISSN (Online): 3008-0711

Volume: 02 | Issue 02 | Mar-Apr. | 2025
Journal homepage: https://jmsr-online.com/

Research Article

Green Sukuk: Contextual Spectrum and Alignments

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Received: 25/02/2025; Revision: 17/03/2025; Accepted: 04/04/2025; Published: 21/04/2025

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Abstract: Anthropogenic activities have distorted the sensitive ecological equilibrium of Earth, and finding an urgent solution to the problem without disturbing the financial landscape has become pertinent. Islamic sanctity to financial trepidations necessitates the quintessential cushion whereby a balance between development, ecology, and economy can be attained amidst a religious backdrop. Green Sukuk or green bonds is one such Shariah-based financial solution aimed at eco-centric sustainability, which strikes a chord with monetary investments that are in sync with the natural environment. The objective of this conceptual paper is to intertwine & align the spectrum of contextual underpinnings of Green Sukuk, ranging from its financial conceptualization to its contribution in the attainment of SDGs by tracing the path of Islamic sentiments of the community. The mixed qualitative treatment of literature applying conceptual framework analysis and grounded theory, and the usage of a systematic data mining technique facilitated in arrival at inductive inferences. The paper heralds a knowledge dissemination approach for ecological economists, green strategists, environmental financiers & investors, and all the stakeholders of the society whose advocacy is centered on the 3Ps-People, Planet, and Prosperity.

Keywords: Eco-centric, Green Sukuk, Islamic financing, SDGs, Sustainability.

INTRODUCTION

In the wake of the COVID-19 pandemic, economic recovery efforts necessitate that stakeholder, including governments and corporations, prioritize development aligned with sustainable principles (Maddatuang et al., 2021). As noted by Samuelson (1954), climate change is closely linked to the concept of public goods, where greenhouse gas emissions, considered a form of public good, create negative externalities, often referred to as public crimes (Nordhaus, 2019). As environmental awareness continues to rise and the demand for clean energy intensifies, the focus on financing sustainable energy sources has become increasingly prominent. Driven by international environmental agreements such as the Paris Agreement, investment efforts are increasingly directed toward clean energy development to restrict the increase in global temperature to no more than 2°C by 2050 (Irvine, Grifferty, & Cowman, 2014). Originally a niche market, the green bond sector has rapidly evolved into an activity driven by supply (Ross, 2015). This form of financing aligns with the principles of socially responsible investing, where financial returns are pursued alongside positive social and environmental impact. Green bonds, in particular, are tailored to fund projects that yield significant environmental advantages. These initiatives span across various industries, such as clean energy and energy conservation, pollution mitigation, and eco-centric farming. The green projects funded by green bonds are specifically designed to tackle ecological issues and advance sustainable progress. The core purpose of green bonds is to back initiatives that promote sustainable development while protecting the ecology. Green Sukuk is a Shariah-compliant green bond in which 100% of the funds are directed toward financing or refinancing eco-friendly initiatives that help reduce the impacts of climate change, adaptation efforts, and the preservation of biodiversity. Structurally, *Sukuk* represents an Islamic financial instrument that serves as a long-term security, providing investors with returns through profit-sharing, margins, or fees until maturity, by Shariah principles (AAOIFI, 2015; Sairally & Abdullah, 2017). The issuance of Green Sukuk (GS) has been recognized as a mechanism for enhancing environmental protection (Larcker & Watts, 2020). Green Sukuk holds significant capability to generate social, monetary, and economic benefits (Aassouli et al., 2018). Accordingly, Green Sukuk issuance is based on two main criteria:

1. The issuance must adhere to both Islamic principles and sustainable finance standards, and
2. The financed infrastructure project must align with sustainable development principles—specifically, it should integrate environmental, social, and governance (ESG) aspects, qualifying it as green infrastructure.

The growing inclination of millennials toward sustainable living among younger generations is expected to lead to an increase in their interest in investing in Green Sukuk instruments (Septiana & Dewi, 2008). This makes the title of the paper relevant and contemporary. The objective of the paper is to intertwine & align the full spectrum contextual underpinnings of Green Sukuk, ranging from its

financial conceptualization to its contribution in the attainment of SDGs by tracing the path of socio-religious sentiments of the society via application of a mixed qualitative approach of conceptual framework analysis coupled with grounded theory. The paper is slated to provide a 360-degree holistic approach to Green Sukuk that has the potential to open frontiers to all social advocates of sustainability.

