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The Role of Islamic Financial Institutions in Achieving Sustainable Development with Special Reference to Environmental Protection

Abul Hassan[1*]

[1] *Associate Professor of Finance, School of Business, King Faisal University, Hofuf,* SAUDI ARABIA.

***Corresponding Author:** hassan@kfu.edu.sa, abulhassan03@yahoo.co.uk

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ABSTRACT

The principles of Islamic banking and finance support the socially responsible development and environmentally sustainable activities. It has the ability to offer Shari'ah-based financial products to contribute in environmental protection and socio-economic development. In order to accomplish this agenda, Islamic finance should make efforts to mobilize resources for achieving the Sustainable Development Goals (SDGs) launched by the United Nations in 2015. This study adopts a qualitative method of inquiry and utilizes secondary information to investigate the ability of Islamic financial institutions (IFIs) in fostering sustainable development. Furthermore, this study contemplates that IFIs should communicate with regard to ecological issues: as finance providers, as pioneers in promoting the goals, as valuers, and as strong partners. A value-based template has been developed and utilized to demonstrate how it is feasible to play an important and vital role of Islamic Financial Institutions (IFIs) in environmental protection. Some strategic choices have been chosen based on the possibility of having a significant long-haul environmental advantage.

Keywords: Environment, Sustainable Development, SDGs, Islamic Finance, Static Model

INTRODUCTION

The World Commission on Climate and Development gave the most widely cited definition of "sustainable development" in its report published in the year1987 titled “Our Common Future”. Additionally, the United Nations (UN) put into effect the Sustainable Development Goals (SDGs) in 2015 as a universal call to action to apply social, economic, and environmental sustainability (UNDP, 2015). It adopted a set of 17 SDGs for the action of its member countries. According to the United Nations Development Programme (UNDP), the Sustainable Development Goals (SDGs) embody an international agenda for inclusive development. They aim to prepare for a sustainable future and to address the global challenges faced by the planet and its people. Prominent among the goals are the elimination of poverty, dealing with environmental and climate degradation, improving education and human health, and a variety of other objectives across environmental and socioeconomic development.[1]

One of the most significant issues that face the attainment of the SDGs by 2030 is the lack of financial resources. Various studies and reports have stated that around US$ 5-7 trillion is needed every year to attain the SDGs, which may not be achieved by governments or contributor agencies (Vorisek & Yu, 2020). In this regard, in emerging countries alone, the required investment for the SDGs will be needed around US$2.5-3 trillion annually for basic infrastructure, food security, education, health, climate change, and poverty eradication.[2]

The Islamic financial sector has shown great promise in providing funds for the execution of the SDGs to maintain human and environmental prosperity. Many developing countries, especially some Muslim countries, have a high level of poverty and low scores of resources in terms of attainment of the SDGs, suggesting that these countries need huge investments in their public service development (Ghlamallah et al., 2021). Currently, Islamic financial assets have grown at a rate of 14% to US$ 2.88 trillion in 2019, the highest recorded growth for the Islamic financial sector since the global financial crisis held during 2007-2008. According to the Islamic Finance Outlook 2022, its assets are projected to reach US$.4.94 trillion in 2025 (S & P Global Ratings, 2022).

Islamic finance has achieved substantial impetus as a rising body of major Islamic funds and individual investors have progressively contributed to the broad principle of *Shari'ah*-compliant investing to achieve sustainable and responsible objectives. There are numerous classifications of these funds based on categories such as climate change, environment, ethical, governance, social impact (such as *Zakah* -charity giving alms of 2.5% of the income of annual savings), *Waqf* (endowment foundation), sustainable, and responsible investment funds, etc. Similar to Socially Responsible Investing (SRI), Islamic finance seeks to foster and enhance sustainable development while adhering to the tenets of fairness, equity, and ethics. Similar commonalities embedded in the fundamentals of *maqasid al Shari'ah* (the objectivity of *Shari'ah*) ensure the necessity for the protection of property/wealth (*maal*) and progeny (*nasl*).

As Islamic ethics suggests, human beings, as God's *Cali*ph (vicegerent) on earth, are assigned to work for the ultimate good of all individuals, species, and generations of God's creations and creatures. The ability of Islamic banking and finance to attract innovative sources of financing which is increasingly evolving as an effective value proposition, strengthening the justification for focusing on Islamic finance for involving the SDGs in its financing (Iqbal, 2018).

Laldin (2019) noted that, even though Islamic finance has been expanding, its involvement in SDGs remains small and has not achieved social impact, sustainability, growth, human-centered economic, and environmental development. Also, this is supported by the SDG Index and Dashboards Reports (2019), which stated that the entire Islamic world does not score highly in terms of SDGs achievement, ranking with an average score of 58 out of 100. This unlocks the door to inquiring about the role of Islamic financial institutions in attaining sustainable development, especially environmental development.[3] The main purpose of this paper is to examine and explore the extent to which Islamic financial institutions (IFIs) can encourage business/ companies to directly participate in sustainable development goals in general and environmental development in particular, both emphatically and effectively. The outline of the paper is as follows:

Section 2 examines Islamic viewpoints on sustainable development and why need to safeguard the environment. Section 3 discusses the Islamic finance's role in achieving sustainable development goals. Section 4 provides an outline of descriptive models for getting corporations to take responsibility for sustainable/environmental development. This section also concentrates on the role of Islamic financial institutions (particularly investment companies, Islamic banks, insurance, and other financial institutions) in achieving the SDGs. A conditional model of the Islamic financial sector is utilized to demonstrate how effective financial transactions can be achieved to attain sustainable development. Section 5 examines the relationship between business organizations, investors, and the climate, delineating the critical role of ecological balance. In the last section, Section 6, conclusions and suggestions are offered.

Islamic Viewpoints on Environment and Sustainable Development

One does not track down a formal Islamic hypothesis of sustainable development, but its absence from current literature on Islamic financial aspects does not imply that such a hypothesis cannot be constructed. Asad (1987) argues: God makes nature, as the *Qur'an* decidedly proclaims. While God is described by Unity (Tawhid), nature is portrayed by duality; however, duality is in the sense of corresponding opposite boundaries, or pairs, as meant by the Arabic expression zawj. One more quality of nature found in the Qur'an is equilibrium. The possibility of a supernatural organization of nature, as found in the Qur'an, might be said to allude to the possibility that nature is the purposive production of an all-omnipotent and omniscient God and is thus perfectly organized in an ordered" (Qur'an 7:56), which well expresses such a model of nature.

