**Financing post-disaster recovery through Islamic banking: instruments, case studies, and policy implications**

**Abstract**

This study delves into the critical importance of both immediate relief and long-term rebuilding efforts following a natural disaster strike. It highlights the urgent need for a well-organised, up-to-date, and centralised system to facilitate the prompt delivery of aid to those who need it the most. This study also examines the financial challenges of financing reconstruction efforts and explores the unique role of Islamic banks in addressing this issue.

This study emphasises the principles of Islamic banking that promote sustainable development and social responsibility. It further explores the various financial contracts employed to finance reconstruction projects, such as mudarabah, musharakah, and Sukuk. This study shows that Islamic finance can play a significant role in rebuilding communities and promoting economic growth in the aftermath of a natural disaster.

**Keywords:** *Islamic Banking, Post-Disaster, Reconstruction*

**Introduction**

In the aftermath of disasters, local and international efforts are crucial in providing relief and rebuilding the affected areas. These efforts can be divided into two main parts: immediate relief, and long-term reconstruction. Direct relief efforts involve providing urgent aid such as food, clothing, and medicine. However, it is essential to ensure that these efforts are carried out under a well-organized and regularly updated centralized system to meet the various needs of the affected population. Otherwise, randomness and eavesdropping can lead to a waste of resources that do not reach the intended beneficiaries. Following a disaster, efforts to assist affected communities are typically divided into two parts. The first section focused on providing immediate assistance, such as food, clothing, and medicine. This part should be managed through a well-organized centralized system that keeps track of data and regularly updates its database to avoid randomness and ensure that the aid reaches those in need. The second phase of the project is far more complicated, time-consuming, and resource intensive. It entails rebuilding infrastructure, repairing damaged homes, and providing people affected by the disaster with necessary training. This is the most critical phase, necessitating long-term strategy and cooperation from all parties involved. Financing reconstruction efforts is an essential difficulty in the second section. Lack of funds and strategic planning can impede and delay the process. Therefore, it is critical to understand the financial resources required to achieve this goal. Long-term reconstruction efforts are essential and necessitate extensive planning, training programs, and coordinated efforts to rebuild damaged homes and infrastructure and provide human rehabilitation for disaster victims. However, the most difficult challenge in this phase was the lack of sufficient funds and strategic reconstruction plans. This approach, which uses an interactive database, allows city managers to efficiently oversee and analyze ongoing reconstruction projects and city operations. Local government officials and implementing organizations can use it to investigate options, obtain the funding needed, and conduct effective city reconstruction operations while consulting the general public.

Additionally, government agencies can use a dynamic and interactive interface to monitor city reconstruction operations regularly. This approach provides the advantage of efficient budget allocation via informed and collaborative decision-making processes.

Furthermore, funding organisations can identify districts, buildings, heritage buildings, ancient monuments, and other assets in desperate need of financial assistance or deteriorating conditions by continuously evaluating a real-time mechanism of city operations assessment. As a result, the purpose of this research paper is to provide an answer to the question of how to effectively finance the reconstruction process. It will look into the financial resources needed to help with reconstruction efforts. We can devise strategies to make the reconstruction process as efficient and long-lasting as possible. By addressing this critical issue, affected communities can recover and rebuild in the long run. Since World War II, many international actors, including the United Nations (UN), the International Monetary Fund (IMF), the World Bank, and the United Nations Development Program (UNDP), have become increasingly involved in post-conflict reconstruction. Donor governments and international and national non-governmental organisations have played critical roles in this effort. Germany's and Japan's postwar careers set the standard for post-conflict reconstruction in many countries worldwide, including Congo, Namibia, El Salvador, Cambodia, Somalia, Mozambique, Haiti, Bosnia and Herzegovina, Sierra Leone, Kosovo, Afghanistan, Iraq, and the Gaza Strip. Despite this extensive effort, a critical review of the interdisciplinary literature on post-conflict reconstruction and state building highlights two primary findings. The first is that there is currently a lack of a comprehensive theory about post-conflict reconstruction. For example, after five years of reconstruction in Iraq, an assessment report prepared by the Special Inspector General for Iraq Reconstruction (SIGIR) concluded that the United States was still stuck in a nation-building effort it did not expect and still does not fully understand. The report also indicates that there is a "reconstruction gap," or a gap between the number of promised and planned projects and the number of projects completed. This gap was the result of overspending on security needs, higher material costs, project delays, cost overruns, multiple reprogramming of reconstruction priorities, and additional maintenance expenses.