REVIEW OF LITERATURE

Deciphering Green Sukuk

The word "Sukuk" stems from the Arabic word "Sakk," which refers to a certificate or financial document (IIFM Sukuk Report, 2021). Green Sukuk is a form of Islamic monetary tool that adheres to the environmental standards associated with green bonds. As these environmental guidelines are independent of the financing framework itself, Green Sukuk are generally structured and issued similarly to traditional sukuk. The issuance of the first Green Sukuk in Malaysia enabled the development of significant projects that delivered considerable environmental and social benefits, establishing a model for similar initiatives in other regions (Liu & Lai, 2021). Green Sukuk presents unique opportunities to finance climate-friendly initiatives, particularly in the development of renewable energy projects (Alam et al., 2016). As noted by Kammer et al. (2015), sukuk can be significant in bridging the infrastructure funding deficit. Research on Green Sukuk suggests that this form of green financial support can be essential in tackling climate change (Musari, 2022), similar to climate finance, which also promotes sustainability while improving ecological quality and environmental performance (Pathan et al., 2024). Moreover, Financing methods like green bonds and impact investment funds provide innovative approaches to directing resources toward environmentally beneficial initiatives (Seth et al., 2025). Additionally, it offers opportunities for financial diversification and contributes to community job creation (Hariyani & Kusuma, 2020).

However, it includes additional components such as a green framework that outlines how the proceeds will be used, an independent review or green certification to verify its alignment with environmental standards, and a post-issuance impact report detailing the allocation of funds and the resulting environmental outcomes. Furthermore, Green Sukuk contributes to economic development within communities and broader society (Ibrahim & Shirazi, 2020; Abdullah & Nayan, 2020; Hariyani & Kusuma, 2020), supports national progress, and helps ensure environmental preservation for future generations (Munir et al., 2020; Santoso, 2020). Green Bonds and Sukuk, as innovative monetary tools, play a pivotal role in channeling funds toward eco-friendly projects. Green bonds and sukuk continue to draw a diverse range of investors, including those driven by ethical values as well as those pursuing profitable, environmentally responsible investment opportunities (Jereme et al., 2015; Nor Diana et al., 2021). Moreover, the effective implementation of Green Sukuk demands reliable and transparent information (Alam et al., 2016; Abdullah & Nayan, 2020; Nehal, 2021; Keshminder et al., 2022; Abdullah & Keshminder, 2022), clear policies from the relevant authorities (Ibrahim & Shirazi, 2020; Alam et al., 2016; Azhgaliyeva et al., 2020), and a robust legal mechanism (Santoso, 2020; Richardson, 2020; Alam et al., 2016; Abdullah & Keshminder, 2022). A study by Hariyani & Kusuma (2020) and Azhgaliyeva et al. (2020) highlights that the implementation of green sukuk in sustainable avenues involves significant costs related to technology, management, and maintenance. The process also requires strong collaboration among various professionals involved (Morea & Poggi, 2017; Nehal, 2021; Ibrahim & Shirazi, 2020; Abdullah & Keshminder, 2020). They also enhance corporate credibility by supporting CSR (Alam et al., 2016), function as tradable capital market instruments offering ease of conversion and transferability (Alam et al., 2016), and can be used to refinance earlier financing from qualifying eco-centric projects (Azhgaliyeva et al., 2020). Although still considered a relatively new investment model, Green Sukuk holds significant promise due to its environmental and societal benefits (Septiana & Dewi, 2022).