Man's aspect lies in 'trust of reasons and volition' (Qur'an translated by Asad), by which man was provided the capacity to make decisions between evil and wickedness. This reasonable awareness gives man essentially the capacity to form ideas and to unite them in innumerable combinations through mental processes which can be directed and coordinated by his will.' Islam embraces this multitude of exercises, and consequently, environmental changes are, according to the Islamic point of view, an inescapable part of life. Yet, according to Islam, man should not perform these exercises for arbitrary reasons. The statement of the Prophet Muhammad (Peace Be Upon Him) often urged the man to be compassionate towards animals. Therefore, the Qur'an, in addition to establishing a vision of nature according to God, also outlines a moral code to guide man: squander is disliked, as is haughty, ness, and every one of its demeanors in egotistic showcases of riches. Considering all, Islam admonishes control and distributive equity. There is also a body of resources in *Shari'ah* (Islamic ethical law), dating from the period of the Prophet Muhammad, precludes private ownership of property assets, such as fields, forests, wildlife, and water, which should be managed for the long-term benefit of people. Sardar (1988) said that wildlife and timberlands are protected in hima or reserves, which are designated exclusively for preservation purposes. Islamic ethical laws

(*Shari'ah*) can be applied to the management of resources. *Shari'ah* implies: (i) dealings must be performed honestly; such practices as cheating, fraud, hoarding, adulteration, speculation, bribery, false advertising, and charging or giving riba (interest) are forbidden, (ii) certain activities, e.g. prostitution, gambling, the manufacturing and selling of alcoholic beverages, drugs, and pornography are prohibited.

There are two decisions vital in *Sharī'ah* that have a tremendous bearing on the issue of sustainable development. These two decisions are to pay *Zakah* (alms paid 2.5% of yearly savings) and to reject usury (*riba*). Sustainable development is first and foremost an economic issue, but it also has a moral angle. The fundamental moral perspective of Muslims is faith in God and acknowledgment of His ethical rules (*Shari'ah*). Islam also does not provide a formal model for the advancement of prosperity in an ecological sense. If all things are equal, it presents rules that can be used for developing suitable models. Therefore, sustainable development, in the sense of maintaining ecological balance, should also be included in this concept, albeit in a more formal structure. According to Islamic ethics, the true ownership of assets lies with God. Man is one of God's honored creatures and its role is that vicegerency. Since the climate and environment are important for God's creation, their abuse can be interpreted in two ways: as a transgression of the power of God and as hurting both the perpetrator and the individual who is harmed. Subsequently, any abuse of the climate that includes waste and destruction is a corrupt demonstration in both senses. 'Enjoying good and forbidding evils' are two moral responsibilities of men. Therefore, in light of these two responsibilities, "sustainable development" can be defined as "inter-generational development", a term used by Ahmad (1976). There are also many perspectives on the significance of sustainable development, as the idea of sustainability is complex.

Shari'ah holds a set of welfare objectives that are manifested in ethical and moral values. Consequently, the objectivity of *Shari'ah* (*maqasid al Shari'ah*) implies a holistic line that drives to uplift humanity to the highest rank by them as virtuous, dispersing virtue, and endorsing public interest, protecting from harm, and safeguarding balanced relations among the self, society, and the universe in which individuals live (Chapra, 2000).

The basic goal of *Maqasid al Shari'ah* is to be a blessing for mankind, influencing nations to execute SDGs such as fostering fairness, safeguarding the environment, determining justice in all facets, community development, consumer protection, and good governance. In Islam, the conservation of the environment involves maintaining environmental resources by utilizing and sustaining them appropriately. Furthermore, Islam has a strong worldview on the environment. It fosters a broad, harmonious notion of the environment. Furthermore, *Shari'ah* has decreed several ethical codes and rules that seek to attain advantages for human capital, community development, protection of consumers, delivery of quality education, and alleviation of poverty.

In regards to relating the environment of the heavens and the earth, the Al-Quran stresses: "He (God) has suppressed for you all that there is in the heavens and what there is in the earth" (Quran 45:13). Likewise, the Jeddah-based International Islamic Fiqh Academy issued it's Resolution No. 185 (11/19) on "Environment Conservation in Islam" during its 19th Session, held on 26-30 April 2009. In respect of any damage inflicted on the environment, the resolution stated: "All acts and behavior that entail any maltreatment to the environment or abuse thereof are forbidden, for example, bbehaviorsand acts that lead to the destruction of environmental balance, or use resources deceitfully without taking into account the interests of future generations" (IFA, 2009).

Islamic Finance's Role in Sustainable Development Goals

The United Nations Secretary-General's "Road Map for Financing the 2030 Agenda for Sustainable Development 2019-2021" recognizes the importance of financial institutions for immediate financing of the SDGs (UN.ORG, 2019). The Islamic financial system echoes the embarking on of the 2030 Agenda since the principles of Islamic finance are rooted in moral and ethical values. Also, Islamic finance can show a vital contribution to the achievement of SDGs as part of Islamic ethical principles (UN Economic Commission for Africa, 2018). The eventual aim of the following ethics is to generate an impartial, sustainable, and ethically responsible Islamic financial system:

1. Interest (riba) is forbidden, and debt is restricted to the value of assets to eliminate selfish hoarding and greed.
2. Excessive uncertainty, speculation, dishonesty, and gambling were all prohibited in the Islamic financial system to discourage reckless behavior.
3. Risk and reward (profit and loss) are distributed in several Islamic modes of financing, which promote fair access to assets, markets, goods, and financing for all.
4. Transactions and investments with forbidden industries and related businesses such as drugs, tobacco, weapons, environmental degradation, etc. are restricted since these are harmful to human beings.
5. Asset-backed or based transactions are made obligatory, linking Islamic finance with real economic activities.

6. Mandatory and voluntary donations such as *Zakah* (two and a half percent of annual savings is compulsory for every Muslim who has annual savings), *Waqf* (endowment/charity), and *Qard Hassan* (benevolent loan) are encouraged.

Objectives of the *Shari'ah* are to promote the welfare and prevent hardship, which is termed maqasid e *Shari'ah*. From a macroeconomic perspective, this implies that an economy should work toward eliminating income disparity through equitable growth and firmness among all sections of people. Similarly, from a microeconomic perspective, this means that businesses should avoid activities that harm society, such as dumping toxic waste in the environment, engaging in speculative ventures, and selling harmful products. Also, it adheres to the rules laid down in the transactions; for example, all contracts must be connected to real economic pursuits. To achieve the SDGs, there are three main factors: economic growth, social inclusion, and environmental protection. The Islamic financial system should play a key role in these three aspects. It is further important to understand how Islamic financial institutions (IFIs) should play a role in attaining sustainable development. There are five key areas where IFIs can play an important role in addressing the aforementioned three factors to achieve the SDGs.

The five key areas are:

(i) Financial sector stability
(ii) Infrastructure development capacity
(iii) Risk mitigation
(iv) Enhancing financial inclusion
(v) Solving social and environmental problems.

Table 1 briefly stated the role of Islamic finance in affecting the five key areas of the SDGs.
The five key areas are clarified below:

Financial Sector Stability

Due to its nature, the Islamic financial system can bring strength to the financial system, as the system is built on the principles of asset-backed and risk-sharing, which avoids an imbalance between financial transactions and the real economy. Islamic finance's most preferred mode of financing in the corporate sector is equity-based financing *(musaharakah*). The equity-based financing helps to reduce systematic risk, lessen the probability of bankruptcies, and make the overall financial system more stable. Enhancing the share of Islamic financial institutions in stock markets and introducing Islamic bonds (*Suku*k), would develop their role in equity-based capital markets. Particularly, the use of equity Sukuk such as those based on *musharakah* (equity partnership) and mudarahah (trusteeship financing) should be encouraged.

