

# Green Waqf: The Integration of Islamic Social Finance and green financing

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## Abstract

One of the most significant challenges facing the world today is climate and environmental issues. The growing demand for energy on one hand, and the inability to invest in clean energy on the other, coupled with the excessive consumption of natural resources, waste generation, and pollution, have led researchers to focus on designing new models for financing green projects. *Waqf*, in Islamic culture, has long been an instrument of Islamic social finance in the daily lives of Muslims. This article, emphasizing the social impacts of *waqf* with a modern approach to its management and consolidation, and by integrating this social finance tool with commercial finance, proposes an operational model named "Green *Waqf*". Green *Waqf* can play a significant role in bridging the financial gap and promoting sustainable development by establishing green funds, a substantial portion of which are government-funded in many parts of the world.

**Keywords:** *Waqf*, Green Finance, Green *Waqf*, Sustainable Development.

## 1. Introduction

Economic development and progress worldwide have initiated significant transformations such as improved health and sanitation, the creation of new job opportunities, and faster, more convenient access to goods and services, particularly in emerging economies. The prerequisite for these advancements is energy, and naturally, the rate of energy consumption has a considerable impact on economic growth (Avtar et al., 2019). In line with the expansion of economic activities, the demand for energy is continuously increasing. According to a World Bank report, the per capita carbon dioxide emissions in 2023 averaged 4.7 tons, highlighting the unfavorable and unsuitable state of the environment as a critical variable in sustainable development. Studies indicate that air pollution leads to severe environmental changes and poses a serious threat to sustainable

development, with the consumption of fossil fuels being one of the primary contributors to these changes (Fan & Lei, 2017).

In recent decades, given the necessity of confronting environmental threats and achieving Sustainable Development Goals (SDGs), the implementation of environmentally friendly or green projects has gained paramount importance. In this context, green finance has emerged as a powerful tool for financing these projects (Babic, 2024). Green finance is a concept that mainly deals with financial instruments, mechanisms, as well as their policy and regulatory frameworks, and financial components, technological innovation, improvement of industrial structure, and environmental monitoring are understood alongside them (Kumar et al., 2024).

In the past two decades, Islamic finance researchers have tried to recognize the potential capacities of Islamic finance and provide new financing methods in line with international developments (Alfalah & Arum; 2024, Alhammadi; 2024, Iqbal & Fikri; 2024, Aderemi & Ishaq; 2023, Paltrinieri et al.; 2023, Delle Foglie & Keshminder, 2022, Musari; 2022, Kuanova et al. 2021, Basyariah et al. 2021). *Waqf* is one of the most important financing capacities in Islamic social finance. Despite many challenges from the distant past to the present, this economic institution has contributed significantly to Islamic societies with charitable, humanitarian, and spiritual goals. Although this institution has been subject to distortion and threat, it faces new capacities in the modern world that will lead to its expansion and deepening (Jahanian; 2021).

The concept of green *Waqf* represents a transformative approach to addressing contemporary environmental challenges by integrating Islamic Social Finance (ISF) and Islamic Commercial Finance (ICF). As the world grapples with climate change, resource depletion, and environmental degradation, the need for innovative financing mechanisms that are aligned with ethical and sustainable principles has become increasingly apparent.

Since *Waqf* is rooted in Islamic principles; it tries to create social welfare with a social responsibility approach and is able to act towards environmental sustainability by providing a unique framework for resource mobilization. This research, while examining the *Waqf* literature and recognizing its capacities, seeks to; firstly, connect it to green finance and secondly present an operational model under the title of green *Waqf*. The author believes that green *Waqf* can create a sustainable ecosystem for financing green projects such as: renewable energy, water resource conservation, natural resource conservation, etc. This article explores the concept of *waqf*, an Islamic financial instrument of great potential

## **۲. Theoretical Foundations and Literature Review**

This section addresses the jurisprudential (fiqh) foundations of *waqf* and the potential of cash *waqf*. Furthermore, it examines green finance, its objectives, and functions, and reviews studies on green Islamic finance from the last two decades.

### **۲.۱. Waqf and Its Position in Fiqh**

A review of the literature on *waqf* reveals that despite efforts in *Imami fiqh* (Ja'fari jurisprudence), many questions remain unanswered for researchers in Islamic finance, although other Islamic schools of thought have also made significant contributions. In Arabic, the literal meaning of *waqf*

is to stop, to hold, and to be static. In Persian, following its Arabic root, it is used to mean remaining in a stationary state and to prevent (Kazemi Najafabadi, 2021). Regarding the term *waqf* in jurisprudential and legal texts, various views exist. According to the definition by Shahid al-Awwal in his book *Al-Lum'ah al-Dimashqiyyah*, *waqf* is defined as "*tahbis al-asl wa itlaq al-manfa'ah*" (the preserving of the principal and the freeing of the usufruct). In later works, the expression "*tahbis al-asl wa tasbil al-thamara*" (the preserving of the principal and the channeling of the usufruct /fruit/yield) is also used (Adibi Mehr & Rahmani, 2015). In the second definition, the word "*tasbil*" is used instead of "*itlaq*," which the late Muhammad Hasan al-Najafi, known as the author of *Jawahir al-Kalam*, considers a better choice. He states that "*tasbil*" is the opposite of "*tahbis*" and, in addition to conveying the meaning of "*itlaq*," it also signifies that *waqf* is a form of charity (*sadaqah*) wherein the intention of seeking closeness to God (*qasd al-qurbah*) is a condition (Kazemi Najafabadi, 2021).