Contrasting Traditional Bonds and Green Sukuk

The shift toward a low-carbon economy is gaining increasing recognition among investors and financial institutions, prompting a reassessment of investment approaches to prioritize sustainable and environmentally responsible practices (Islam et al., 2022). Empirical studies indicate that Green Sukuk generates greater returns in comparison to conventional, non-green Sukuk (Roslen et al., 2021). Unlike conventional financing methods, which often lack dedicated sustainability commitments, green bonds and sukuk are specifically designed to ensure that capital is allocated exclusively to environmentally and socially sustainable projects. This targeted approach appeals to investors with a strong interest in sustainability, thereby increasing the availability of funding for such initiatives (Alam et al., 2017). Moreover, the offering of Green Sukuk serves as a strategic tool to attract a diverse group of investors, such as both green-conscious and conventional investors (Fahad & Khan, 2022). Green bonds generally exhibit lower volatility compared to conventional bonds, as their investors are typically more focused on long-term environmental impact rather than short-term financial returns. Green Sukuk (in contrast to traditional bonds) involves liquidity risk due to its non-tradable and non-transferable nature. Nevertheless, it can still be redeemed before maturity through the early redemption facility. Green bonds are widely recognized for their high level of transparency, with strict reporting requirements that detail the environmental impact of funded projects. This transparency enhances investor trust by ensuring that investments are used efficiently to produce measurable environmental outcomes (Bhutta et al., 2022).

Although the initial returns from green financial instruments may be similar to those of traditional investments, the long-term advantages often result in better risk-adjusted performance. This is largely due to the growing enforcement of environmental regulations, which tend to favor sustainable projects, thereby increasing the appeal of green bonds and sukuk from an economic perspective (Jereme et al., 2015). Despite the rise of

conventional green bonds, environmental scientists and financial practitioners have criticized their limited effectiveness, arguing that they often serve as financial instruments with superficial environmental impact compared to traditional bonds, driven by political and economic interests (Russo et al., 2021; Peeter, 2003; Fetica & Panzica, 2021). Additionally, it benefits from lower tax rates compared to conventional deposits, provides convenient online transaction access through early redemption facilities, and allows investors to contribute to environmentally friendly development initiatives (Grahesti et al., 2022). The issuance of Green Sukuk is not without risks, similar to those encountered in Retail Sukuk or other Savings Sukuk (Rahmawati & Hasanah, n.d.). These risks may include financial risk, reputational risk, and the risk of under-subscription. However, Green Sukuk avoids exchange rate risk since it is issued in Rupiah (Alfirman et al., 2020). What distinguishes green bonds from conventional financial instruments is their exclusive allocation of proceeds to environmentally focused projects. This is further supported by rigorous reporting and transparency standards, which play a critical role in fostering investor trust and ensuring that the intended environmental benefits are both measurable and achieved (Bhutta et al., 2022). Sukuk, which adhere to Sharia principles, differ from conventional bonds in that they are based on asset-backed investments, with returns derived from profits generated by those assets rather than interest. This structure makes sukuk particularly well-suited for financing environmentally sustainable projects, as it aligns financial returns with ethical and ecological goals.

Attainment of SDGs through Green Sukuk

The SDGs increase the demand for technology, innovation, and resources to support the development and execution of such strategies (Bebbington & Unerman, 2017). The presence of Green Sukuk plays a crucial part in helping to achieve the SDGs, particularly those related to ecological sustainability and climate change (Nehal, 2021; Risanti et al., 2020; Ibrahim & Shirazi, 2020). The asset-backed structure of Green Sukuk ensures that investments are tied to tangible assets, resulting in real, measurable environmental benefits and closely aligning with global sustainability objectives (Delle Foglie & Keshminder, 2022). Green Sukuk has been instrumental in supporting sustainable urban development, including the integration of eco-friendly technologies in construction, which helps reduce carbon emissions in cities and improves overall environmental conditions (Liu & Lai, 2021). The funds raised through Green Sukuk are allocated for environmental preservation, natural resource conservation, energy efficiency, the advancement of renewable technologies, and the reduction of greenhouse gas emissions (Abdullah & Nayan, 2020). Furthermore, green bonds support projects focused on enhancing energy efficiency—efforts that contribute to reduced energy consumption and a smaller carbon footprint, thereby aligning with international sustainability objectives (Alam et al., 2024). Additionally, there is an urgent need for international cooperation among countries to promote Green Sukuk as a key financing instrument for environmental restoration and global ecological protection (Ibrahim & Shirazi, 2020).