Table 1: The five key areas where IFIs can play the role in impacting SDGs

SDGs	Financial Stability	Development of Infrastructure	Mitigating risk	Financial inclusion	Social & Environmental Impact
1. Eradicate of poverty in all forms	√		√		
2.Eradication of hunger, attain food security and foster sustainable agriculture			√	√	√
3.Safeguard healthy life and help wellbeing of people for all age groups.			√	√	√
4.Guarantee of inclusive and quality education & support lifetime learning					√
5.Attain equality of gender & empowering women				√	√

6.Ensure availability and sustainability of water & sanitation		√			√
7.Guarantee of access to inexpensive and resolute energy for all.		√			
8.Stimulate,maintain, inclusive & sustainable economic growth, full and productive employment and reasonable job for all	√		√	√	
9.Develop robust infrastructure, support inclusive and sustainable industrialization and rapidly innovation	√	√			
10.Lower inequality among countries	√				
11.Get cities inclusive, durable, safe, and sustainable		√			√
12.Safeguard the sustainable consumption and creation patterns	√				
13.Need serious action against the change of climate and its shock					√
14.Maintain the seas and marine resources and use of ocean sustainably					√
15. Management of forests sustainably and fighting desertification, stopping the reserve land degradation, and biodiversity loss					√
16.Support peaceable, just, and inclusive societies				√	√
17.Invigorate the global alliance in the matter of sustainable development		√			√

(*Source:* Modified and developed based on Ahmed et al, 2015)

Capacity Building in Infrastructure Development

To boost commerce and trade, the development of infrastructure is very significant. It also improves competition and leads to long-term growth. The development of sustainable infrastructure will involve the process of being environmentally responsible and having a positive social impact. High requirements for infrastructure investment funds indicate a demand to find innovative approaches in which pioneering players, such as Islamic financial institutions, can contribute to sustainable infrastructure development. Various types of Sukuk (such as sovereign, private sector, and retail Sukuk) are being utilized to fund infrastructure projects that promote the welfare of the community at large.

Mitigating Risk

Islamic finance aims to share risk rather than shift risk, so this system can be applied to reduce vulnerability through its risk-mitigating methods. Islamic insurance or takaful, based on mutual help schemes, may be extended to various segments of people, especially to the economically weaker section. Various charitable funds, such as endowments and other waqf funds, should be utilized to pay the monthly takaful premiums to hedge against the defined risk, or to give interest-free loans (*Qardul Hassan*) to the appropriate people. This should not only enhance the penetration of Islamic insurance (*takaful*) amongst the poor people but also decrease the helplessness of the poor by acting as a safety net.

Enhancing Financial Inclusion

For minimizing poverty, which is the first agenda of the SDGs, financial services must be made available to economically less privileged people. Formal financial institutions find that poor lenders are risky or costly to provide loans. A small number of people in financial inclusion can be attributed to various economic, social, and moral causes. While making efforts to eliminate poverty and attain sustainable development, Islamic microfinance institutions can obtain help from IFIs to ascertain the social role which Islamic business ethics promotes. Associating the social sector with IFIs by utilizing *Zakah* alms giving (2.5% of savings) and Waqf (endowment foundations) to augment the productive functions of the economically disadvantaged sections can obtain benevolent loans or financial assistance for the very nature of social impact or to achieve the objectives of *Shariah* (*maqasid al Shariah*).

Islamic Finance in Attaining Environmental Protection

The primary aim of this study specifically addresses environmental protection. According to the viewpoint of ecological strategy makers, the present circumstance presents a possible open door, especially useful because the Islamic Development Bank, the Organization of Islamic Cooperation (OIC), and the United Nations Cooperation Committee have recognized the requirement for a more extensive scope of strategy tools, particularly the utilization of market-based apparatuses (Alawode et al, 2018) and (Zeinelabdin, 1993,). In a perfect world, environmental strategy makers in Islamic countries might seek to see IFIs supplementing and supporting the signs that policymakers are attempting to lay out, including financially "rewarding" environmentally prevalent ways of behaving (for instance, with a lower capital cost or a higher offer cost) and avoiding odds things.

Like other economic organizations, the IFIs also have some direct environmental effects from their activities - for example, power use, paper use, and business travel. While not considered major polluters, as with some businesses, there is scope to reduce this impact, and often to do so without incurring additional costs. The assistance sector is becoming increasingly important in the economies of Islamic countries and its overall environmental impact is significant. Given their influence, IFIs are well-positioned to play a positive leadership role in the sector in demonstrating ecological responsibility.

To accomplish this change, the policymakers have various choices. Existing ecological regulations can be altered or interpreted in ways that make them more pertinent to the Islamic financial system. The latest environmental regulations can be used to energize or pressure the Islamic financial market to consider ecological issues. Several Islamic financial instruments should be developed and utilized to persuade the Islamic financial sector to reach out. Lastly, the Islamic financial sectors are profoundly managed and dependent upon regulation, and there may be scope here to adjust strategies to incorporate ecological angles. To play a vital role in environmental protection, Islamic financial institutions need to be strategized in the following directions:

Transaction Model of the Markets of Islamic Finance

Business sectors in Islamic countries will capitalize on their leverage to help the climate, assuming they see that it is to their greatest advantage, and that means it will help them generate profit, either directly (by working following the nature of their business reputation).