**Literature review**

1. **(al-Din, 2022)** The research paper titled "A Series of Peace Risks in Post-War Yemen: Reconstruction Challenges" by Abdullah bin Muhammad Hamid al-Din, a senior researcher at the King Faisal Center for Research and Islamic Studies provides an analysis of the challenges that Yemen faces in its reconstruction process after the devastating conflict that led to one of the largest avoidable humanitarian disasters. The paper presents a literature review of the conflict, the number of deaths, and the collapse of the country's health, economic, and political systems. The author highlights the need for a deep understanding of the local social fabric, political structure, and cultural and economic context in Yemen's reconstruction process, as well as the importance of avoiding centralisation, taking into account the priority needs of local communities, and critical review of the requirements donors. Overall, the paper emphasises the importance of practising critical thinking to achieve the most significant positive effects and reduce the impact of the inevitable negative ones.
2. (**Ayman Assem, 2022**)The research paper "Smart management of the reconstruction process of post-conflict cities" by Ayman Assem proposes an approach for the smart and effective management of the post-conflict city reconstruction process. The paper highlights the challenges faced by cities lying within conflict zones, which go beyond recovery from post-conflict trauma and preserving urban heritage. The challenges also include critical decision-making, rebuilding effectiveness, and funding mechanisms, leading to time-consuming processes that lack adequate, consistent long-term management. The approach suggested in the paper involves post-conflict city evaluation, reconstruction planning, reconstruction projects, and project implementation. The authors integrate building information modeling (BIM) and geographic/geospatial information systems (GIS) in a platform that allows for real-time analysis, reporting, strategic planning, and decision-making for managing reconstruction operations and projects among involved stakeholders, including government agencies, funding organisations, city managers, and public participants. The research paper highlights the need for smart management systems for use by city managers and government authorities in post-conflict zones and bottom-up decision-making by including participant citizens, especially populations in the diaspora. The proposed method aims to empower all parties and stakeholders concerned with efficiently managing the reconstruction process for post-conflict zones. The paper presents an innovative approach to managing the reconstruction process in post-conflict cities, which integrates technology, real-time data analysis, and stakeholder involvement to ensure effective planning, implementation, and management of reconstruction projects. The paper provides valuable insights into the challenges faced by post-conflict cities. It offers a comprehensive approach to addressing these challenges, which could have significant practical implications for city managers and government authorities in post-conflict zones. The research limitations highlighted in the paper also suggest avenues for future research to test and refine the proposed approach in different case studies. Overall, the paper contributes to post-conflict reconstruction and urban planning literature.
3. **(Al-Rifi, 2012)** The author argues that Islamic banks have become a global phenomenon that deserves study and evaluation as a new credit activity, as its credit services have gone beyond the concepts of participation, Murabaha, and traditional speculation. Instead, it is based on the abolition of the traditional credit mechanism, which is the interest rate, and operates on Islamic Sharia principles and provisions. The author discusses the concept of Islamic banks and their characteristics in the first axis of the research, highlighting the connection between the characteristics of Islamic banks and the Islamic economic system as a whole. The second axis deals with the financing formulas adopted by Islamic banks, while the third axis discusses the elements of success of Islamic banks and the obstacles and problems they face. In the fourth axis, the article delves into the concept of Islamic development and the role of Islamic banks in it. The author concludes that Islamic banks are only partial economic institutions in an Islamic financial banking system that constitutes one of the requirements of the Islamic economic system. The characteristics of Islamic banks are related to the characteristics of the Islamic economic system as a whole, such as the connection with Islamic values and what is decided by Islamic law. However, the Islamic banking business faces a number of problems and obstacles that impede achieving the goals sought by Islamic banks, including administrative, economic, and accounting issues. The author recommends establishing specialised Islamic banks for financing large projects with long-term and high-cost investment fields, and laying down the foundations of administrative and accounting regulations and systems for Islamic banks in accordance with the rules and provisions of Islamic Sharia. Overall, this article provides a useful insight into the role of Islamic banks in the development of Islamic-oriented economies and highlights the challenges they face in achieving their objectives.

