

Bridging the Green Gap: Analyzing the Scenario of Renewable Energy Financing in Bangladesh

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Abstract: Bangladesh has given special attention to the renewable energy sector and especially invested significant resources to extract the blessings of renewable energy. However, how the projects are working and the entire scenarios are still unexplored. This study generates a noble contribution to the renewable energy sectors of Bangladesh. It tends to explore the current status, challenges, and prospects of renewable energy in Bangladesh. The study arranges in-depth interviews of 40 stakeholders in Bangladesh from April 2023 to January 2024. Later, the qualitative data analysis software ATLAS.ti.23 was used to analyze the data. The findings highlight that the current status of renewable energy investment in Bangladesh is not satisfactory. The stakeholders are facing huge challenges, and these have become one of the biggest barriers to improving the sector. Despite that, the prospects of improvement of renewable energy in Bangladesh are very high. Special attention to this sector can bring about positive changes in power generation and consumption. The study enriches literature in the academic field. The concerned authorities of renewable energy in Bangladesh can take a deeper look into the requirements of the sector. The study also discusses some limitations and future research directions.

Keywords: Green Gap, Renewable Energy Finance, Scenarios, Status Quo, Challenges, Prospects, Bangladesh

1. Introduction

In light of escalating environmental obstacles and growing demands for energy, renewable energy has surfaced as a beacon of optimism for a sustainable world. It plays a crucial role in the global endeavor to achieve sustainable development, specifically within the framework of Sustainable Development Goals (SDG) 7 which strives to guarantee universal access to affordable, dependable, sustainable, and contemporary energy for all stakeholders. Alongside contributing to decarbonizing energy systems, mitigating climate change, and improving air quality, the widespread benefits to the economy, society, and individuals have made RE a global priority (Li et al., 2023; Pizarro-Loaiza et al., 2021). Moreover, IRENA (2023) reports RE sources like wind power and solar capacity have seen tremendous growth, five and

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twenty-six times respectively since 2010. It also reports the decline in coal-and oil-based power plants by 2030 (from 34% to 9% for coal and from 3% to 0% for oil), eventually phasing out completely by 2050. Similarly, natural gas and nuclear power plants will account for a small portion of electricity generation, 5% and 4% respectively, in 2050. Consequently, with energy security challenges and environmental sustainability imperatives, Bangladesh's effort to achieve SDG7 aligns with innovative policy mechanisms and financial frameworks supporting the adoption of renewable energy, as it addresses the growing population and energy demand, making sustainable energy solutions crucial both strategically and ethically.

Financing is crucial for RE infrastructure as it requires substantial upfront investment, infrastructure, and technology in several stages, for example, planning, construction, and operation, unlike conventional projects (Al Naimat & Liang, 2023). RE financing mechanisms like grant, loan, subsidies, tax incentives, and public-private partnerships are essential for mobilizing the capital, attracting investment, and facilitating the development. Investment in such RE projects have surged globally as global investment in renewable energy reached \$1.8 Trillion in 2023 which shows the appeal of these projects to investors (BloombergNEF, 2024). Additionally, these mechanisms promote job creation, economic growth, energy access, and climate change mitigation, making them essential for sustainable development in Bangladesh. However, upfront investment and policy uncertainty is a major obstacle to start RE projects, which drastically hamper the growth (Appiah-Otoo, 2021). Due to increasing energy demand and environmental pressure, sustaining development in the power production sector in Bangladesh is a significant problem. Bangladesh is now unable to supply an adequate amount of electricity to its population as approximately 62% of the population resides in rural regions and around 55% lack access to commercial energy sources (Hossain et al., 2023).

As Bangladesh is improving in economic indicators day by day, the importance of robust regulatory policies is going high. The National Renewable Energy Policy 2008 was introduced to motivate the initiatives of RE nationwide. Alongside, the sustainable and renewable energy development authority act 2012, scaling up renewable energy program for Bangladesh 2015, Bangladesh energy Regulatory Commission regulations 2016, etc., were introduced for stronger regulatory environment. Moreover, there is a large workforce in Bangladesh, as it stands fifth after China, Japan, USA, and India (Huang et al., 2020). Power companies and RE firms are exempted from corporate income tax for 15 and 10 years respectively, and from import duties, which works as a catalyst for companies to finance in the power sector (Amin & Rahman, 2019). Moreover, there is a presence of guarantees from the government as they takes all stakes, widespread acceptance by the society, favorable environmental condition to foster the RE industry in Bangladesh (Mahbub & Jongwanich, 2019; Uddin et al., 2019). This RE sector faces obstacles in Bangladesh including difficulty in securing land for projects, challenges in sending profits back to investors' countries, and a lack of coordination and collaboration among stakeholders (Keeley & Matsumoto, 2018; Khatun & Ahamad, 2015). Bureaucratic hurdles, corruption, and limited access to local financing further hinder the expansion of RE sources (Asadullah & Chakravorty, 2019). Making a nation fit for the RE sectors and ensuring the green energy availability and sustainability require appraising the RE sectors. Bangladesh has invested a significant finance in RE sectors. However, the present scenarios of RE are not appraised yet. Therefore, the study aims to bridge the green energy gap focusing on analyzing the scenarios of renewable energy financing in Bangladesh.