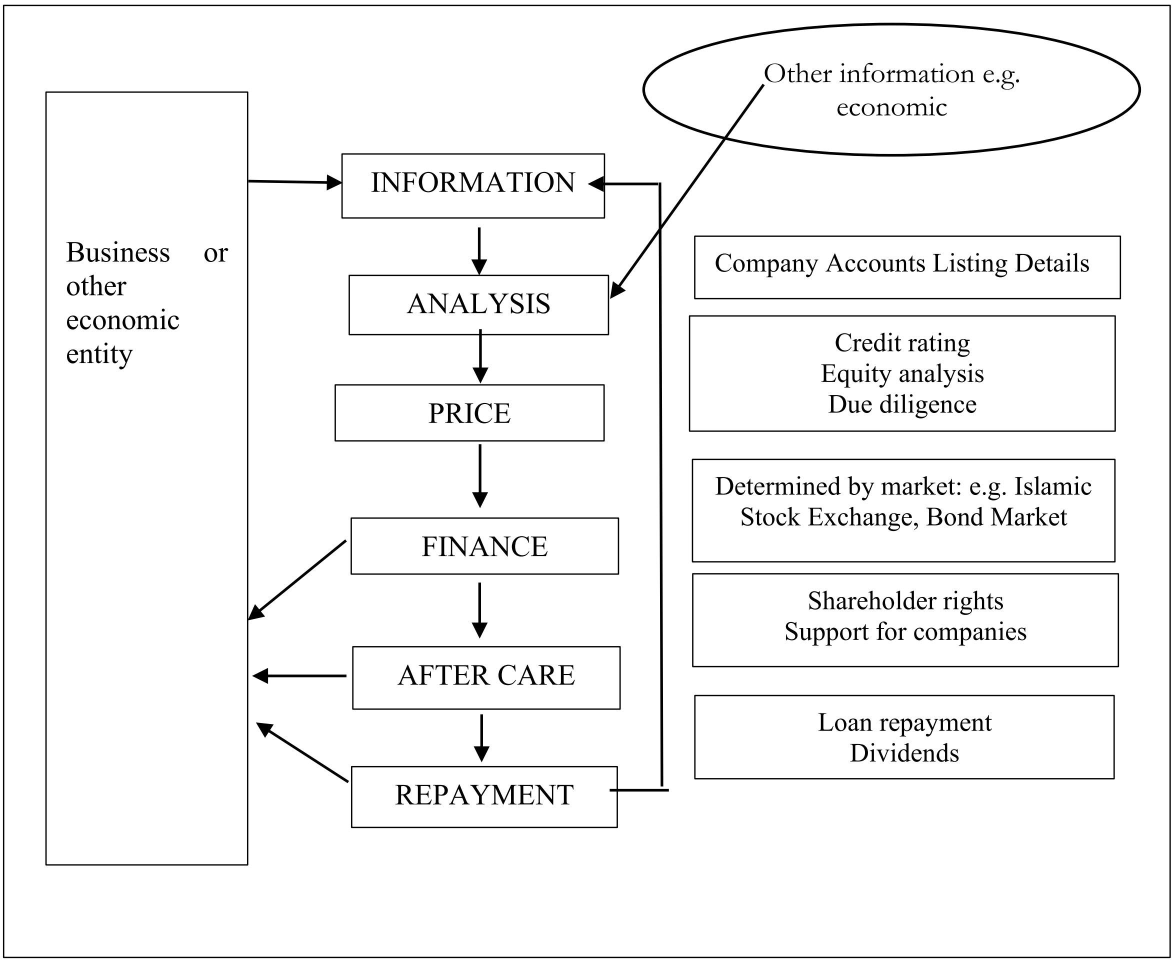

Figure 1: Transaction Model for The Markets of Islamic Finance

The unusual contemplation is especially significant in venture execution through superior advice or management guidance. While this is clear, applying it is fairly more difficult. Ahead of time, it tends to be extremely challenging to know whether a specific movement will be beneficial or will improve investment returns. Before considering any new or different action, IFIs will need to carefully consider the ramifications. Therefore, it is beneficial to understand how the Islamic financial market works in providing capital. Figure- 1 beneath gives a model of the Islamic financial market activities in this matter.

Assessment is a vital part of the interaction and will be largely driven by the goal of making beneficial Islamic investments. A critical element in the assessment will be the evaluation of the actual and potential involvement of perceived risk. A significant part of the investigation is that it incurs costs, which can be very significant. Hence, an underlying assessment is often made of the potential outcome of the investigation, with many recommendations being dismissed at an early stage (Gazni & Tamer, 1997). The cost is fundamentally resolved by the Islamic market and is generally dependent upon the type of investment and the risk when it is known. Aftercare refers to the way that most funding continues for a while and IFIs have a significant interest in supporting their investments once the finance has been provided, which can be done through investor activities, through agreements on *Shari'ah* compliant loans, or through the general provision of services that enhance the business.

The above model uses both individual supporting exchanges and the progress of innovative business lines, although the latter option can be undeniably less quantitative and is expected to offer the possibility to recover the underlying costs multiple times over. This model features that for economic activity or change to a movement in favor of IFI establishment, not only must it make sense in basic *Shari'ah*-compliant financial terms (to offer a fair return/be accurately evaluated), but it must also be widely applicable and relevant to business, taking into account the various costs associated with going through the above process.

Like mainstream financial institutions, if *Islamic* financial institutions (IFIs) are to incorporate environmental considerations into their decision-making, they need to be convinced that not only are they profitable in the short-term sense, but also that the arguments are strong enough to make the environment an important issue for IFIs facing challenges and competition both externally and internally. Nearly, the model proposes that information and analysis present key difficulties for the environment, as generally, procuring good environmental data is a challenge. Also, this will increase the costs and there is a chance to reduce the trustworthiness of analysis and make it more problematic for IFIs to defend various environmental actions. Nevertheless, there is often substantial latitude in making decisions in Islamic financial institutions—seldom are choices black and white. Thus, in terms of individual transactions, environmental factors may play an important role in marginal financing choices, even if the information is incomplete. At the company's business level, while it may be difficult to defend new environmentally correlated activities in terms of business profitability, they may offer benefits to an Islamic financial institution in terms of excellent publicity and present a good proposition in general terms. The following are potential strategies:

Ecological Niche Strategies

Islamic financial institutions (IFIs) may see the environment as contributing to a potentially profitable business. Some of these are:

1. Structuring expertise in offering finance for essential environmental areas such as water and waste, renewable energy, and environmental technology.
2. Building financial products to support the practice of environmental benefits such as energy efficiency.
3. Structuring "green" products in compliance with Sharīʿah for customers and clients.

Along the lines of the aforementioned business, making suggestions that are attractive to IFIs may entail the reality of profitable and growing market sectors. The extent to which such opportunities occur is open to debate, but there is some evidence to suggest that there are many untapped opportunities existing. These prospects signify a "niche" approach in terms of the business of Islamic banking - even though some of the niches may be quite substantial. The effect on the environmental aspect will vary depending on the degree to which Islamic investment is mobilized towards leading sectors, but if finance is mobilized, the environmental benefits are quite direct and, for example, may help to accelerate the development of essential industries to pave the way towards sustainability.

Broad Strategies

Besides what was mentioned above, the IFIs can see the environment as an opportunity to enhance the overall improvement of their business, for example by:

1. Enhancing the value of their investment by controlling risks, such as environmental obligations.
2. Enhancing the value of their investment choices by incorporating environmental factors.
3. Upgrading the excellent quality guidance offered to clients, for instance, investment advice.

All these prospects represent a strong move towards all sectors, which might have extensive outcomes for many industrial sectors in theory. Yet, the direct impact on the environmental matter is much harder to measure, as it would depend on the degree to which such acts would alter the conduct of the businesses and other economic bodies participating. At the outset, the goal is to eliminate any obstacles to environmentally responsible behavior by companies who understand the Islamic financial markets, regardless of and perhaps unsympathetic to the actions that some developing companies are taking positive steps towards. In the long term, as businesses find that Islamic financial institutions are keen to understand and establish environmentally-friendly conduct, the results could be significant. An important factor in this process is whether socially responsible and environmentally friendly behavior does play a part in the role of better financial performance (such as better corporate productivity, investment profits, etc.) and hence is a subject of valuable consideration for the IFIs.

Clients and Sectors

The Islamic financial system covers a broad range of products and functions and serves a wide variety of clients. The Islamic financial segment can be divided into Islamic Asset Management Companies, Islamic banking, and Islamic Insurance Companies (*takaful*). Islamic asset management companies and banks would trade off risk against potential return and might be involved in potential upside; insurers vigorously aim to assume risk and offset it within these. These distinct approaches to risk may obviously result in varying opinions of each sector towards environmental concerns. Several IFIs have varying customer bases, for example, small, medium, and large enterprises, the public sector, non-governmental organizations (NGOs), and individuals; and they have various levels of impact on them. This should also affect where and how IFIs would have an environmental effect and where they may best improve environmental practices. The majority of customer groups are examined as follows:

1. Large Companies

The IFIs, especially Islamic banks, have become major lenders to larger firms in Islamic countries, as well as providing a range of other Islamic financial services, such as treasury management and transaction processing. Their ability to influence larger corporations is limited, as competition is fierce, and these financial services are hardly central to large companies. The greater impact on larger companies will come from the larger Islamic investment sector. Some corporations may be further subject to the effect of Islamic banks, for instance, private companies (not listed in the stock market) or those companies with closely held shares, smaller registered companies that are dependent on banks, and businesses in financial difficulty. However, in certain sectors, Islamic banks may have a larger influence, especially where high levels of investment are common. These businesses include real estate, lending, project finance (on a *musharakah* basis), and lending for individual infrastructure projects-this would be appropriate for the environmental sector. In this area, Islamic banks should impose a range of conditions concerning the operation and construction facility, by way of covenants and conditions on lending. These should include environmental issues. While several Islamic banks may carry out an environmental risk assessment as a part of the credit appraisal; this tends to be retrospective, and a few may actively impose environmental conditions. Impact on environmental evaluations should be a valuable tool in respect of identifying environmental project risks and implying risk management practices. Liability systems may also influence the risk appraisal of such financing.