Jahanian (2021), in a study titled "The Economics of the *Waqf* Institution," examines the history and literature of *waqf* economics, highlighting the importance of codified *fiqh* and its fundamental role in theorizing this capacity. This study attributes the lack of confidence in the theories and functions of *waqf* in the financial and economic spheres to a lack of deep jurisprudential understanding (*ijtihad*). Although it is believed that codified *fiqh* of *waqf* faces challenges, firstly, in recognizing new and seemingly modern issues, and secondly, in expressing jurisprudential matters of *waqf* in a new and economic language. Therefore, the implementation of *waqf* in today's complex and modern world faces challenges, and the state of endowments in the country shows that the economic utilization of endowed properties is negligible. To revitalize this valuable institution and enhance its role as an ongoing charity (*sadaqa jariya*) in improving Islamic society, creating a desirable jurisprudential model for *waqf* and new issues such as cash *waqf*, stock *waqf*, and intellectual property *waqf* is essential.

## ۲.۲. Cash Waqf

Based on the various definitions of *waqf* from the perspective of jurists (*fuqaha*), it can be generally claimed that they all agree on, firstly, the unconditional and perpetual (confinement) of the asset, and secondly, the creation of an opportunity for its unlimited utilization as a permanent stream. Therefore, three characteristics of *waqf* can be enumerated, on which all scholars are in agreement: 1. The *Waqf* property (*mawqufah*) must be protected from transfer, sale, and consequently, from destruction. 2. The effort to benefit from its usufruct is a fundamental principle. 3. The benefit created must be for charitable and humanitarian purposes (Kazemi Najafabadi, 2021).

Mortazavi et al. (2024) in a study titled "The Fiqh and Legal Feasibility of *Waqf* Securities Based on the Teachings of Economic Law," examine the *fiqhi* dimensions of *waqf* from a legal perspective and assess the position of the *waqf* institution. This research, while addressing the views of opponents of cash *waqf*, states that most opponents of this idea, without citing any Quranic, narrative, or scientific basis, oppose cash *waqf* on the assumption that money is consumed upon use and thus departs from the essential feature of perpetual of the asset. However, based on evidence of validity from custom (*'urf*) and general principles of evidence (*adilla*), it is proven that the evolving nature of money and its fungibility make its substitute the replacement for the original money, and the principal of the money remains intact despite the change in its physical form.

Jahanian (2021) in a study, distinguishes between two important principles in *waqf* and argues that a misunderstanding of these principles and their conflation has led to strictness regarding the change and conversion of endowed properties to better ones (*tabdil bi al-ahsan*). The first principle is the reality of *waqf*, which is the perpetual of the legal personality of the *Waqf* property, and the second principle is *tasbil*, which refers to the original function of *waqf*. How can emphasis on the first principle lead to the demise of the second principle, when the second principle (the function of *waqf*) necessitates benefiting from the advantages of the endowment? The *waqf* is the principal, and the perpetual of the asset is a derivative. Certainly, the perpetual of the asset is fundamental in *waqf* such that it is not subject to transfer, inheritance, or sale. In cash *waqf*, if the perpetual of the asset is intended as the perpetual of the physical, paper, or electronic money, it is not possible. However, if the intention is the perpetual of its monetary value (*maliyyat*), then the perpetual of the asset is interpreted as the perpetual of the monetary value of the money, and the possibility of cash *waqf* is provided (Kazemi Najafabadi, 2021).

In other Islamic countries as well, in the last decade, there has been an emphasis on cash *waqf*, meaning the *waqf* of financial resources (cash), for charitable and social purposes (Mohsin et al., 2021; Hassan & Ashraf, 2020). These resources are permanently endowed and used to finance various projects of public good. Cash *waqf*, due to its flexibility and ease of management, is recognized as an effective tool for sustainable financing (Khan & Mirakhor, 2022). Indonesia and Malaysia have played a pioneering role in utilizing the *waqf* institution by creating *Sukuk Waqf*. The development of renewable energy, restoration of clean water, rehabilitation of wetlands, and support for environmental projects have been supported by *Sukuk Waqf* or cash *waqf* (Abdul Rahman & Alias, 2019). Cash *waqf* has advantages, with flexibility, sustainable financing, and creating a basis for participation being its most important merits (Zaenal & Hassan, 2021; Muneeza & Mustapha, 2023).