1.1 Problem Statement

The study of RE financing has recently gained popularity across the globe as well as in Asian countries. It's high time to finance and strengthen RE sectors for any nation. Though a number of countries have gained remarkable success in RE production (Atieh et al., 2023; Isah et al., 2023), there is no existence of the similar improvement in Bangladesh in this sector. The investment in RE sector in Bangladesh is struggling. However, the sector is unexplored yet regarding why the financing in RE is not getting remarkable success and what are the problems behind them. Eventually, the recommendations in making financing productive in the RE sector are still out of sight. For these reasons, the authors intend to find out the green gap in financing RE sector in Bangladesh focusing on in-depth concerned exploration.

1.2 Aim, Objectives, and Research Questions

RE sector is going to be the one of the critical resources within a few years (Hassan et al., 2024). The present scenarios, prospects, and challenges of RE financing are worth being investigated. Eventually, this can enrich the paucity of RE finance in Bangladesh in the literature. Therefore, this study aims to explore the RE financing in Bangladesh- status quo, prospects, and challenges by observation and interview. To be precise, the study considers three objectives:

- To explore the status quo of the RE financing in Bangladesh
- To explore the prospects, and challenges of RE financing in Bangladesh
- To prescribe required suggestions based on the research findings

The aim and objectives further can be shaped to form three research questions:

- What is the status quo of the RE financing in Bangladesh?
- What are the prospects, and challenges of RE financing in Bangladesh?
- What could be the recommendations to improve the RE financing in Bangladesh?

Following this Introduction, the rest of the part of this research is outlined as follows. The second section presents the overview and issues of RE financing. Next, the third section details the methodology. Subsequently, the fourth section depicts the status quo, prospects, and challengers. Finally, the fifth section summarizes the findings, recommendations, noting some limitations and signifying actions for imminent research.

2. Literature Review

RE is crucial for tackling worldwide energy issues such as climate change and energy security. Promoting RE source is in Bangladesh due to its susceptibility to natural calamities and increasing energy needs (Islam et al., 2022). However, successful execution of RE projects depends on significantly on finance arrangements (Qadir et al., 2021). This literature review focuses on analyzing the status quo, future possibilities, and challenges related to RE financing in Bangladesh using a qualitative approach, which involves thematic analysis of interviews from industry experts.

Energy financing involves the financial tools and tactics utilized to finance the operation of energy projects within the energy sector which covers both conventional and sustainable sources (Li et al., 2023; Palmer, 2022). RE, which focuses on energy that use the renewable natural resources, is playing a crucial role in the global shift towards sustainability. However, the higher initial investment costs associated with RE sources compared to traditional sources may deter potential entrepreneurs and financiers from entering the market (Mahmud & Roy, 2021; Qadir et al., 2021; Sastry Musti, 2023). In this regard, energy finance offers funding methods including debt financing, equity investment, and green bonds tailored to meet the

requirements of RE projects (Fu & Ng, 2021; Palmer, 2022). These financial instruments enable the mobilization of funds from diverse sources such as banks, private investors, and government entities, making RE projects financially viable and supporting their expansion. Having all these facilities, RE is experiencing rapid growth worldwide as IRENA (2023) highlights the development of the capacity due to the increase in the deployment of solar and wind power. However, Khalid & Okitasari (2023) stated that a much faster pace of implementation is needed to achieve the ambitious climate change mitigation targets. Meanwhile, a growing number of investors recognize the long-term economic and environmental benefits of RE sources, resulting in increased investments in the sector (Kilinc-Ata & Dolmatov, 2023; Pizarro-Loaiza et al., 2021). Technological advancements have also reduced the cost of RE production, enhancing its competitiveness compared to conventional sources (Keeley & Matsumoto, 2018; Kilinc-Ata & Dolmatov, 2023; Qadir et al., 2021). Nevertheless, policy and regulatory uncertainties, and limited access to financing especially in developing countries, can undermine investor confidence and hinder project progress (Appiah-Otoo, 2021; Li et al., 2023; Mahmud & Roy, 2021). However, energy financing is indispensable in realizing the potential and advancing towards a sustainable future.