2. Small and Medium Enterprise (SMEs)

Islamic banks are an important source of peripheral finance for SMEs and would have a considerable impact on them since most of the SMEs have a banking affiliation. The Islamic banks should send the following strong indication to the SMEs:

- ***Influencing Management Through Lending Engagements:*** When providing loans to SMEs, Islamic banks reflect the worth of management and further risks, which should include environmental issues. These Islamic banks may explicitly pursue environmental concerns when determining whether to extend funds; in these conditions, they should enforce lending and the terms they would offer.
- ***Provide Companies with Information*:** The IFIs are the key source of information for businesses, especially for SMEs, and there is a possibility for Islamic financial institutions (IFIs) to play a role as a source of data in the environmental field.
- ***Professional Environmental and Financial Services*:** There is an opportunity for Islamic banks to build Islamic products that provide for the environment, for example, investing in energy efficiency or renting environmental technology.
- ***Expert Support for Environmental Enterprise*s:** The majority of developing sectors may encounter difficulty in gaining approval from the Islamic financial sector, as they are new, the risks are unspecified, the technology is inexperienced, and the markets are uncertain. Environmental companies certainly face these problems. It is necessary to try to recognize the sector and the problems it faces; the IFIs should at least try to ease some of the barriers these promising companies face. Even though one should not expect them to relinquish standard financial judgment, remarkably, while various Islamic banks are vigorously engaged in fields such as renewable energy financing, every so often neither their environmental nor their publicity units seem to be aware of such actions.

3. Households and Individuals

People may have a significant influence on the environment through their actions and use of goods and services, and in some cases, their influence can be more damaging than commercial effects. The IFIs should have a key impact on the actions of people through the provision of appropriate financial provisions: for example, access to Shari'ah mortgages is a requirement for providing home ownership. Additionally, car ownership should be enhanced by the accessibility of Shariah-based car loans (murabah or cost-plus basis) and hire purchases. Without suitable Islamic financing plans, products or goods may struggle to achieve sales, especially if they have high capital costs and long life spans. This is often relevant for environmental services, which involve a significant capital cost. A good example is energy efficiency, which, in theory, provides very good financial returns but is hindered by the fact that people are reluctant to finance such investments and, in this case, IFIs have largely failed to deliver suitable Shari'ah-compliant financing instruments/products.

4. The Public Sector

The public sector is an important component of the economy of various nations and thus contributes significantly to a larger share of the environmental impact of that country, especially when sectors such as water, waste, transport, and energy are in state hands. The IFIs are also providers of capital to public sector organizations and governments, and therefore, theoretically, they might have some impact on how that investment is offered and utilized. Though in most cases public sector financial support involves an implicit or explicit government assurance, there is little possibility for other public sector endeavors to be evaluated on their financial or environmental effects by financing institutions. In severe cases, it could be argued that if environmental negligence at the national level jeopardizes a country's beneficial capability, this must be reflected in the country's overall credit rating. If public sector investment is provided at the regional level without addressing the root causes, then the environmental impacts could be substantial enough to warrant consideration by the IFIs.

5. NGOs

The NGOs (non-government organizations) comprise organizations such as cooperatives, charities/endowments, micro-credit institutions, etc. Whereas these NGOs have general requirements for finance and little environmental impact, they would be significant at the edge, as they should be working in the field or actively looking for appropriate investment to respond to the key environmental risk—therefore they should show an active role in financing the environmental protection area. Environmental social campaigners and economists have stressed that investments in sustainable development must start by financing social areas, such as by financing education, refinancing microcredit, and supporting social and community services. As Al-Harran (1999) states, the availability of small amounts of capital would inspire micro-entrepreneurship and generate employment. While it is true that some micro-credit groups may not have immediate environmental effects, the investment of Islamic banks in these micro-credit groups should help to focus on the social aspects of sustainable development.

Islamic Banks

Following the principles of Islamic ethics, Islamic bankers will never anticipate advancing a loan and receiving a predetermined fixed rate of interest in the future as conventional financial institutions do. In Sharīʻah law, the core of Islamic business ethics, they are responsible for safeguarding that investments must be made in viable projects with trustworthy entrepreneurs. If the project is successful in business, the Islamic bank shares the profit on a pre-agreed percentage. If the business fails, the Islamic bank shares the losses with entrepreneurs in the case of a musharakh (partnership) mode of finance or suffers the losses in the case of a *mudarabah* (trust financing) mode of finance.

The *Sharīʻah*, which determines the functioning of Islamic banks and shapes the basis of customers' day-to-day businesses, entails that incentives come from risk sharing. The profit should be rationalized through the creation of ethical value that the Islamic banking system puts forth to add to the value of the borrower's endeavors and skills. Besides a backdrop of rapid growth in the economies of Asian and Middle Eastern countries over the last few years, and a desire to resist globalization, Islamic banks have started to shift and develop to deliver a variety of alternative financial products firmly based on Islamic business principles. Islamic financial systems have effectively engaged in an increasing number of key projects in Asian and Western countries. Islamic banks, such as Al-Rajhi Bank, Al-Barakah Group, Faisal Islamic Banks Group, National Commercial Bank in Saudi Arabia, Dubai Islamic Bank in Dubai, Abu Dhabi Islamic Bank in UAE, Islam Berhad in Malaysia, Islamic Bank Bangladesh Ltd, and Islamic banking in other countries, have achieved project deals using lease financing technique (ijārah mode of finance) and numerous industrial projects, including the construction of refineries, power stations, airports, and schools, etc., by applying the istisnaʻ (deferred financing technique). The apex bank of the Islamic countries and the Islamic Development Bank (IDB) have also sponsored several projects that are completely linked with sustainable development (IDB Annual Report, 2022).