## ۲.۳. Benefits of Cash Waqf

### Flexibility

Flexibility, as one of the most prominent advantages of cash *waqf*, refers to its high capability in allocating and distributing resources. Unlike traditional *waqf*, which is usually limited to physical and non-movable assets (such as land and buildings) and whose generation of returns or conversion is relatively difficult, cash *waqf*, due to its liquid and fluid nature, allows resources to be deployed quickly and more efficiently in response to daily needs and the most critical areas of society, such as environmental needs, water, and green finance in general. This feature also enables investment in various Islamic financial instruments (like *sukuk*) or profitable economic projects, which not only preserve the principal capital but also generate additional returns. In other words, it significantly enhances the flexibility, efficiency, and agility of *waqf* management.

### Sustainable Financing

The core concept of cash *waqf* is sustainable financing. Traditional *waqf* models often rely on income generated from the rental of physical assets, which can be susceptible to fluctuations in the real estate market or maintenance costs. However, cash *waqf* has revolutionized this concept by creating a sustainable financial cycle. In this model, the principal endowed capital remains

untouched, and only the proceeds from its intelligent investment in Sharia-compliant economic projects are used for charitable purposes. This mechanism creates a perpetual and self-renewing source of income that can meet the long-term financial needs of social projects. This financial sustainability allows *waqf*-centric institutions to plan for the future with reliance on this stable income stream, reducing their dependence on intermittent public donations.

### Participatory

Cash *waqf* breaks down the barrier of large capital, paving the way for broader participation from all segments of society in charitable endeavors. In traditional *waqf*, usually only individuals with significant wealth were able to endow their assets. However, due to its divisibility, cash *waqf* enables even individuals with moderate and low incomes to contribute small amounts to raise a large *waqf* capital. This feature significantly expands the social base of *waqf* and fosters a culture of philanthropy throughout society. The emergence of digital platforms and Islamic FinTechs has facilitated this process and made maximum participation possible by offering easy solutions for *waqf*, even for very small amounts. This increased participation not only helps in accumulating financial resources but also strengthens public awareness and social responsibility.

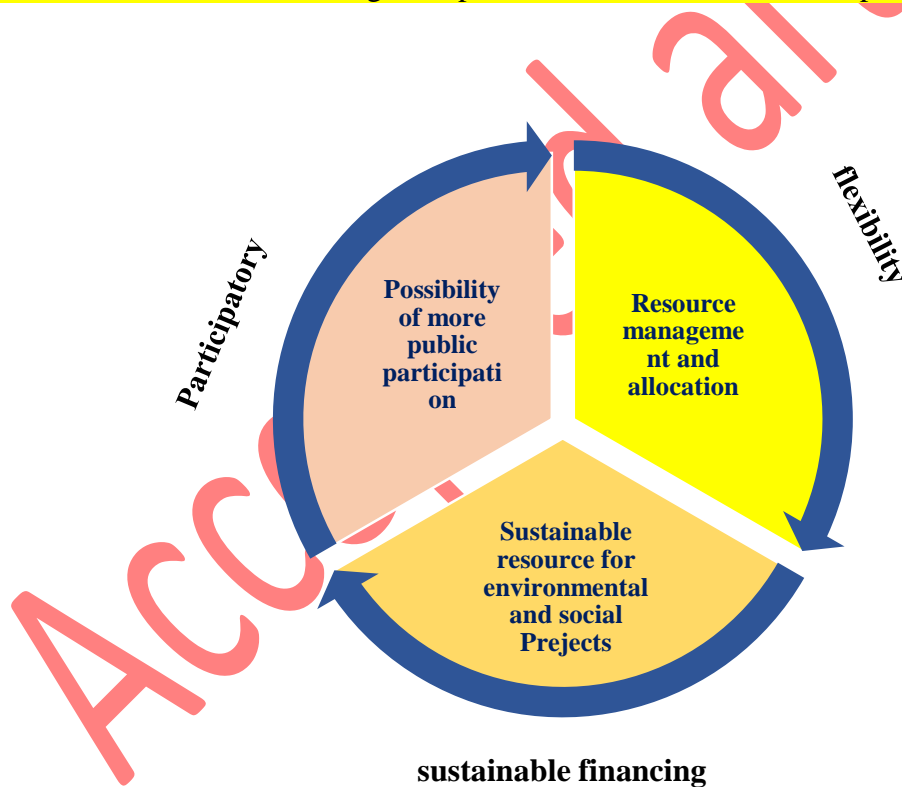


Figure 1: Benefits of developing cash Waqf

Based on the analysis and arguments presented, it seems that the possibility of creating a cash *waqf* process, conditional on preserving the principal of the asset—in the sense that in money, preserving the principal means preserving its monetary value—is feasible. This financial

instrument will find a significant emergence in the social and sustainable development arena within the Islamic economic system, although the *waqf* institution, due to its rational, function-oriented, and universally beneficial nature, is inherently accepted by the public and does not belong to any specific social system. If *waqf* can be introduced as a humanitarian and human rights criterion, it can be expected that this Islamic social finance instrument will play a more active role than ever before in today's global society (Mortazavi et al., 2024).