Similar to the status quo of RE finance worldwide, Bangladesh shows a combination of advancements and obstacles. (Gulagi et al., 2020) found that the government's RE Policy and the creation of the Sustainable and Renewable Energy Development Authority (SREDA) demonstrate a firm dedication to advancing the deployment of RE. Investment trends show a consistent rise in local and foreign interest, especially in solar and wind energy projects, supported by government incentives such as tax benefits and feed-in tariffs (Khatun & Ahamad, 2015; Uddin et al., 2019). Organizations such as the World Bank and the Asian Development Bank have provided finance, technical help, and capacity building for RE projects with international backing (Gulagi et al., 2020; Islam et al., 2022). Although (Karim et al., 2019) finds the existence of supporting legislative framework in place, obstacles remain in implementing objectives due to regulatory uncertainty, land acquisition concerns, and grid connectivity restrictions (Munjer et al., 2023). Similarly, restricted availability of extended and inexpensive funding hinders the expansion of small and medium-sized projects and initiatives for rural electrification (Gulagi et al., 2020; Karim et al., 2019). Despite the increasing use of technology, there is still a substantial lack of financing that is preventing wider implementation in rural regions. Therefore, it is essential to simplify regulatory procedure, attract investment, and enhance institutional capabilities by fostering cooperation among government bodies, financial institutions, development partners, and private sector.

RE financing in Bangladesh seems prospective due to the country's significant energy sources such as solar, wind, biomass, and hydropower (Safi et al., 2023). In order to carrying out the potentials, international organizations and development agencies are getting interested in providing support for RE projects through various ways, for example, grants, concessional loans, and technical assistance (Rahman et al., 2020). Additionally, the decreasing expenses of RE technology and the chance for generating cash through feed-in tariffs and carbon finance offer chances for investors and financiers (Karim et al., 2019; Uddin et al., 2019). Despite having potential, various obstacles impede the successful funding of RE projects in Bangladesh. One of the major obstacles is restricted availability of finance, especially for small and medium sized initiatives (Munjer et al., 2023; Safi et al., 2023). In addition, financial institutions sometimes see RE projects as highly risky one because of uncertainty surrounding project feasibility, regulatory structure, and off-take agreements (Mahmud & Roy, 2021; Supti, 2022). Moreover, bureaucratic inertia, insufficient institutional capability,

and ineffective policy enforcement create difficulties for project execution and financing (Mahmud & Roy, 2021; Munjer et al., 2023).

3. Methodology

3.1 Approach

This study used qualitative methods including observation and interviews. This method helps researchers understand the problem's background more deeply (Crabtree & Miller, 2023; Hancock et al., 2001; Hatch, 2023; Savin-Baden & Major, 2023; Strauss & Corbin, 1998). To investigate the scenarios of RE financing in Bangladesh, the writers combined observational data with interviews conducted in a semi-structured manner. Investigating the fundamental causes for achieving the study's aims has been made easier by striking a balance between observation and interview.

3.2 Observation

According to Yang et al. (2023), the observation technique is considered a crucial instrument for gathering qualitative data, since it allows researchers to gather a wide range of information such as actions, spoken and nonverbal communication, and contextual elements. The writers witnessed various RE projects and their success in financing around the nation and observed the status quo, prospects, challenges, body languages of the stakeholders, interests in these projects, word of mouth, and so on. The researchers have examined the RE financing projects and their progress. The participants were passive in nature and unaware of the observation so that the exact responses can be drawn at the best possible levels.

3.3 Interview

Thorough qualitative interviews can produce a deep grasp of an issue and reduce the likelihood that the researchers would impose their opinions or restrict the scope of the debate (de Geus et al., 2023). The interview was done by the writers in accordance with a planned protocol. The interviewees granted permission to end the interview at any time. The questions were simple to complex. Since each interview lasted five to ten minutes, it was important to avoid asking too many questions and squandering time by not offending the stakeholders associated with RE financing. Participants in this study who are sufficiently serious and willing to answer have been the interview subjects.