Scattered across Islamic countries and elsewhere, there are over 250 Islamic banks, financial institutions, mortgage companies, mutual funds, and insurance (*Takaful*) companies that have successfully created a complete parallel economy in which *Shari'ah* has the final say. The business growth of IFIs has averaged 10-15% per year (Statista, 2022). In response to this prospect, conventional banks such as Citibank, HSBC, and many others have launched Islamic "windows" in the South East Asia, the Gulf, and some European countries. The business's market share is moderate - about 12% (S & P Global Ratings, 2021). As of December 2019, Islamic banks have total assets of over US$1.99 trillion (Statista, 2022) in the world. Consequently, IFIs have an enormous effect on the economy of Islamic countries and, subsequently, on their environmental impact. Islamic banks provide a wide variety of services, including lending and deposits in the forms of *murabahah* (trade finance on cost plus basis), *mudarabah*, and *musharakah*, as well as providing cheque, debit, and credit card services and additional transaction handling as well as offering other financial products and services that the mainstream financial system provides. Practically, investing on a long-term (*musharakah*) basis is the most vital activity in the Islamic banking method. A significant factor in establishing the influence of Islamic banks on the environment will be the nature of the clients. Therefore, it is worth looking at the major customer groups, such as small and medium enterprises (SMEs), large companies, and individuals. There is still scope for Islamic banks to influence consumer behavior through the financial products they offer. Currently, Islamic banks have focused on two areas: first, many have made significant progress in strengthening internal environmental management systems to reduce their environmental impact. Secondly, several Islamic banks incorporate environmental assessment into their credit evaluation process. One encouraging area of action is to provide practical help to small enterprises on how to cope with their environmental impact, through information guidelines and other logistical help. Wherever Islamic banks are less advanced, several

NGOs and the Islamic Development Bank (IDB) are helping to develop novel financial products from an environmental perspective for both individuals and businesses, for example, investments in the energy efficiency field, and inspiring the progress of such products seem necessary. . It is stated that there is an increasing attractiveness in improving environmental management systems (EMS) and upgrading the reporting systems within Islamic banks.

The Investment Sector

The possibility of the investment segment lies largely in the signals it could send to those who invest in it about the benefits of environmentally beneficial behavior. The gestures it should send will vary depending on who is looking for finance. It is seen that the effect of investors on the public sector is inadequate, and mostly limited to macroeconomics. The considerable impact of the Islamic investment community on the industry, especially on larger companies, is thus evident. The Islamic investment community should send out the following strong signals to businesses:

Ratings of Pricing of Capital for Companies: When a firm or company first acquires a listing or pursues to raise more capital, the process of due diligence provides an opportunity to scrutinize a company's overall management and strategy, as well as environmental issues. A complete understanding of environmental factors can significantly influence the price and amount of capital available to companies, and reward excellent companies with Islamic debt finance (due to lower environmental risk) or gain access to the equity at improved ratings. Similarly, investors may stay away from companies with high environmental risks.

Share Ratings and Company Valuations by Equity Markets: If investment providers were to give incentives to companies with a higher environmental track record with better share prices, this may send a strong signal about the advantages of better environmental performance to businesses. To be effective, shareholders should expect the results of decent environmental projects, rather than waiting for the findings to become obvious. Islamic financial markets must be assured that such conduct leads to exceptional financial performance. Currently, this trend has been a cause of much argument and analysis, but the testimony is evolving to support this hypothesis. Therefore, Islamic financial markets should be aware of the importance and validity of the outcomes.

Ownership of Corporations through their Share Capital: The IFIs hold most of the share capital of the public sector companies in Islamic countries, either directly or on behalf of their investors, and are thus the most influential stakeholders. In principle, they can direct companies to take the environment seriously in their management policy. However, in practice, action has been inadequate: shareholdings are generally diffuse, making it difficult for majorities to address the issues and institutions are unwilling to become effective if the financial gains are not certain (S&P Global Ratings, 2021). Other investors, therefore, enjoy more control over the management of key companies. However, if IFIs are encouraged by the financial benefits of excellent environmental performance, they should promote such action.

In some cases, nowadays, investors are perhaps less interested in environmental issues than Islamic banks. Still, several pressure groups are emerging in the investment area (illustrated in Figure 2), and they are:

1. ***Industry:*** Prominent companies have become increasingly upset with the ineffective appreciation and incentivization of the environmental development they have done by the investment group. Especially, international organizations such as the World Business Council for Sustainable Development (WBCSD) and the Sustainable Development Goals (SDGs) of the United Nations have been involved in this field, building the notion of eco-efficiency and fostering its application among investors (UN.ORG, 2019).
2. ***Investors:*** There is a scope for generating revenue from specific investors in environmentally sound investing, which has encouraged the progress of evolving some ecological investment funds in the traditional area. Institutional investors have also begun to explore this area, encouraged by the good investment benefits of such funds. As a 'green' product with no pricing or quality premium, the potential market for such products is considerable. Additional avenues that several investors have followed are the action of shareholder activism. They may have been discouraged by the apathy of investment institutions and may be taking up their concerns directly with large companies. This approach has proved successful in Indonesia, Malaysia, Pakistan, the UK, and the US, etc. However, its application is more restricted in developing countries, where shareholders' claims are less established- there may be some scope to improve it in Islamic countries.