By supporting projects that generate both economic and environmental value, Green Sukuk contributes to community well-being and promotes broader economic development, addressing multiple facets of sustainable progress (Liu & Lai, 2021). Green Sukuk presents a valuable opportunity for both public and private sectors to secure funding for advancing a low-carbon economy, facilitating the shift to renewable energy sources like wind & solar to fulfill local power demand (Alam et al., 2016). Green bond financing has played a vital role in advancing solar and wind energy projects, which not only contribute to climate change mitigation but also decrease dependence on fossil fuels (Asl et al., 2023). The green investments in renewable energy, sustainable waste management, and environmentally friendly infrastructure, green bonds, and sukuk address pressing environmental challenges while simultaneously stimulating economic expansion and facilitating the growth of industries essential for an eco-centric future (Islam et al., 2022; Alam et al., 2022). Several scholars, including Morea and Poggi (2017), Musari (2021), Moghul & Safar-Aly (2015), Wahab & Naim (2020), and Ramadhan & Wirdyaningsih (2019), have recognized the growing popularity of Green Sukuk as a financial tool to promote regenerative expansion. Similarly, green bonds require comprehensive environmental impact evaluations and continuous reporting on project outcomes, which helps guarantee that the funds are contributing effectively to sustainable development goals (Peng et al., 2023).

Financial Perspective of Green Sukuk

Green financing generally refers to financial instruments aimed at supporting sustainable development projects and initiatives that support the shift into a sustainable, low-emission, and climate-adaptive green economy (H. Liu et al., 2020). According to data from Statista, climate change-related losses amounted to USD 329 billion globally in 2021, which is expected to drive increasing demand for public investment through Green Sukuk. The certification under the Climate Bond Standards outlines the types of assets eligible for Green Sukuk, encompassing advanced energy efficiency programs, renewable energy generation and grid systems, electric vehicles along with their charging networks, solar farms, biogas plants, and wind power developments (Obaidullah, 2017). These bonds play a crucial role in directing significant financial resources toward clean energy initiatives such as wind and solar power, which are vital for lowering global carbon emissions and combating climate change (Alam et al., 2024). For ensuring the long-term health of both the environment and the economy, it is essential to integrate sustainability with financial decision-making. As a result, green bonds and sukuk are becoming increasingly important instruments within the global financial system, offering a compelling case for their continued expansion and development (Nor Diana et al., 2021).

This upward trend is further driven by the increasing awareness within the financial industry of the risks

associated with climate change, leading to a surge in green investments as key components of sustainable global financial strategies (Nor Diana et al., 2021). Research has demonstrated that companies engaging in climate action initiatives often experience improved investor sentiment, leading to increased market valuation and greater investment interest (Alam et al., 2024). This effect is particularly noticeable in sectors such as agriculture, where sustainable practices contribute to enhanced food security and economic resilience for communities impacted by climate variability (Alam et al., 2018). Moreover, sustainable agricultural projects financed through green financial instruments have been shown to help reduce income inequality by providing more stable incomes and reducing communities' susceptibility to climate-related challenges (Alam et al., 2017). The diverse investor interest has contributed to a vibrant market landscape, where the demand for green financial instruments continues to grow, reflecting a strong commitment to sustainability across the global financial sector (Jereme et al., 2015).

Challenges in the way of Green Sukuk

Pioneering research on the performance of Green Sukuk suggests that investors primarily subscribe to these instruments for financial returns rather than for their environmental impact, ultimately limiting their effectiveness in addressing climate change and enhancing monetary performance (Siswantoro & Surya, 2021; Siswantoro, 2018). Concerns surrounding the credibility of its green status (Liu & Lai, 2021), uncertainties regarding returns on investment (Siswantoro, 2018; Noordin et al., 2018), and the risk of increased bank liabilities (Morea & Poggi, 2017) pose challenges to its widespread adoption. Green Sukuk faces several other challenges in supporting environmental sustainability (Suwanan et al., 2021), including:

1. Limited involvement of financial institutions in identifying environmental risks, which may be attributed to restricted auditing authority.
2. Low awareness among financial institutions, leading to increased risk levels, while government performance in managing eco-friendly projects is often seen as inadequate.
3. Eco-friendly projects are typically long-term in nature, creating uncertainty around payment timelines.
4. Insufficient information and transparency regarding environmentally friendly projects.