## ۲,۴. Green Finance

The process of industrialization has led to drastic economic changes in countries worldwide, resulting in a soaring demand for mineral, subterranean, and energy resources. Alongside the creation of more job opportunities and higher GDP, which are benefits of industrialization, the generation of waste, air pollution, climate change, and the reckless exploitation of mineral and subterranean resources are its detrimental effects. In 2015, at the United Nations Climate Change Conference (COP21), 195 countries signed the Paris Agreement to mitigate environmental changes by limiting the global temperature increase to below 2 degrees Celsius above pre-industrial levels (Yang et al., 2020). To achieve this long-term environmental goal, countries need to invest in environmentally friendly industries and new financing methods, which are termed "green finance."

In a globalized market, optimizing resource consumption to minimize waste, utilizing renewable energies, and creating business models that are environmentally friendly are essential for achieving sustainable development (Paramati et al., 2022). Given the urgent need for investment and financing in these areas, green finance provides a targeted framework for allocating financial resources to support sustainable environmental projects and initiatives such as renewable energy, energy efficiency, clean water access, waste reduction, and sustainable transportation (Liu et al., 2022). Green finance involves mobilizing capital to support the transition to a low-carbon economy and financing projects that protect the environment (Richardson, 2009). In reality, green finance is born from the fact that traditional financial resources lack the necessary capacity to create and develop a low-carbon economy and environmentally friendly industries and to promote sustainable environmental projects (Campiglio, 2016; Dorfleitner & Braun, 2019; Sadiq et al., 2022; Bhutta et al., 2022). In summary, green finance is essential for achieving a sustainable future and addressing the challenges posed by climate change. If the necessary financial resources are provided to promote beneficial environmental initiatives, green finance can help mobilize capital, reduce risk, and guide the innovation of technologies and new products that enhance environmental sustainability.

## ۲,۵. The Importance and Instruments of Green Finance

As previously mentioned, the development of the green finance concept over the past two decades has led to improved financing conditions in this area and has provided tangible benefits. Providing opportunities for greater investment in green projects to reduce carbon emissions in the short and long term (Sachs et al., 2019), enabling sustainable economic growth (Zaenal & Hassan, 2021), and reducing the budget for fossil fuel activities that pose a threat to the environment and climate

(Ozili, 2022) are examples of these benefits. Any traditional financial product or instrument can be considered "green" provided that it is used for accumulating and spending funds on projects compatible with the environment (Zhao et al., 2022). Therefore, the most important green finance instruments currently include: 1. Green loans, which are generally provided by the banking system at a lower interest rate, such as loans for building homes with environmentally friendly materials, tree planting loans, and green mortgage loans. 2. Green products, such as smart-air cars, loans for solar energy development, etc. (Lindenberg, 2021; Chang et al., 2019). 3. Green bonds, which aim to provide financing within the framework of clean air and environmentally friendly development plans (Zhao et al., 2022; Chang et al., 2024). 4. Green investment funds, which finance infrastructure and corporate projects within the framework of sustainable development (Naqvi et al., 2021; Bhutta et al., 2022; Arfaoui et al., 2024).

### ٢.٦. Green Islamic Finance

The Islamic financial system can be divided into two parts: commercial finance and social finance. Since Islamic teachings emphasize the right to a dignified life for all people, concepts such as *Zakat*, *Sadaqah*, and *Waqf* are highlighted to support the well-being of all members of society. Furthermore, in commercial finance, issues such as avoiding usury (*riba*), uncertainty (*gharar*), and trade in forbidden (*haram*) goods are strongly emphasized. With the development of green finance concepts, Islamic finance researchers have also sought to fill the existing gaps by leveraging the potential of Islamic finance. Green Islamic finance, as an emerging field, is a combination of Islamic financial principles and environmental objectives that aims to finance sustainable and environmentally compatible projects. Given global challenges such as climate change, depletion of natural resources, and increased pollution, the need for financial instruments that are aligned with ethical and religious principles is felt more than ever. Green Islamic finance, by using instruments such as Green *Sukuk* and green loans, not only contributes to sustainable development goals but also attracts global attention as an ethics-driven financial model.