3.4 Sampling

The current study has considered convenient sampling in stakeholder identification and data collection. To guarantee balance and cross-responses, the authors included an equal number of myriad stakeholders (40). All replies were adults who shared their experiences with RE finance and its scenarios. During the data gathering procedure, 12 respondents failed to submit a comprehensive response. Later on, this study refrained from offering these inadequate responses.

3.5 Data collection

The authors tracked the interview convincing the respondents about confidentiality and permission with due respect. The authors asked the interviewees some preset questions to gather sufficient data. Then, manuscripts were prepared from Bangla to the English language. The authors have collected data from RE producers, regulatory bodies, concerned organizations, RE equipment manufacturers and suppliers, investors, insurance companies, and landowners and affected communities. The authors invested ten months (April 2023 to January 2024) to collect the data rigorously. The respondents were from different divisions of the country, for instance, Dhaka, Mymensingh, Rajshahi, Rangpur, Barishal, Chattogram,

Khulna, and Sylhet. The locations of the respondents are mostly out of Dhaka. The respondents were having a significant engagement with RE financing.

3.6 Data Analysis

The authors have analyzed the data through ATLAS.ti2023 which is a qualitative data analysis software. The data analysis covered content, concept, and thematic analysis. The information was grouped and coded to assess similar themes. Then, the themes were separately synthesized in the networks to visualize a better relationship. Finally, the inductive thematic analysis helped to assess the scenarios about RE finance in Bangladesh.

4. Results and Discussion

4.1 Status Quo of the RE financing in Bangladesh

Though Bangladesh has given a special focus on producing required level of RE and financed significantly, the status quo (existing state of this sector) of the RE finance is not satisfactory. The progress is not notable. The RE producers could not attain their targets in utilizing the finance in RE. They mentioned myriad reasons behind the sorry figures. Remarkably, they are not trained enough. Additionally, they did not get productive guidelines from any concerned authorities. Moreover, the number of RE producers are very limited. For this reason, the producers cannot share their objectives, plans, and strategies with other peers. Surprisingly, the number of consultancy firms in this regard is also scarce and the RE producers are puzzled to create a significant signature of success.

The regulatory bodies are also indifferent most of the time and cases. They do not appraise the performance levels of the RE producers timely. Consequently, the deviations remain unexplored, and the performance levels are not improved. So, the controlling measures of the concerned authorities are not up to the mark.

The political impacts additionally create barriers to improve the RE finance sometimes since some RE manufacturers get favor whereas some do not. The equal treatment must be ensured to do better in this sector. Bureaucratic hurdles add sugar to this problem again. The sector is also missing the supports of foreign investors in this regard. If they are attracted to RE financing of Bangladesh, the sector could touch the peak point of success. Furthermore, several banks and other financial organizations are not positively motivated to invest in this sector. Therefore, they set a high interest rate in financing RE sectors. They create negative marketing frequently to reduce the application for RE finance from the producers. These organizations claim that the amount of money to be invested in RE sectors is very high whereas, the rate of success in these sectors is not pleasant. Consequently, they debtors cannot repay loans in due tenure and most of the time the unsuccessful producers create total loss for the concerned monetary organizations.