**Hypothises**

1. Islamic banks can play a key role in rehabilitating devastated communities by providing funding through various channels and encouraging sustainable growth.
2. Empowering startups and small and medium-sized enterprises (SMEs) in the post-war reconstruction process can lead to economic growth and prosperity, resulting in long-term economic development and a fair distribution of wealth.
3. Enhancing communication among parties participating in the reconstruction process can be achieved using web-based application layers with sophisticated database technologies. (contractors, facility managers, clients, service providers, staff members, and public participants).

**Research Methodology:**

Using a qualitative, comparative, and descriptive research approach, the function of Islamic banking in post-disaster reconstruction will be examined. As part of the research, a survey of pertinent academic papers, books, and reports on Islamic banking, post-disaster recovery, and economic development will be carried out. The study's theoretical framework, which will guide the study's research questions and hypotheses, will be provided through the literature review. The research will include case studies of effective post-disaster restoration programmes funded by Islamic banks. The case studies will cover the advantages of utilising Islamic financial contracts to finance rebuilding projects, the function of Islamic banks in fostering sustainable development, and the significance of empowering startups and SMEs in the reconstruction process.

**Islamic Banks' Role in the Reconstruction of Affected Areas**

After wars and conflicts, one of the most significant challenges communities face is rebuilding their affected areas. Islamic banks, which operate on Sharia law principles, can play a critical role in the reconstruction process, bringing economic, social, and security benefits to themselves and society. One of the essential advantages of Islamic banks in the reconstruction process is their ability to use idle local resources. They can increase the volume of domestically produced goods by utilising physical capital, such as factories and human capital, represented by labour. This, in turn, leads to economic development and growth. Rebuilding affected areas in the aftermath of natural disasters or conflicts is a difficult task requiring significant resources. Capital is a critical resource for reconstruction, and banks play an essential role. On the other hand, traditional banks face cultural barriers in Muslim societies due to the prohibition of usury in Islamic law. This is where Islamic banks come in, offering a one-of-a-kind and ethical solution for funding the reconstruction of affected areas. Islamic banking is based on the profit and loss sharing principle, which means that the bank and the customer share in the profits and losses of any investments made with the funds. This approach is consistent with Islamic law principles, prohibiting charging interest on loans. Instead, Islamic banks provide financing through various channels, including Mudarabah, Musharakah, and Ijarah, based on partnership and leasing arrangements. These funding modes of ensure that the bank shares the risk and reward of any investment with the customer, promoting more equitable wealth distribution.(Ismail et al., 2014) One of the key advantages of Islamic banking in the reconstruction of affected areas is that it promotes sustainable development. Islamic banks are focused on profit, social responsibility, and ethical investment. This means that the funds provided by Islamic banks for reconstruction projects will be used for sustainable development that benefits the local community. For example, Islamic banks may invest in renewable energy projects, affordable housing, and community infrastructure, all of which contribute to the long-term development of the affected area. Islamic banks can lend money to affected areas using Islamic financial contracts such as Murabaha, Istisna'a, and Ijarah Muntahia Bittamleek. These contracts can fund infrastructure rebuilding, housing, and other economic activities. Istisna'a contracts, for example, can be used to finance factory reconstruction, whereas Ijarah Muntahia Bittamleek contracts can be used to finance real estate reconstruction.(Sadiqi et al., 2016)

Furthermore, Islamic banks can help affected areas rebuild through their social responsibility programmes, which can aid in reconstructing schools, hospitals, and other vital facilities. Zakat funds, which Muslims give annually for charitable purposes, can also be used in the reconstruction process. Islamic banks can be important in assisting with the reconstruction process in affected areas. In times of crisis, their principles of ethical finance, risk-sharing, and avoiding interest-based transactions may be relevant. With the international community's support, Islamic banks can help rebuild the affected areas and provide a better future for their people.(Xu & Lu, 2018)

**Empowering Startups in Post-War Reconstruction for Economic Justice**

Postwar reconstruction offers a once-in-a-lifetime opportunity to create a new class of merchants and diversify the distribution of wealth to improve economic justice. Allowing startups and small and medium-sized enterprises (SMEs) to participate in the reconstruction process and benefit from the cash infusion into the country can help achieve this. On the other hand, the current approach prioritises contractors with a well-known track record and strong financial capabilities. Except for stable and well-established firms, the terms of reference for donor-funded projects exclude the majority. While this approach may be appropriate for larger projects, the terms of reference must allow startups to enter the market, primarily if they offer innovative solutions that are cost and quality-competitive. This is a critical issue in Yemen, where many professionals and merchants lost everything during the civil war. Recognising startups as critical players in the rebuilding process can help to address this imbalance. The current reconstruction models rely on the government, foreign countries, donor organisations, non-governmental organisations (NGOs), and major contractors as the primary actors in the process.(Harriss et al., 2020; Johnson, 2007)