Hassan et al. (2021) examined the role of green *sukuk* in financing renewable energy projects in Malaysia and Indonesia. The results show that green *sukuk* has effectively contributed to reducing carbon emissions and promoting clean energy. In another study, researchers analyzed the challenges and opportunities for green *sukuk* in Islamic countries and emphasized the need for standardization to increase the attractiveness of these instruments (Oseni & Ahmad, 2022). Khan and Mirakhor (2022) investigated green products in Islamic banking and their importance in sustainable development, showing that green loans and green investment accounts help reduce environmental impacts. Mohd-Pisal and Rusni (2021) conducted a comparative study of green products among Islamic banks in different countries and stressed the urgent need to increase education and raise the level of knowledge among bankers.

### ٣. Research Methodology

This research is applied in terms of its objective, as it aims to present an operational model for applying the social finance tool (*waqf*) to develop green Islamic finance while contributing to the creation and expansion of Islamic finance literature. In terms of data collection, it relies on books

and articles published on this topic, making it a library-based study that employs an analytical-descriptive method.

## 4. Findings

The preceding sections discussed topics related to green finance and Islamic finance, highlighting the potential capacities of Islamic social and commercial finance. This section, assuming the permissibility of cash *Waqf*—a concept *Waqf* debated and justified in the previous section and endorsed by some contemporary jurists—explores green, which can be developed through the *Waqf* of money. An operational model for green *Waqf* within the framework of a Green *Waqf* Fund is presented. Furthermore, while addressing the importance of governance in the domain of green *Waqf*, the pillars of the proposed operational model are also elaborated.

### 4.1. Green Waqf

Green *Waqf* is a novel concept in the domain of *waqf* and charitable affairs, established with the goal of environmental preservation and sustainable development. This type of *waqf*, instead of focusing on traditional matters, concentrates on environmental projects such as developing renewable energies, restoring water resources, reducing air pollution, managing waste, and protecting biodiversity. Green *Waqf* can be utilized as a powerful tool to confront environmental challenges and climate change.

In Malaysia and Indonesia, as two leading countries in the development of Islamic financial instruments, numerous initiatives have been created in the field of green *waqf* and related environmental matters. These instruments, using Islamic financial concepts like *waqf*, *sukuk*, and other financial mechanisms, seek to secure financial resources for environmental and sustainable development projects. The most important objectives of Green *Waqf* are:

1. **Development of Clean Energy:** Investing in renewable energy projects such as solar and wind power.
2. **Environmental Protection, Pollution Reduction, and Restoration of Natural Resources:** Assisting in the preservation of forests, pastures, wetlands, and other natural ecosystems. Supporting projects that help reduce air, water, and soil pollution. Participating in projects for the restoration of water, soil, and forest resources.
3. **Education and Awareness:** Increasing public awareness about the importance of environmental protection and sustainable development.

Green *Waqf* is not merely a charitable act but a necessity for future generations. Given the current environmental crises, this type of *waqf* can play a crucial role in preserving the planet and improving the quality of life. The implementation of Green *Waqf* offers three significant cultural, social, and economic benefits. By supporting and promoting environmental projects, Green *Waqf* has long-term positive impacts on the lives of humans and other living beings. It increases public

participation, as this form of *waqf* can encourage more people, especially those interested in environmental issues, to participate in charitable activities. Furthermore, this Islamic social finance instrument is highly aligned with supranational and global goals, as Green *Waqf* is in harmony with the United Nations' Sustainable Development Goals (SDGs).

## 4.2. Proposed Model

The integration of Islamic social and commercial finance for Green *Waqf* is a relatively new area of research. A pioneering study by Muneeza and Mustapha (2023) proposed a hybrid model of *waqf* assets with *sukuk* issuance to finance green infrastructure projects. This model utilizes the perpetual nature of *waqf* and the liquidity of *sukuk* to create a sustainable financing mechanism. Additionally, Khan and Mirakhor (2022) discussed the potential of cash *waqf* in mobilizing funds for environmental projects and emphasized the need for regulatory frameworks to support such initiatives.

Therefore, based on the theoretical and jurisprudential foundations, the proposed model should adhere to the following:

**First:** The principle of the monetary value (*maliyyat*) of the cash *waqf* must be preserved. Consequently, all endowed funds will be collected in a fund named the "Green *Waqf* Fund."

**Second:** The funds must be productive. Therefore, the resources of the Green *Waqf* Fund will be utilized to develop green projects. Thus, projects with environmental justification will be prioritized for receiving facilities from this fund.

**Third:** To comply with the first principle, the generated funds must be guaranteed. The principal of the facilities granted by the Green *Waqf* Fund will be guaranteed by the money or capital market.

**Fourth:** Profit generation through the productive use of funds is possible. The interest rate for the facilities can be determined based on the importance of the green projects, which could be significantly lower than the financing rates in the money and capital markets.