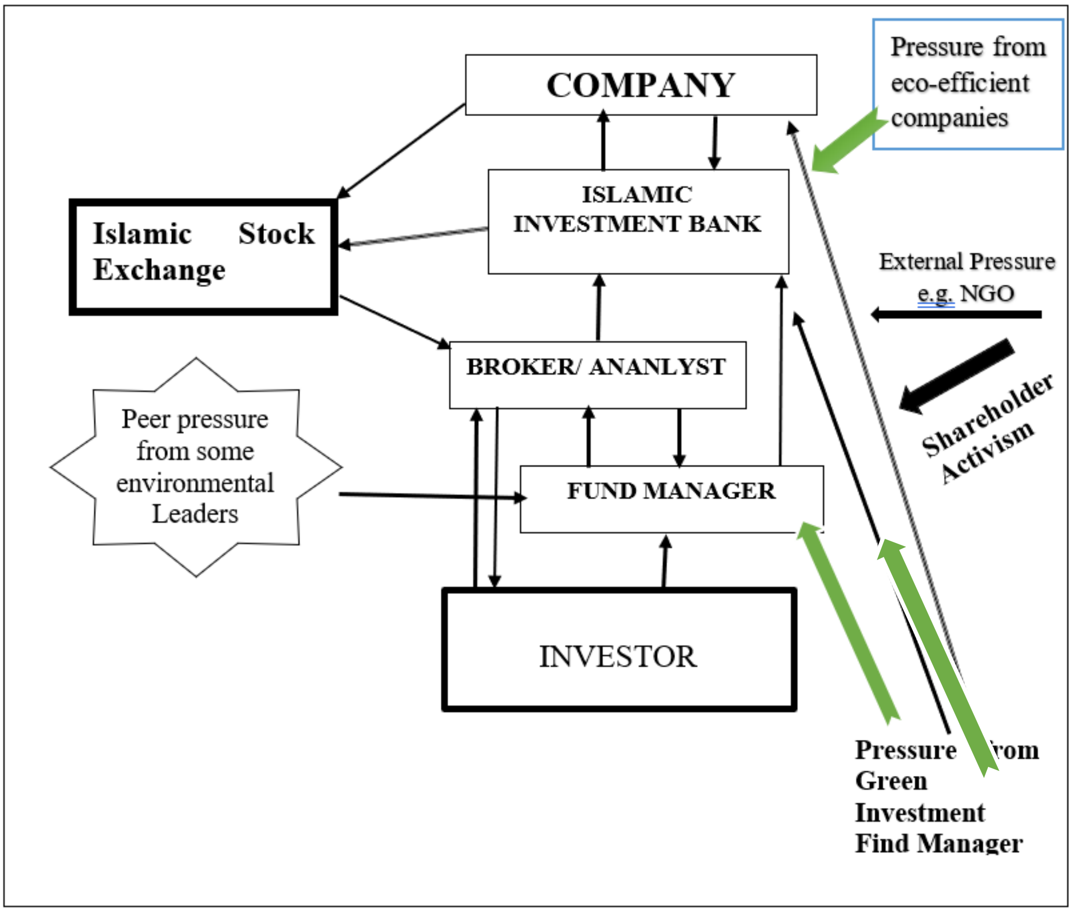

Figure 2: The environmental pressures on the Investment Sector

3. ***NGOs:*** Ecological Non-Governmental Organizations (NGOs) have likewise begun to target fund management and investment banks over their investments and associations with environmental protection organizations. Until now, they have not had any significant success, but have begun to have an impact on the sector.
4. ***Within the Investment Sector:*** A couple of associations in the investment sector have begun to take environmental matters more seriously and may create some peer pressure for change (UN.ORG, 2019).

One pressing issue for the investment area is the connection between environmental performance and investment performance. The evidence from the traditional investment sector supports the assertion that environmental sustainability contributes to strong financial performance. Nevertheless, many in the investment sector remain unconvinced and action is needed both to persuade sceptics and reinforce signals, for example through the enhancement of environmental taxation. To urge the investment sector to join ecological issues, various obstacles should be overcome. Two major impediments are: (a) market inertia in investment practices, and (b) the balance between long-term and short-term analysis. However, the primary issue is likely the difficulty of obtaining quality data in ways that the sector can comprehend and utilize. Strategies should be improved to provide relevant data to the sector.

The Insurance (*takaful*) Sector

The Islamic insurance sector, known as *Takaful*, has yet to grow. The capability of *Takaful* protection in achieving sustainable development lies in its ability to assess different types of environmental risk and to help pay for ecological damage. As environmental issues can affect risk in various areas, the conventional insurance sector has adopted an issue-based strategy and the Islamic insurance sector is following in the footsteps of the former:

- Expanding on a greater understanding of the interaction between the environment and Islamic insurance (*takaful*) agency, there are several potentials for beneficial action and business prospects.
- Involving sustainable development as a risk management instrument, companies that are acting impractically are likely to introduce more serious risks than those that are not in effect. The preparatory rule would appear to be generally about risk reduction.
- Looking at the potential for industry-wide activities to reduce ecological risk, for example, by creating rules and regulations, etc.

- Looking at the chances for improving new *takaful* items to address ecological difficulties.
- *Takaful* of new risk classes, for example, innovation risk.
- Items for the environmental sector, such as conventional insurance against climate viability for the environmentally friendly power sector.

The Role of Companies and Investors in Environment Matters

Companies should progressively see environmental issues as pertinent to their business advancement. However, financial investment sectors in general, especially investors, are not attracted for several reasons. Furthermore, companies are progressively aware of the environmental pressures and have fostered a range of initiatives to address them. Understanding the economic implications of the climate on companies includes:

- Distinguishing what the climate means for organizations is seldom straightforward, but rather usually involves commercial organizations,
- Realizing how business organizations' executives can answer, utilizing mechanisms such as ecological administration frameworks, eco-efficiency, and risk management,
- Transmitting appropriate information,
- Insight into the financial consequences of their environmental impact and the management reaction.

The following figure 3 illustrates the aforementioned relationship. The chart also helps us to recognize where data/statistics are likely to be beneficial to the business sectors. Information on the organization's approach to dealing with environmental issues is attractive, including techniques, management frameworks, etc. Such information is often subjective, however, investment experts are accustomed to assessing the highest quality from such information. Ecologically relevant financial data on costs and liabilities are likely to be valuable. Nonetheless, such statistics will only cover specific territories and may not provide a guide for future economic performance and risk.

Organizations' ecological records will help address the conflicts they encounter and the dangers they run. While the negative cycle in the model is flawed, organizations with a bigger ecological impact will feel obligated to change. The WBCSD and others have contended that environmental performance may be a sign of the adequacy of a company's management. Sensible investigators should also monitor the "ecological drivers" that corporations face directly. Corporations may not have this kind of statistics themselves, which is beyond their control.

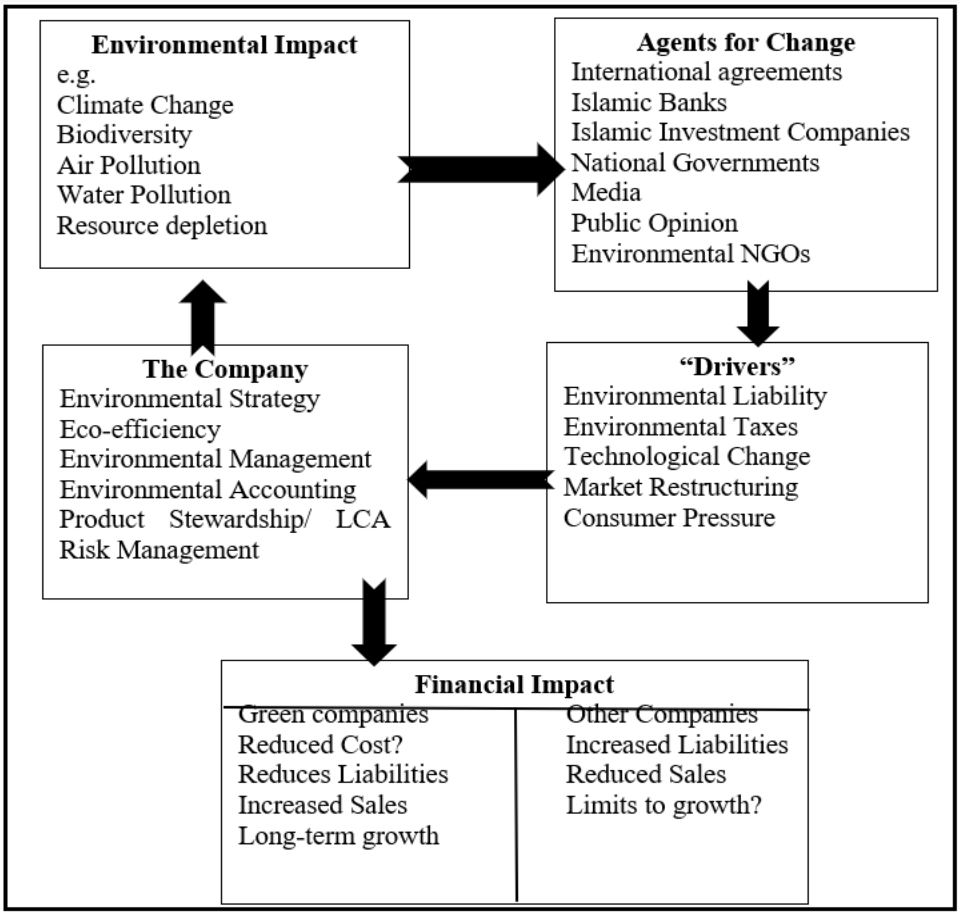

Figure 3: The Relationship between Companies, Investors, and the Environment
(*Source:* Hassan and Chachi, 2003)