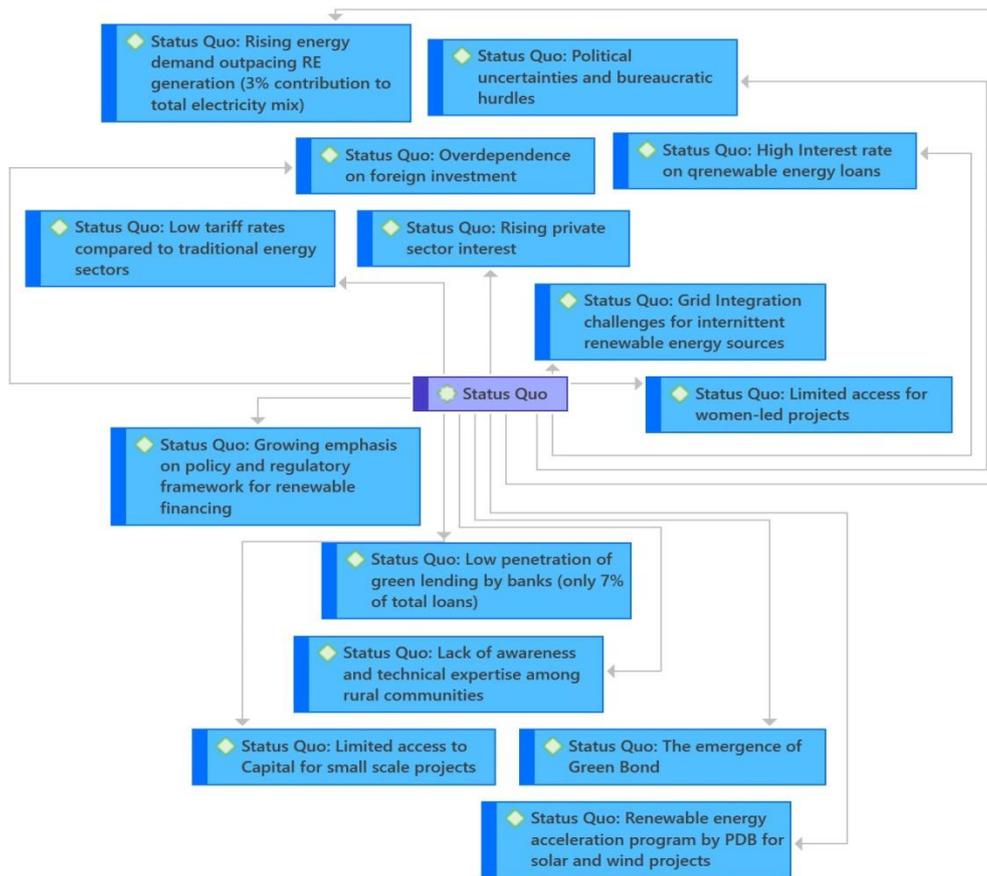


Figure 1. The Status Quo of the RE financing in Bangladesh (Source: Authors’ survey)

The RE equipment manufacturers and suppliers are very limited in number. For this reason, they practice more bargaining power in all spheres including setting prices, quality levels, supply volumes, and related everywhere. Eventually, the producers lack the necessary items and cannot demand the actual price, quality, volume, and lead time. These generate inefficiency in producing RE and the producers cannot survive over the longer period of time. This is one of the biggest reasons behind creating failure for the RE producers. It's not the least that the publics are not well-aware of the RE's necessity and importance. Especially, the local communities and surrounding landowners are not interested enough to focus on RE production close to them.

Finally, it's a word of hope that the private interest and required government supports are now increasing. The more private sectors will come forward, the more RE financing will more productive and progressive.

4.2 Challenges in RE financing in Bangladesh

The authors have found a set of challenges in RE finance and its success rate. Challenges include high initial costs for the RE projects. They RE producers lack funds and cannot keep go on smoothly with their projects. They find huge barriers getting the RE finance from the concerned sources. In addition to this, the existing infrastructure like electricity and other power generation authorities create unwanted competition and hindrance for the RE producers in various ways. Moreover, the climate is rapidly changing and RE producers cannot cope up with the changing environment. It delays the progress rate of the projects. The stakeholders engaged in generating RE are not capable and skilled up to the mark. Furthermore, almost all people are dependent on electricity more. This creates reluctance in

investing resources in the minds of concerned group. Since these projects require a significant amount of capital at the initial time and it continues, the RE producers need constant capital at any time. Unfortunately, the access to the capital for these projects are very limited. The financial institutions are not interested enough in investing this sector. Additionally, the required promotional programs for creating interest in RE finance are not run properly and adequately. This makes people more unaware of the projects. Besides, the producers are out of continuous audit and accountability. These make the projects unprofitable and unproductive for every stakeholder. Making this sector successful, the concerned stakeholders require productive training programs. However, the irony of fate that the improvement programs are not sufficient to make stakeholders skilled regarding the RE production. The concerned authorities do not have adequate incentive programs for the people engaged in the sector.