On the other hand, recognising startups as important players in the reconstruction process is a critical step towards giving them a role and ensuring a fair distribution of wealth. New businesses can emerge by allowing startups and SMEs to participate in the reconstruction process, creating jobs and increasing economic growth. Furthermore, these new businesses have the potential to provide innovative solutions that will improve the quality and efficiency of the reconstruction process. The post-war reconstruction process must include startups and SMEs to ensure economic justice and a fair distribution of wealth(Assem et al., 2020; Sumner, 2004). While major contractors will play a role in the reconstruction process, recognising startups as key players will result in a more diverse and innovative approach that benefits the economy as a whole. Allowing startups and small and medium-sized enterprises (SMEs) to participate in the reconstruction process is an investment in the country's future that can lead to long-term economic growth and prosperity(Chang et al., 2011).

**Islamic Contracts for Financing Reconstruction: Advantages and Challenges**

Real-time task management, scalability, and flexible access are made possible by the web-based application layer used in the Ayman Assem project. It also includes a variety of interfaces and a networking feature to help all stakeholders involved in the reconstruction process communicate more effectively. This layer's comprehensive database technology enables messaging and mobile notifications for all parties involved. A dynamic ticketing mechanism is also included in the coating, facilitating the exchange of requests among all stakeholders, including operations and project management. This layer uses archiving, file management, versioning, and reporting tools to guarantee coordinated and thorough data management among contractors, facility managers, clients, service providers, staff members, and members of the general public.(Doberstein & Stager, 2013). All data are managed through a dynamic interface, making it easier for all stakeholders to access and collect information related to the reconstruction process. By utilising the previous model, we can improve the likelihood of implementing Islamic financing contracts to discover practical solutions for reconstruction. Before examining the methods through which Islamic economics funds reconstruction, it is possible to categorize monarchies into two groups: those characterized by private ownership and those described by public ownership.(Chang et al., 2012)

**Approaches taken by the Islamic economic system to finance the reconstruction of privately owned assets**

* **The concept of "al-istisna**" is an Islamic financing contract involving the sale of a non-existent or yet-to-be-produced good. While the principle of analogy (i.e., qiyas) appears to forbid such a contract, it has gained acceptance in Islamic finance due to its practical necessity and widespread use, as long as certain conditions are met (e.g., full payment in the contract meeting, clear description of the good to be produced). The main difference between "al-istisna" and other contracts like "salam" is that the former is not contingent on a pre-existing, weighed or measured good but on producing a good that does not yet exist. "al-istisna" is not a necessary contract, unlike "salam". Finally, "al-istisna" does not require the immediate payment of the full contract amount in the contract meeting, unlike "salam". The Istisna'a contract is practically applied to fulfil material and industrial needs, such as manufacturing doors, air conditioners, and household appliances for buildings. The contractor produces them according to legal requirements and receives an advance payment for the total value.
* **Murabaha** for the purchase ordered: The desire to obtain some needs before the required price is available, whether those needs are required for personal or domestic use. This concept was considered one of the investment formulas due to the urgent need to expand the alternative banking scope to prevent overlap with the participation and speculation formula. If the state is one of the contracting parties, then this agreement can finance society's post-disaster needs for goods and essential materials. This contract overlaps with contracting and supply contracts.