To ensure the efficiency, transparency, and Sharia compliance of the proposed model, a robust governance structure is essential. A specialized Board of Trustees is proposed at the heart of this structure. This board will comprise prominent Islamic jurisprudence scholars (particularly specialists in *Fiqh al-Mu'amalat* – Islamic commercial law – and *Waqf*), experts in Islamic finance and investment, and specialists in environmental and sustainable development. The primary responsibilities of this Board include the Sharia and technical evaluation and approval of proposed green projects, determining financing rates commensurate with the importance of green projects, and ensuring the compliance of all fund operations with Sharia principles and green objectives. Furthermore, the Board will be responsible for formulating transparent guidelines for project

selection, resource allocation, and performance monitoring to prevent misuse and deviation from the core objectives of the Green *Waqf*.

To maximize public trust and encourage broad participation, reporting and transparency mechanisms are of paramount importance. The Green *Waqf* Fund will be committed to providing periodic and comprehensive reports on its financial status, approved and ongoing projects, the extent of environmental and social impacts achieved, and the utilization of funds to *waqifs* (endowers) and the general public. These reports can be disseminated through online platforms utilizing modern technologies to ensure easy and widespread access. Additionally, annual independent auditing by reputable financial and Sharia institutions will guarantee the fund's transparency and accountability. These measures aim to strengthen stakeholders' trust and confidence in the efficiency and effectiveness of the Green *Waqf* in achieving sustainable environmental objectives.

Based on the four principles stated above, the establishment of a Green *Waqf* Fund is proposed, based on the frameworks of the stock exchange and securities organization, to collect and consolidate endowed funds. Green projects, after approval by a professional and jurisprudential committee (acting as founders and trustees), will be eligible to receive facilities from the fund. These projects must prove the guaranteed return of the principal through banks or other investment entities. The facility fee, in addition to its interest rate, will be determined by a specialized working group under the supervision of the trustee, and it will be lower than the usual facility rates.

#### ٤,٢,١. Pillars of the Green *Waqf* Fund

Given that the Green *Waqf* Fund is an innovative and integrated model combining Islamic social finance and green finance, five proposed pillars are presented based on the experiences of investment funds. This proposal is based on the premise that, firstly, the fund maintains a problem-solving approach to social issues by mobilizing small capital with an Islamic financial approach; secondly, it responds to contemporary financial academic literature; and thirdly, it adheres to jurisprudential and Sharia dimensions. Therefore, establishing a Green *Waqf* Fund in Iran can benefit from the "Law on the Establishment and Operation of Investment Funds" under specific conditions.

##### ١. Board of Trustees of the Green *Waqf* Fund:

- **Composition:** Composed of recognized, trustworthy individuals with a good reputation in environmental protection, social affairs, finance, environmental investment, and specialists in economic jurisprudence.
- **Key Duties:**
  - Approval of the fund's articles of association and internal regulations.
  - Identification and approval of projects and cases supported by the fund.
  - Oversight of the correct allocation of funds to projects.
  - Attracting financial supporters and *waqif* (endowers).

##### ٢. Fund Manager:

- A legal entity that, in addition to professional asset management, must pay attention to Socially Responsible Investment (SRI). It must avoid investing in businesses contrary to the values of the Green Waqf Fund.

**٣. Fund Administrator (Mutawalli):**

- A legal entity chosen by the board of trustees of the Green Fund. The fund administrator essentially represents the waqif.
- In addition to overseeing the financial performance of the manager, it also oversees the **compliance of activities with the objectives stated in the articles of association.**

**٤. Auditor:**

- In addition to auditing financial matters, the auditor must also verify the correctness of fund allocation to projects and mention it in their report.

**٥. Guarantor:**

- A legal entity that guarantees the principal amount paid to the fund. (Based on the amount of facilities, banks or innovation and research funds, etc., can play this role.)
- Given the importance of preserving the principal of the endowed property, as discussed in the jurisprudential issues of cash waqf, the role of the guarantor in the proposed fund is significant.

**٤,٢,٢. Proposed Operational Model of the Fund**

١. The waqif pays the cash amount to the fund representative and receives a Green Waqf certificate. These certificates can have a tracking number for tracing and receiving impact reports, which is very important in attracting participation in waqf. (Representatives' activities are voluntary.)

٢. **Aggregation of Endowed Funds:** The collected funds are aggregated in the fund's main account and placed under the authority of the fund administrator.

٣. **Receiving Project Proposals:** The fund manager, upon receiving project documentation, submits the initial review to the relevant committees for approval. The fund manager can invest a specific percentage of the fund's resources in financial markets according to the articles of association.