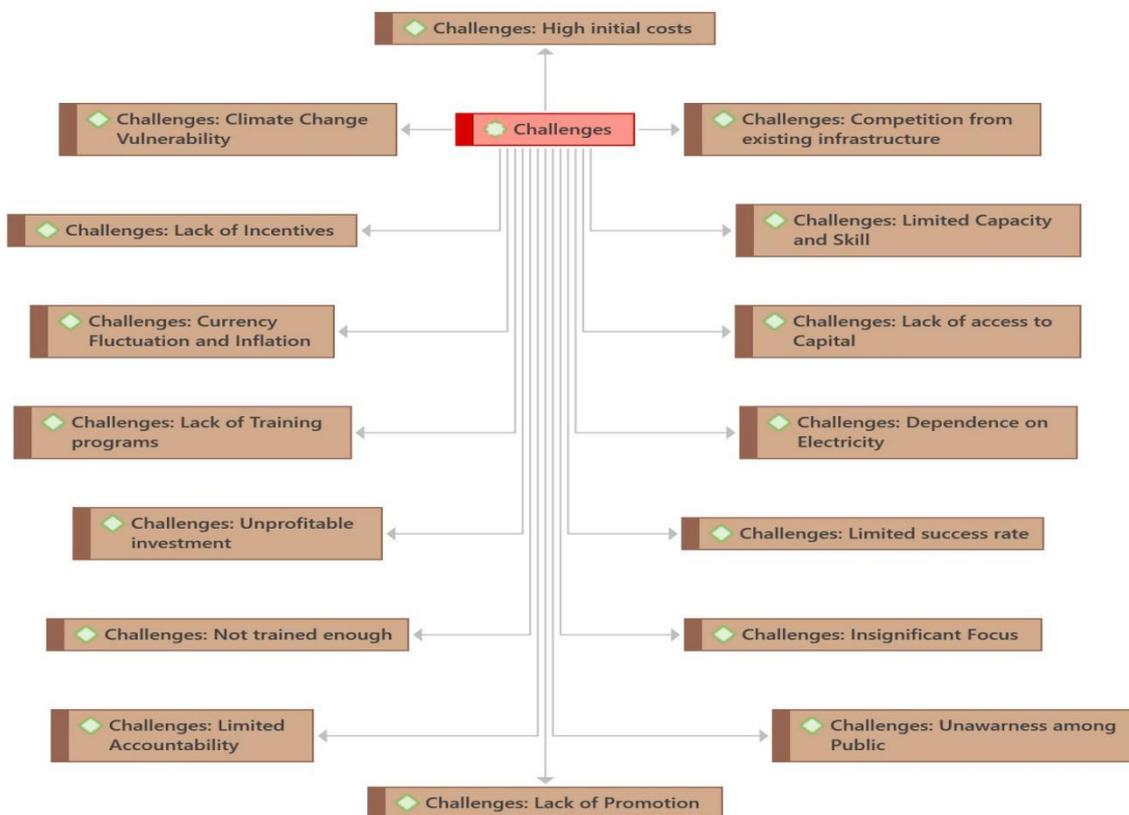


Figure 2: Challenges in RE financing in Bangladesh (Source: Authors’ survey)

4.3: Prospects of RE financing in Bangladesh

Despite having dissatisfactory status quo and many challenges, the RE financing has a good number of prospects. Since the technology is being advanced day by day, this sector might extract positive results with the help of the modern technology. Recently, a number of organizations have focused on RE financing and its better outcomes that will lead to pouring water on these projects. The partnerships with some organizations might improve the RE sectors. Moreover, a few international organizations are trying to work with Bangladeshi RE producers and stakeholders resulting in massive financial and technical supports for the projects. Furthermore, the local communities are being aware of the necessity of the RE and they are becoming interested to this sector. This will lead to creating the RE stronger than before. Besides, the RE entrepreneurs will be increased more with the passage of time. Also, the RE related policies are being given importance more and more that would make this sector healthy in the near future.