Additionally, the high costs associated with issuing Green Sukuk and the lack of strong regulatory support from the government contribute to companies' reluctance to engage in Green Sukuk issuance (Hania et al., 2022). Additional challenges facing Green Sukuk involve immature local bond markets, a shortage of viable and standardized clean initiatives, the absence of globally recognized green definitions and criteria, issuer apprehension regarding cost-effectiveness, and discrepancies between project sizes, issuance volumes, and institutional investor expectations (OECD, 2015). Furthermore, information on the risks, barriers, and potential benefits of Green Sukuk remains limited in public access. As a result, it is challenging to provide investors with confidence that funds raised through sukuk will be allocated to appropriate projects that not only deliver economic value but also comply with a credible and widely accepted green benchmark (Malaysia International Islamic Financial Centre, 2016). This could lead to reputational risks for both companies and the government, potentially resulting in highly negative perceptions from key stakeholders such as regulators, investors, and local authorities in the future (Aryo Sasongko, 2020). Additionally, Green Sukuk represents large-scale state assets that require proper care, which can place a considerable financial burden on the State Budget (APBN). Other challenges include limited public involvement and awareness (Hariyani & Kusuma, 2020; MS Abdullah & Keshminder, 2022) lack of support from regional governments (Campisi et al., 2018; Munir et al., 2020; Hariyani & Kusuma) and risks stemming from improper actions or human oversight (Hariyani & Kusuma, 2020).

The growth of the Green Sukuk market is further hindered by limited understanding of the benefits of green bonds and international best practices, as well as the absence of national regulatory frameworks, elevated transaction costs associated with complying with green bond criteria, limited availability of green bond ratings, indices, and listings, challenges faced by international investors in entering local markets, and an insufficient pool of domestic green-focused investors (G20, 2016). As a relatively new financial instrument, Green Sukuk faces challenges in reaching potential investors, who often have varying levels of knowledge and preferences regarding this investment type (Liu & Lai, 2021).

Islamic viewpoint on Green Sukuk

The growing susceptibility to climate change and the continuous exhaustion of ecological assets are anticipated to intensify major socio-economic problems (Braun, 2010; Tang, 2021). In light of these challenges, the global Islamic finance industry (IFI) has garnered interest for its potential to tackle climate and social issues, notably through innovative tools like Green Sukuk (UNDP, 2021). In Islamic economics, a *Shariah*-compliant investment option is the Green Sukuk, which aligns financial activities with environmental sustainability (Suwanan et al., 2021). The capital generated from Sukuk issuance is mainly directed towards financing environmentally friendly projects that comply with Shariah principles. After covering the operational costs of the Special Purpose Vehicle (SPV), the remaining proceeds are distributed to Sukuk holders (Ibrahim, 2015). Upon maturity, Sukuk holders are required to buy back the asset portfolio from the SPV (Nagano, 2017). Green Sukuk (GS) is guided by Islamic principles such as *Wasatiyyah* (moderation) and *Fasad* (prevention of harm or disorder), which advocate for preserving the planet's natural equilibrium (*Mizan*) through the funding of environmentally sustainable infrastructure and public welfare initiatives (RFI, 2018). The Islamic financial system is fundamentally designed to uphold social justice and social support by strictly forbidding interest-based transactions (Rethel, 2011; Pollard & Samers, 2007). These fundamental Islamic values require businesses to fulfill societal needs while ensuring that environmental and

economic integrity is maintained (Liu & Lai, 2021). Amid climate change and humanitarian emergencies, Islamic financial institutions (IFIs) are responsible for ensuring that Green Sukuk, as a financing tool, effectively addresses environmental and social challenges without disrupting the existing ecological and economic equilibrium (Obaidullah, 2017).