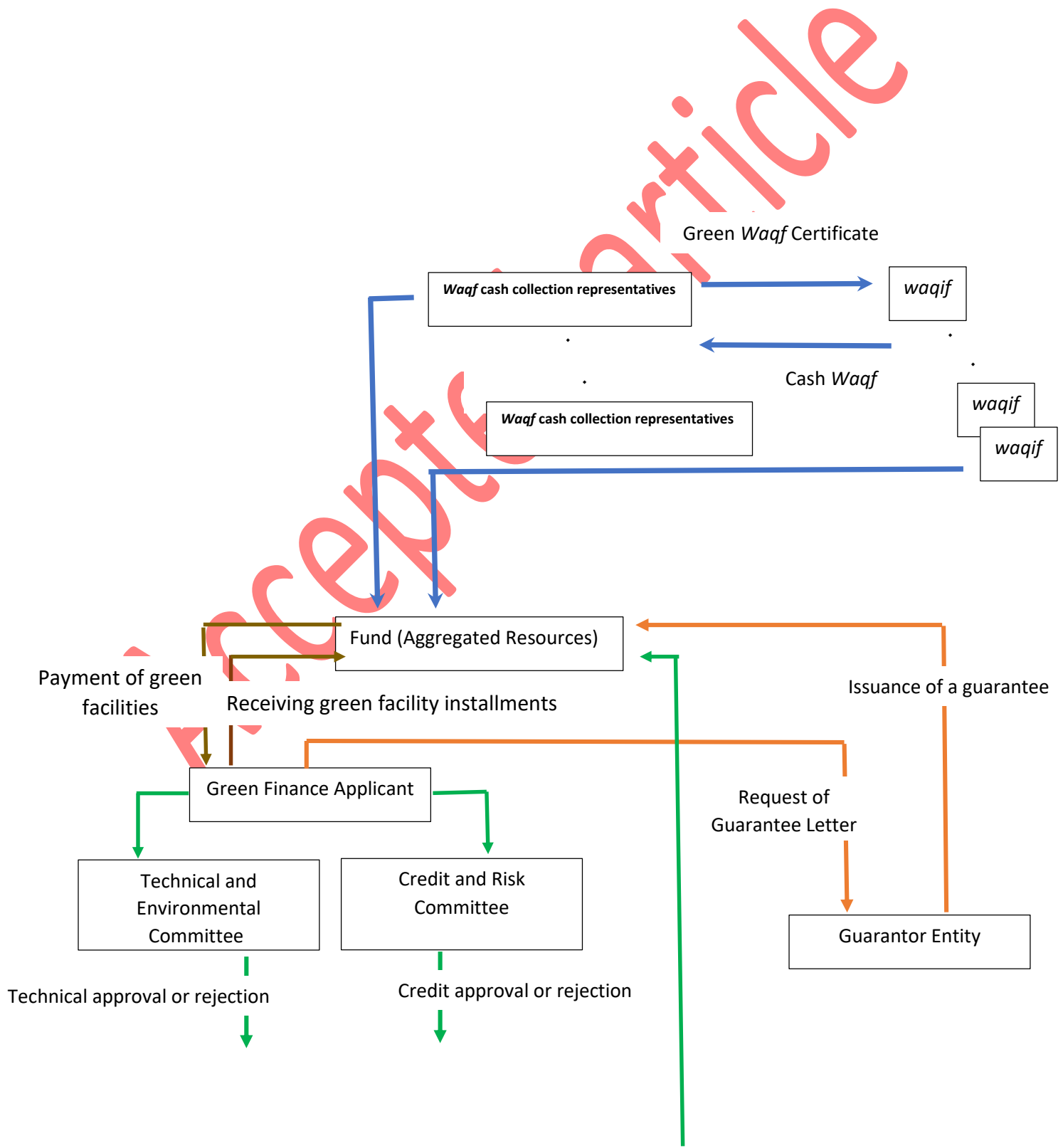
**٤. Evaluation and Approval of Projects:**

- **Technical and Environmental Committee:** Evaluates the environmental impact, technical feasibility, and viability of received projects.
- **Credit Assessment and Risk Committee:** Assesses the applicant (natural or legal person) for financial credibility, loan repayment history, and ability to execute the project. This committee assesses the risk of non-repayment.
- The Board of Trustees, based on the opinions of the two committees, makes the final decision on granting facilities, their amount, and the repayment rate.

٥. **Guarantee and Disbursement:** Before any loan disbursement, the applicant must provide a guarantee from a reputable institution (such as a bank or other endowment fund guarantors). This institution guarantees that in case of default by the applicant, the principal of the endowed fund, which is of great Sharia importance, will be returned.

٦. **Implementation and Return:** The green project applicant implements their investment project. The applicant is obligated to return the principal amount and approved profit to the

fund in specified installments. This minimum profit is necessary to cover administrative costs and inflation.