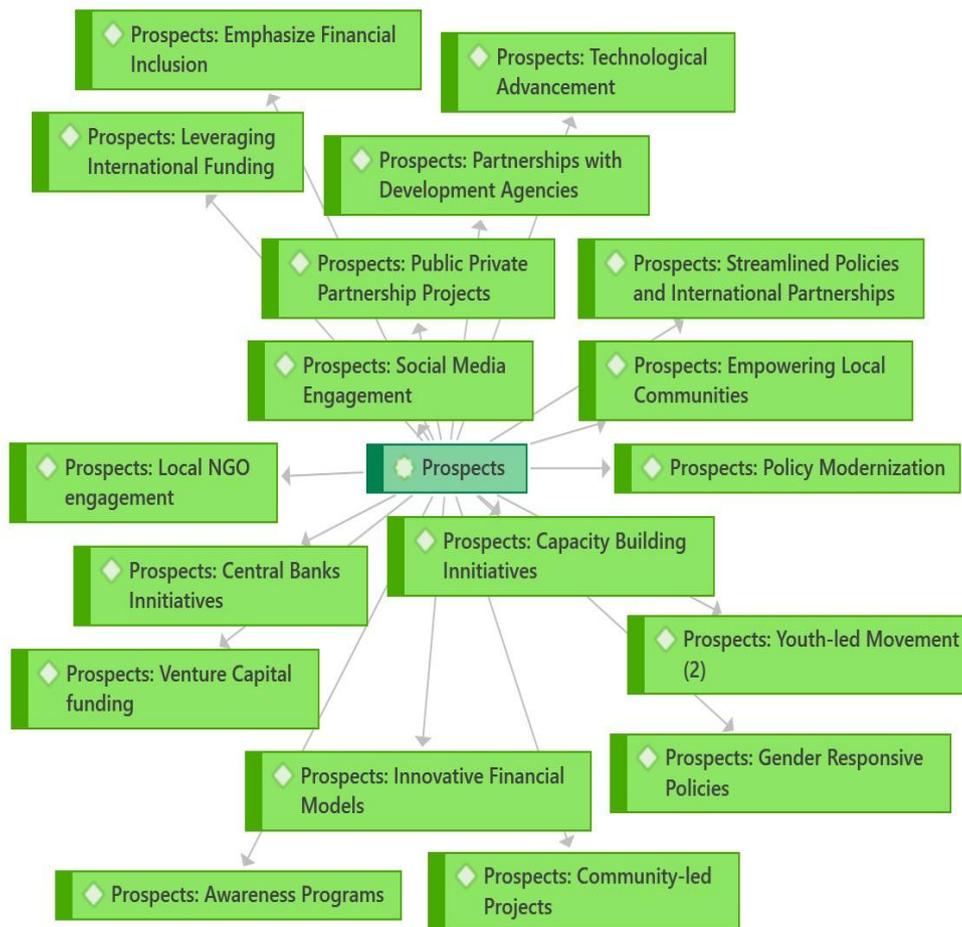


Figure 3: Prospects of RE financing in Bangladesh (Original)

The awareness programs are very much significant to make these sectors strong. Myriads of organizations and movements are playing significant roles in creating awareness relating to the sectors. It has also some possibilities of getting venture capital from several sources. The public-private partnerships and social media engagement are productive tools to improve the RE finance. Therefore, the prospects are very high in the improvement of the RE finance in Bangladesh.

5. Analysis, Discussion, and Recommendations

This study posits that RE financing in Bangladesh are not getting success as per the expectations. It has poor status quo and many challenges. However, the prospects are very high to improve the sector. In relation to these findings, the authors have tracked similar other findings where the scenarios of RE finance is quite alike. These findings are also supported by a number of previous studies (Alola et al., 2023; Asif et al., 2023; isah et al., 2023; Khan et al., 2023; Lan, 2023). Therefore, improving in the RE finance is a critical and challenging issues. Thus, the stakeholders must get all types of supports to perform better in these sectors.

The study represents that high interest rate of the funds is an impediment to the RE sectors. The producers of RE must get incentives on collecting the funds from various sources. The previous studies also commented accordingly in their findings (Barman et al., 2023; Enescu et al., 2023; Singh et al., 2023; Wei et al., 2023). The competition of RE sectors with other

infrastructure including power generating sources should not be existed. It creates negative impacts on the new ventures related to RE production. Thus, the concerned all stakeholders must have to support the sector to create positive results. A number of studies agreed on the same comments in their research (Batool et al., 2023; Buana et al., 2023; Hassan et al., 2023; Liu et al., 2023; Lohani et al., 2023; Mofokeng et al., 2023; Qamruzzaman & Karim, 2023; Sowby, 2023).

The rise of public-private partnerships in the RE sectors could strengthen the outcomes. Whenever there will be a combination of public-private partnerships, they mutual functions would ensure the productivity and success. The RE producers and financial organizations would be motivated enough to invest this sector. Several studies found the significant impact of private and public enterprises on the improvement of RE sector (Balcilar et al., 2023; Raghutla & Kolati, 2023; Ning et al., 2023).

Furthermore, most of the people of Bangladesh are still unaware about the blessings of RE. They are basically dependent on electricity and having some misconceptions regarding the utility of the RE. This creates disinterest among them in investing resources on RE. The massive level of awareness regarding the necessity of RE can instigate the stakeholders to focus on investing in this sector. The more people will be informed about the blessings of RE, the more they will invest resources in this sector. Several authors also found the similar outcomes in their research works (Chanchangi et al., 2023; Hassan et al., 2024; Lan, 2023; Le et al., 2023).

Along with these, the technical skills of the RE producers and manufacturers are not up to the mark in the perspective of the country. If any breakdown takes place, the concerned people cannot solve the problem in time. This breakdown creates the wastage of the resources since during staying idle, the machineries remain unused. Thus, there must have a critical urge on making concerned people skilled technically so that they can keep the resources workable all the time. The similar comments are made by several scholars in their research works (Ates & Calik, 2023; Martinez et al., 2023; Raihan et al., 2023; Zhang et al., 2023).