**Approaches taken by the Islamic economic system to finance the reconstruction of generally owned assets.**

* Musharaka is one of the formulas that describe the partnership between two parties (the bank and the project owner); each has a fixed portion of the capital, provided that they divide the project's return according to their respective capitals after taking the agreed-upon. Share of the person in charge of management into account. Divide it by the amount of capital. Musharaka contracts ownership and management.
* **Islamic Sukuk** is a type of financial instrument that has grown in popularity recently for financing large projects in the aftermath of natural disasters. The term "sukuk" refers to the Islamic term for bonds used to raise money for significant projects. Sukuk is a type of investment instrument that divides the capital into equal shares by issuing ownership sukuk registered in their owners' names. The owners can own common stock in the company and receive a percentage of the profits based on their ownership. The proceeds of sukuk issuance are used to fund commercial, industrial, and agricultural investment projects. Sukuk of various types, such as Istisna'a and Murabaha sukuk, represent joint financial asset ownership. Islamic sukuk has several characteristics that set it apart as a financial investment tool. Sukuk, unlike bonds, are not regarded as a debt owed by the issuer to the bearer. Sukuk may be traded, but doing so is restricted by the conditions of the securities they stand in for..They are issued in denominations of equal value and represent a common share in the ownership of assets designated for investment, including property, benefits, services, moral rights, debts, and money. Sukuk are issued based on a legal contract, with legal controls regulating their issuance and circulation. Owners of sukuk are liable for any fines in proportion to their ownership of the sukuk and share profits in proportion to their ownership of the sukuk, as stated in the prospectus. Governments and institutions have turned to Islamic sukuk as an alternative to traditional financing tools to bridge budget deficits and provide security for individuals seeking Islamic investment options. Islamic Sukuk has gained popularity to raise money for infrastructure development in the aftermath of disasters. The process involves a government or company issuance of Sukuk to raise capital, which is then used to fund specific projects such as securing railways, constructing airports, and building investment roads. One of the key advantages of Islamic Sukuk is that it is a Shariah-compliant financial instrument that adheres to Islamic finance principles. This makes it a popular choice for investors in Muslim countries seeking ethical and socially responsible investment opportunities. Another advantage of Islamic Sukuk is that it provides a more stable funding source for major infrastructure projects. The issuance of Sukuk allows governments and companies to raise funds over a longer period, which can help to spread out the financial burden of large-scale projects. This is particularly important in the aftermath of disasters when there may be a shortage of capital and a need for significant investment in infrastructure. In addition, Islamic Sukuk can also help to attract foreign investment in post-disaster reconstruction efforts. Sukuk can be issued in multiple currencies, making it an attractive option for international investors looking to diversify their portfolios and invest in emerging markets. Overall, Islamic Sukuk is vital in financing major projects in the aftermath of disasters. It provides a stable and ethical funding source that can help support infrastructure development and promote economic growth. As such, it will likely continue to be an important part of the financing landscape in the future.(Ahmad Alsaleh, 2018)

**Conclusion and discussion**

To summaries, rebuilding affected areas after disasters, conflicts, and wars is a difficult task requiring significant resources and coordination among multiple parties. To ensure that aid reaches those in need, immediate relief efforts should be managed through a centralised system. Long-term reconstruction necessitates extensive planning, training programmes, and collaborative efforts to rebuild damaged homes and infrastructure while also providing human rehabilitation. The most difficult challenge in this phase is frequently a lack of sufficient funds and strategic plans for reconstruction, which can stymie and delay the process. Islamic banks that follow Sharia law principles can significantly finance the reconstruction of affected areas. Their innovative approach to financing, which includes profit-and-loss sharing, social responsibility, and the avoidance of interest-based transactions, can potentially promote long-term development and benefit the local community. Islamic banks can fund infrastructure, housing, other economic activities, and essential facilities such as schools and hospitals through various Islamic financial contracts and social responsibility programmes. City managers, government agencies, and funding organisations can efficiently oversee and analyse ongoing reconstruction projects, monitor city operations, and allocate budgets by utilising an interactive database and informed collective decision-making processes. The involvement of Islamic banks and their ethical finance principles can make the reconstruction process efficient and sustainable, allowing affected communities to recover and rebuild in the long run. The hypothesis being tested is that Islamic banks, empowering startups and small and medium-sized enterprises (SMEs), and using web-based application layers with extensive database technology can contribute to the post-war reconstruction process and lead to economic growth, sustainable development, and fair distribution of wealth. The information provided supports this hypothesis by highlighting the advantages of Islamic banks in using local resources, promoting sustainable development, and providing ethical financing for reconstruction projects. The article also argues that empowering startups and SMEs in the reconstruction process can lead to economic growth and prosperity, while the use of web-based application layers with extensive database technology can enhance communication among stakeholders involved in the reconstruction process. Overall, the information provided supports the hypothesis that these factors can significantly affect the post-war reconstruction process.

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