Green Sukuk, a form of Islamic green bond, is structured according to Shariah guidelines to attract capital from the Islamic finance sector for initiatives aimed at advancing environmental sustainability. Green Sukuk holds immense potential, especially given that Muslims represent the second-largest population globally, offering a significant opportunity to drive environmentally conscious investments through Islamic finance. Environmental preservation stands as a key priority and core objective of Green Sukuk, aligning with the teachings of Allah in *Surah Al-Baqarah* verse 30, which designates humans as stewards (caliphs) of the earth, entrusted with the responsibility to protect and sustain nature. In issuing Green Sukuk, various types of contracts can be utilized, each offering different income structures. These include *ijarah, salam, murabahah, istisna', mudharabah,* and *musharakah* contracts (Affandi et al., 2022). Sukuk have proven to be highly effective in mobilizing capital for large-scale sustainable infrastructure developments, positioning them as a vital instrument within Islamic finance to support environmental sustainability. From a Shariah standpoint, sukuk are typically classified according to the Islamic contracts that underpin them. Frequently used contracts include mudarabah, istisna, salam, murabahah, wakalah, ijarah, and musharakah, among others. The selection of a particular *Shariah* structure depends on the characteristics of the sukuk, such as whether it is a perpetual or a plain sukuk. The issuer's choice of contract is influenced by various factors, including the company's asset profile, debt levels, credit rating, tax implications, legal considerations, and specific economic objectives (International Shari'ah Research Academy for Islamic Finance, 2016).

According to Bacha and Mirakhor (2018), recent advancements in Islamic borrowing (sukuk) have the potential to reduce reliance on external financing, decrease debt levels, and provide protection against economic shocks. Due to the elevated ethical standards embedded in Islamic principles, which forbid participation in activities deemed sinful, such as alcohol, gambling, and pornography, sukuk issuance holds the potential to boost investor confidence. Additionally, Green Sukuk plays an important role in promoting financial inclusion, supporting social responsibility, and assisting Islamic nations in achieving their SDGs targets (Keshminder et al., 2022). In addition to meeting the demand for financial tools that adhere to Islamic principles, Green Sukuk also supports the achievement of the 2030 SDGs by funding sustainable development initiatives, offering significant environmental benefits and long-term potential (Budiarso, 2019). The fulfillment of the SDGs also reflects the realization of *maqasid shariah*—the fundamental objectives of Islamic law, which aim to safeguard human life and ensure the preservation of wealth throughout the world (Ibrahim & Shirazi, 2020; Hudaefi, 2020). Importantly, Green Sukuk financing adheres to shariah principles, aligning with the objectives of *maqashid shariah* within the framework of *al-khamsah al-kulliyah* (Fitrah & Soemitra, 2022). The policies centered on Green Sukuk should aim to raise public awareness and improve financial literacy by promoting green sukuk as a Sharia-compliant investment tool that aligns with global sustainability trends (Keshminder et al., 2022; Liu & Lai, 2021).

RESEARCH METHODOLOGY

This conceptual paper employed a systematic and comprehensive review of extant literature sourced from peer-reviewed journals, scholarly articles, and reputable academic databases, including Scopus, Web of Science, and journals listed by the Australian Business Deans Council (ABDC). The research adopted a mixed qualitative approach, combining Conceptual Framework Analysis with Grounded Theory. This dual approach facilitated the synthesis of theoretical insights, historical evolution, and contemporary applications of Green Sukuk, thereby covering the entire thematic spectrum of the study.

A purposive sampling strategy was employed to select literature that specifically explored the intersection of Sustainable Development Goals (SDGs), Finance, Islam, and modern Green Sukuk. Selection criteria emphasized scholarly credibility, thematic relevance, and contextual significance, ensuring the inclusion of a wide array of perspectives—collectively referred to by the researchers as the 'Spectrum' in the research paper title.

The study identified 'conceptual frames' through critical analysis and synthesis based on thematic convergence and homogeneity within the literature. However, consistent with the nature of conceptual and qualitative research, this study has certain limitations. These include the absence of hypothesis testing, its purely qualitative nature, and the exclusion of other potentially significant variables. Future research could address these limitations by incorporating quantitative methods and exploring additional contextual factors.

Overall, the study is inductive, aiming to build theory through grounded insights and conceptual integration.