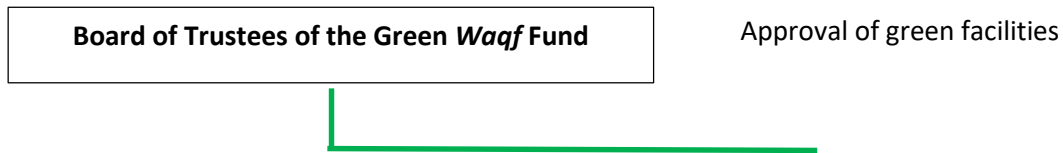


Figure 2: Proposed Operational Model of the Green *Waqf* Fund

Based on the four aforementioned principles, the proposed Green *Waqf* Fund model is designed to facilitate the flow of funds from Waqif towards green projects. This model encompasses several stages: fund collection, project evaluation and approval by a specialized and jurisprudential committee, resource allocation with guaranteed principal and profit return (at minimum covering costs and inflation), and ultimately, monitoring of project implementation. Figure 2 visually illustrates this flow and the associated interactions. Waqif/s can donate their cash funds to the Green *Waqf* Fund. These funds are then invested in productive green projects that have been approved by the jurisprudential and specialized committee. The principal capital is guaranteed by financial institutions, and the profits generated from the projects are returned to the fund for reinvestment in the further development of green endowments.

## ◦. Conclusion and Suggestions

This study has emphasized the financial and social capacities of *waqf* and has presented an innovative model integrating Islamic social and commercial finance. Through a detailed review of theoretical and jurisprudential foundations, it appears that the possibility of cash *waqf*, conditioned on preserving the principal of the asset not merely as physical currency but as its monetary value, is feasible. Furthermore, *waqf* is a charitable act that the sacred lawgiver has recommended and encouraged; therefore, any step taken to develop this virtuous act is commendable. Since environmental problems and issues are among the most significant challenges facing the country, and people, especially environmental advocates, are keen to help in this area, the creation of Green *Waqf* securities can lead to greater public participation in charitable affairs. Studies emphasize the urgent need for financing for pro-environment and green projects. Therefore, the funds received in the Green *Waqf* Fund will be consolidated and, with an Islamic commercial finance approach, will be exclusively used to finance green projects. This study is the first step in this path, aiming to take a step forward in developing the literature in this field by creating a new approach that integrates Islamic social finance models like *waqf* with their management for commercial projects with a green focus. The creation of the Green *Waqf* Fund will increase the opportunity for public participation in the development of green projects and will lead to a reduction in the gap of insufficient government financial resources for financing these projects.

## ◦. Operational Challenges

While the proposed Green *Waqf* model holds significant potential, its practical implementation is accompanied by several potential challenges. The foremost challenge pertains to existing legal and regulatory impediments within the national jurisdiction, particularly concerning the definition of cash *waqf*, its management, and the rights of beneficiaries (*mauquf alayhim*). Therefore, a comprehensive review and fundamental legal reforms, aligning with the proposed new

frameworks, appear indispensable. This crucial endeavor could be pursued and actioned through the The National Endowment and Charity Organization, the Islamic Consultative Assembly (Majlis Shura-e Islami), and the Guardian Council (Shora-ye Negahban). Secondly, fostering public trust and engagement in such a fund necessitates extensive public awareness campaigns and complete transparency regarding the fund's operations and achievements. Many potential waqifs (endowers) may be unfamiliar with the concept of Green *Waqf* or harbor skepticism concerning fund management and project efficacy. Thirdly, identifying and selecting appropriate green projects that are economically viable and demonstrate tangible environmental and social returns presents a substantial challenge. This requires robust capacity building in the assessment of green projects and close coordination with specialized environmental agencies. Furthermore, market volatilities and investment risks inherent in novel projects could impact the fund's financial sustainability, thereby necessitating the formulation of robust risk management strategies.

#### ٥,٢. Suggestions for future research

This study, serving as an initial stride in advancing the Green *Waqf* literature, unveils several avenues for future research. It is recommended that future investigations concentrate on the following areas:

**Empirical and Case Studies:** Conducting empirical studies across diverse jurisdictions with varying legal frameworks to assess the practical feasibility and success of the Green *Waqf* model. Such studies could encompass an examination of the challenges and opportunities encountered within specific contexts.

**Comparative Analyses:** Undertaking comparative analyses of legal and regulatory frameworks in various Islamic countries for the implementation of Green *Waqf* funds and identifying best practices in this domain.

**Role of Emerging Technologies:** Investigating the potential of technologies such as Blockchain and Artificial Intelligence in enhancing transparency, efficiency, and risk management within Green *Waqf* funds.

**Advanced Financial Modeling:** Developing more sophisticated financial models for evaluating the returns and risks of green projects financed through Green *Waqf*, as well as exploring hybrid Islamic financial instruments, such as the amalgamation of *waqf* and *sukuk*, to augment investment appeal.

**Measuring Social and Environmental Impacts:** Developing frameworks for the quantitative and qualitative measurement of the social and environmental impacts of projects financed by Green *Waqf*, with the objective of providing more accurate reports and fostering greater stakeholder trust.

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