Environmental Reporting and Rating Agency

The global financial system is changing due to companies' participation in businesses in light of several UN initiatives on sustainable development and environmental issues. The way corporations are performing in business is also shifting. Important components, such as environmental reporting standards, are becoming more inclusive, containing ESG and SDGs concerns. The Islamic Financial Services Board (IFSB), the Basel Accord III standards, and other financial reporting standards provide the linear economic paradigm. The Cambridge Institute of Sustainable Leadership (CISL) and the United Nations Environmental Programme - Financing Initiative (UNEP-FI, 2014) have formally investigated this significant shortfall in standards and called upon international standard setters to include environmental disclosure issues in their reporting standards. The call is of similar importance for the IFSB (Islamic Financial Service Board) and the AAOIFIs (Accounting and Auditing Organizations of Islamic Financial Institutions) to include environmental reporting, ESG, and SDGs in their standards and to classify tasks and responsibilities under Pillar 2 as well as disclosure requirements under Pillar 3 of the BASEL Accord III. Under Pillar 1, the IFSB should promote green Sukuk for various reasons.

Information is the way to assess performance, however, there are limited useful statistics on ecological implementation and management. The currently available data sources may not be adequate to satisfy observers for the reason that:

1. The ecological detailing is focusing on several onlookers, and various organizations do not report.
2. The possibility of yearly reports is being impulsively taken advantage of and needs to be normalized;
3. Freely accessible information presents significant practical complications.

To address these issues, there may be a possibility to standardize the different factors and economically suitable environmental reports, possibly as a feature of the yearly reports, encompassing Islamic financial systems, ecological information, and subjective data on environmental management. An alternate method needs to be developed to assess the progress of environmental rating and a short report is required for financial markets. As of now, such organizations have limited advancement, however, the Bahrain-based International Islamic Rating Agency promoted by the IDB (Islamic Development Bank) offers long-term potential. A compelling approach to enabling the growth of these organizations is working on the quality of information made accessible through the regulators.

Environmental Business Area

The ecological business area comprises corporations ranging from customary environmental businesses, such as waste management and control of waste management, to the development of "green" products for eco-tourism and renewable energy, etc. They have a basic role to play in achieving sustainable development programs and ensuring access to private-sector finance is important. Despite seemingly great potential, with rapidly developing markets, the investment in the area has been disappointing. Certainly, the underperformance of several high-profile companies has been the main factor in creating a poor impression of the climate among Islamic financial markets.

In light of the difficulties confronted by the environmental sector, various creative methodologies and expert associations have been created in different areas, such as Islamic project finance, Islamic investment, eco-friendly renting (ijara), ecological and green Sukuk (Islamic green bonds), expert environmental consultants, and environmental assets. These items can easily be replicated Islamically, and IFIs should approach them with a positive methodology. To promote Islamic investment sectors and to support the sector, there is a need for measures at both a macro level, such as clear policy development and dissemination, and at a micro level, such as the creation of Islamic ethical financial products and specialized Islamic financial institutions for environmental entrepreneurs. There must be a degree of support for innovation in the Islamic financial structure.

CONCLUSIONS AND RECOMMENDATIONS

The Islamic financial industry can play a meaningful role in addressing the difficulties faced by humanity and can contribute to the efforts of mobilizing resources for achieving sustainable development goals (SDGs) particularly in protecting environment. However, this study has found a wide range of activities that driving Islamic financial institutions (IFIs) might embrace and encourage companies to conduct themselves in a sustainable and environmentally conscious manner. Bringing the Islamic financial market into the domain of ecological sustainability is a movement that should be undertaken cautiously and with consideration for the components of the Islamic financial sector. The Islamic financial sector's responsibility is to facilitate their clients' requirements. Development is only beneficial when it is profitable.

Subsequently evidence shows, there is limited interest from corporate clients for SDGs issues specially environmental financial services, apart from a few specific areas of concern (Ibrahim et al, 2023). Although, the ecological organizations are too small and diffuse to provide significant support to open doors for the market in general. However, there is a scope to work within these constraints. The potential for environmental variables to be relevant to Islamic financing and venture investment is considerably limited because lack of operational data to these issues. The interest in environmentally oriented investments should be expanded in real terms, assuming any obstacles to their sale are overwhelming. Supporting niche activities more directly, such as the promotion of visionary Islamic investments, should help to enable their growth.

The accompanying strategy choices are suggested for the consideration of the IDB/IFIs and the OIC (Organization of Islamic Cooperation). The IDB/OIC should play the primary role in working on the progression of ecological data pertinent to the Islamic financial sectors. This can be done through the normalization and improvement of statistical data collection and the development of environmental reporting guidelines targeted at the Islamic financial markets. The overall result of the proposed acquisition of information/data and research should position the Islamic financial sectors as a positive contributor to environmental protection program. Such a program of activities would provide a significant supplement to, and support, others with consistent environmental policy initiatives and would help to achieve the goals of sustainable development.

Furthermore, waste management and waste control are of primary importance to ensure the protection of the environment, encouraging recycling to maintain the ecological balance. Waste control and management strategies should be given a high priority in Islamic countries, as the European Union and other parts of the developing world have emphasized in achieving sustainable development goals especially environmental protection aspects. In Islamic countries, dealing with a wide range of waste remains one of the most difficult tasks. More corporations in the Western world are integrating their disclosures regarding their waste control and management policy into their reporting. The Islamic Development Bank (IDB) member countries, with a few exceptions, do not consider waste control and waste management to be a popular issue (Laldin, 2019). The government policies at various levels in Islamic countries should substantially contribute to introducing waste control and management initiatives at IDB/OIC member countries, and Islamic financial institutions (IFIs) should cooperate with governments in this matter.

Information disclosure is another important issue. Socially responsible investing and firms motivated by economic, social, and governance (ESG) information should offer voluntary disclosures on SDGs and ESG activities, strategies, and achievements. Several Islamic banks, such as Islami Bank Bangladesh, National Commercial Bank Saudi Arabia, and Bank Islam Brunei, etc. have already initiated disclosures concerning their contributions to implementing sustainable development and environmental matters. Others should follow suit.

This study argues for the status of IFIs in sustainable development and environmental protection. Essentially, Islamic finance has to go a long way to live up to its potential of achieving *maqsid al shar'iah*. Remodeling Islamic financial products, operations, and services to follow a sustainable business model will provide superior sustainability. Customized and innovative Islamic financial services will allow an inclusive experience for all customers alike. There is a need to embrace Financial Technologies (Fintech) to modernize the Islamic financial system. The adoption of Fintech should be employed to develop financial inclusion. To nurture the foundation for sustainable development and capacity building by IFIs, further support for the environment is required. This needs to acquire excellent quality talent with an enthusiastic mind to build up an innovative, sustainable company model with enriching skills.The utmost importance is that there is a serious need to incorporate environmental dimensions and social issues into the decision-making techniques in respect of achieving SDGs. The worldwide sustainable development agenda offers a vivid opportunity for researchers to take on empirical studies to transform Islamic financial sectors to become more socially responsible, resilient, and inclusive, ensuring shared prosperity and social well-being.

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