Additionally, the RE entrepreneurs also could not get smooth access to the required capital to run the RE projects. Without ensuring the proper funds to the RE projects, these sectors cannot be upgraded. The constant and smooth access to the RE funds must be confirmed so that these sectors can invest resources as per the necessity. This finding is supported by several studies (Bei & Wang, 2023; Li & Umair, 2023; Lin et al., 2023; Osman et al., 2023; Siddik et al., 2023; Shang et al., 2023).

Moreover, the study has revealed that the RE producers has to face huge initial costs. Meeting up these costs requires to be wealthy of resources. However, the financial health of most of the RE entrepreneurs is not satisfactory. The initiatives of the respective authorities matter huge in these problems. Through creating a beneficial and differentiated funds schemes for the RE producers, these problems could be addressed. The finding of the authors are alike some previous findings (Deshmukh et al., 2023; Haldar & Tripathi, 2023; He et al., 2023; Kumar et al., 2023; Osman et al., 2023).

Sometimes, currency fluctuations and inflations also create cost ineffectiveness for the RE projects and lead to increasing cost's levels. The respective authorities within the country should minimize these problems as the portion it's possible. Scholars identified same

problems in some research works (Abbas et al., 2023; Chen et al., 2023; Dinçer et al., 2023; Evans, 2024; Mirza et al., 2023).

Despite the challenges, problems, and dissatisfactory images of RE finance in Bangladesh, the sector has a great potential to be improved. The technology in the world is being updated in an uncontrolled speed. The RE sector of Bangladesh could grab the technological advantages and benefit the projects. The people must be technologically skilled, and they must know technological know-how very well. Looking into other research extract the same comments (Fang, 2023; Hasan & Du, 2023; Jahanger et al., 2023; Raihan et al., 2023; Saqib et al., 2023; Wang et al., 2023).

This study also unearths that local communities have significant impacts on the RE projects. Therefore, they must be supportive to the projects. Different kinds of promotional programs might make them well aware of the benefits and necessities of RE and consequently they might be interested to the betterment of the projects. The impacts of the local communities are also found in several other studies (Chao et al., 2023; Lan, 2023; Lin et al., 2023).

Importantly, the international aids can improve the RE sectors of Bangladesh. Since several respondents are getting proposals from international bodies, they can improve the RE sectors if the proposals are beneficial and realistic. Several nations took supports from abroad to improve the RE sector and become successful. The findings are supported by several studies (Lindner, 2023; Villanthenkodath et al., 2023).

6. Conclusion

This study tends to explore the status quo, challenges, and prospects of the RE financing in Bangladesh. The existing outcomes of the RE projects are not up to the mark and thus, many stakeholders are becoming reluctant to invest time, money, and energy in this field. The RE producers and suppliers also claim that the interest rates of the financial institutions to get the loans are comparatively high. As per the special area, this sector still does not get special attention from the respective authorities. Therefore, the RE projects are being stuck in the problems and difficulties. In some cases, this sector is getting some benefits but, they are not enough to improve the sector. Further, most of the RE entrepreneurs lack sufficient resources and they cannot meet up the initial high costs of starting RE projects. If they start the projects, become bound to shut down due to having inadequate resources. Thus, these problems must be addressed properly. In reality, most of the people are dependent on the electricity and other forms of power generating options. This overdependence on electricity is another impediment to keep a signature of success to the RE projects. The promotional message must be massive in nature so that people can understand the requirement of RE in the nearest future. Along with these, the respective people engaged with the RE projects must have proper training to create efficiency and effectiveness. The regulatory bodies should offer a unique scheme and incentives for the RE projects to delve into the deepest point of success.

7. Limitations and Future Research Directions

The study embraces some limitations. It focuses on qualitative methodology which typically relies on smaller and sometimes non-representative samples. This can limit the generalizability of the findings to the entire population of the stakeholders involved in renewable energy finance in Bangladesh. Due to the in-depth nature of qualitative research, it often focuses on a specific aspect of a phenomenon, potentially overlooking other significant factors that may influence the status quo, challenges, and prospects of renewable energy finance in Bangladesh. Gaining access to relevant data and stakeholders, particularly in the

public sector or from private financial institutions is challenging in Bangladesh. This may limit the comprehensiveness of the research. The further research can be directed focusing on specific area to get more exact findings. Finally, the quantitative research methodology can be addressed the crosscheck the results or to get different and critical insights from other perspectives.

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