FINDINGS

Based on the coupling of qualitative data analysis, Conceptual framework analysis, and Grounded theory, the probable inferences are:

- Green Sukuk is an instrument for financing climate-friendly interventions, intended to promote the growth of clean energy projects in the direction of eco-centric sustainability.
- Green Sukuk is a CSR (Corporate Social Responsibility) oriented bond that has the potential to function as a tradable capital market instrument used to refinance previous loans from green projects.
- In contrast to the non-green bonds, Green Sukuk ensures capital allotment to socially and environmentally viable sustainable projects with

an early redemption facility, with stringent compliance to ecological regulations, along with lower tax rates by avoiding the exchange risk.

- The working mechanism of Green Sukuk is asset-based, in which the assets are closely linked to tangible assets. This results in measurable, realistic, and feasible benefits that are in consonance with the SDGs.
- As per the thematic review of filtered literature, it has been identified that Green Sukuk contributes to:
    - Community well-being
    - Energy & natural resource conservation
    - Global ecological protection & carbon footprint reduction
    - Advancement of eco-centric government & non- government projects
    - Reduced dependence on fossil fuels
    - Growth of a resilient carbon-neutral economy
    - Better investment interest and enhanced market valuation
- Major hurdles in the way of Green Sukuk include:
    - Dubious credibility status
    - Uncertainty & risk on return on investment
    - Dearth of standardized & bankable green projects
    - Poor awareness status among potential investors
- Green Sukuk has positive potential bearing especially for Islam. Being a *Shariah-compliant* investment option, it derives its basic functionality from Islamic principles of *Mizan* (ecological balance), *Fasad* (prevention of disorder), and *Wasatiyyah* (moderation), many of which are inscribed in the teachings of Allah in *Surah Al-Baqarah*.
- From an Islamic viewpoint, Green Sukuk helps in the attainment of SDGs via the realization of *maqasid-shariah*, which is one of the aims of Islamic law aimed at protecting life and maintaining ecological balance of the earth within the alignments of *al-khamsah al-kulliyah.*

The multitudinal approach of Green Sukuk in aligning finance, religion, and SDGs through a common thread establishes it as a tool that is both contemporary and relevant.

CONCLUSION

Climate change poses significant threats to economic stability, particularly affecting small enterprises within the informal sector that often face limited access to financial resources and capital (Norouzi et al., 2020; Timur & Herianingrum, 2022; Gallego-Schmid et al., 2020). In this context, Green Sukuk, a Shariah-compliant financial instrument, has emerged as a promising solution for bridging infrastructure financing gaps. It presents a compelling investment avenue for environmentally conscious Islamic investors, combining adherence to Islamic principles with a commitment to sustainability. The Islamic finance sector has increasingly recognized Green Sukuk as a viable mechanism for funding eco-friendly initiatives. However, one of the recurring obstacles in their issuance is the absence of well-defined regulatory frameworks and supportive policy measures. This regulatory shortfall is not limited to governmental bodies but also extends to other critical stakeholders within the ecosystem. Furthermore, although Green Sukuk has the potential to refine the overall architecture of green financing, evolving standards and the integration of various knowledge domains continue to shape their reporting and accountability mechanisms (Liu & Lai, 2021). The integration of Green Sukuk into the sustainable finance landscape has shown promise for generating environmental and socio-economic benefits. Nonetheless, given its relatively recent introduction, there is a growing need to build public confidence and increase its acceptance among investors and issuers.

The innovative use of Sukuk to fund renewable energy and other green initiatives has provided a replicable model for other nations, showcasing the alignment of Islamic finance with modern sustainability objectives. Notably, Sukuk must be asset-backed following Shariah law, creating a direct link between investments and tangible, environmentally beneficial projects. The increasing diversity of green assets, coupled with the rising interest from environmentally focused investors, further enhances the strategic importance of Green Sukuk in driving sustainable development. Despite these advantages, some studies have pointed to the limited financial performance improvements associated with Green Sukuk. The findings of this paper offer valuable insights for ecological economists, sustainability strategists, environmental finance professionals, investors, and all societal stakeholders who advocate for the three pillars (3Ps) of sustainable development: People, Planet, and Prosperity.

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