



CPD

Working Paper

141

Establishing a Blended Finance Mechanism Involving Climate Funds in Bangladesh

Opportunities and Challenges

Fahmida Khatun
Wasel Bin Shadat
Foqoruddin Al Kabir



**ESTABLISHING A BLENDED FINANCE MECHANISM
INVOLVING CLIMATE FUNDS IN BANGLADESH**
Opportunities and Challenges

CPD Working Paper 141

**ESTABLISHING A BLENDED FINANCE MECHANISM
INVOLVING CLIMATE FUNDS IN BANGLADESH**
Opportunities and Challenges

CPD Working Paper 141

*Fahmida Khatun
Wasel Bin Shadat
Foqoruddin Al Kabir*



In collaboration with



As part of the
PROMOTING KNOWLEDGE FOR ACCOUNTABLE SYSTEMS (PROKAS)
Climate Induced Migration Issue Based Project

Publisher

Centre for Policy Dialogue (CPD)

House 40/C, Road 11 (new)

Dhanmondi, Dhaka-1209, Bangladesh

Telephone: (+88 02) 48118090, 55001185, 58156979

Fax: (+88 02) 48110414

E-mail: info@cpd.org.bd

Website: www.cpd.org.bd

First Published December 2021

© Centre for Policy Dialogue (CPD)

Disclaimer: The views expressed in this paper are those of the authors alone and do not necessarily reflect the views of the CPD.

Citation: Khatun, F., Shadat, W. B., & Kabir, F. A. (2021). *Establishing a Blended Finance Mechanism Involving Climate Funds in Bangladesh: Opportunities and Challenges*. CPD Working Paper 141. Dhaka: Centre for Policy Dialogue (CPD).

ISSN 2225-8175 (Online)

ISSN 2225-8035 (Print)

Centre for Policy Dialogue (CPD) was established in 1993 as a civil society initiative to promote an ongoing dialogue between the principle partners in the decision-making and implementing process. Over the past 28 years, the Centre has emerged as a globally reputed independent think tank, with local roots and global reach.

A key area of CPD's activism is to organise dialogues to address developmental policy issues that are critical to national, regional and global interests, with a view to seeking constructive solutions from major stakeholders. The other key area of CPD's activities is to undertake research programmes on current and strategic issues.

CPD's research programmes are both serviced by and intended to serve, as inputs for particular dialogues organised by the Centre throughout the year. Major research themes are: macroeconomic performance analysis; poverty and inequality; agriculture; trade; regional cooperation and global integration; infrastructure; employment, and enterprise development; climate change and environment; development governance; policies and institutions, and the 2030 Agenda for Sustainable Development.

As a continuation of its work, CPD has collaborated with various eminent networks, i.e., World Economic Forum (WEF), South Asia Economic Summit (SAES), Bangladesh, China, India and Myanmar (BCIM) Forum, South Asia Centre for Policy Studies (SACEPS), etc. CPD hosts the secretariat of the *LDC IV Monitor*, an independent global partnership for monitoring the outcome of the Fourth UN Conference on the LDCs. CPD was also the initial convener and founding host of the Southern Voice on Post-MDGs, a network of 50 think tanks from Africa, Asia and Latin America. CPD was the Secretariat of Southern Voice during January 2013–June 2019. At the national level, CPD hosts the Secretariat of the *Citizen's Platform for SDGs, Bangladesh*, a civil society initiative that includes more than 100 Partner organisations, founded with an objective to contribute to the delivery and implementation of the Sustainable Development Goals (SDGs). In recognition of its track record in research, dialogue and policy influencing, CPD has been selected as an awardee of the Think Tank Initiative (TTI) for two consecutive terms.

Dissemination of information and knowledge on critical developmental issues is another important component of CPD's activities. Pursuant to this, CPD maintains an active publication programme, both in Bangla and in English. As part of its dissemination programme, CPD has been bringing out **CPD Working Paper Series** on a regular basis. Research work in progress, background papers of dialogues, investigative reports and results of perception surveys which relate to issues of high public interest are published under this series.

The present paper titled *Establishing a Blended Finance Mechanism Involving Climate Funds in Bangladesh: Opportunities and Challenges* has been authored by *Dr Fahmida Khatun*, Executive Director, CPD., *Dr Wasel Bin Shadat*, former Visiting Research Fellow, CPD and *Mr Foqoruddin Al Kabir*, Programme Associate, CPD.

Series Editor: *Dr Fahmida Khatun*, Executive Director, CPD.

Acknowledgements

This scoping study has been conducted by the Centre for Policy Dialogue (CPD) as a part of the Climate Induced Migration (CIM) issue-based project (IBP) of the Promoting Knowledge for Accountable Systems (PROKAS) Programme, funded by the Foreign, Commonwealth and Development Office of the United Kingdom (UK), and implemented by the British Council in association with Palladium.

This report was authored by *Dr Fahmida Khatun*, Executive Director, CPD, *Dr Wasel Bin Shadat*, former Visiting Research Fellow, CPD, and *Mr Foqoruddin Al Kabir*, Programme Associate, CPD.

The research team gratefully acknowledges the valuable support received from *Mr Avra Bhattacharjee*, Joint Director, Dialogue and Outreach, CPD, and *Ms Farah Nusrat*, Senior Publication Associate, CPD for the publication of this paper. The team also appreciates the valuable support received from the Dialogue and Communication Division, and the Administration and Finance Division of the CPD.

The team would also like to register its sincere thanks to a number of concerned officials from several institutions for extending valuable support to the team.

Executive Summary

1. Bangladesh is one of the most vulnerable countries to the effect of climate change for its terrestrial and demographic features. In recent times, climate displacement and internal migration to the big city slums for employment opportunities have been critical problems for the country hindering the attainment of a number of Sustainable Development Goals (SDGs). Given the social and economic background, the country needs to find an alternative solution to stop internal migration by creating employment opportunities. Moreover, several estimates suggest that there prevails a large finance gap in terms of achieving the SDGs both globally and locally. In this regard, blended finance can play a crucial role in mobilising funds from various sources, especially green climate funds (GCF). However, a prudent framework is required to operationalise a blended finance mechanism in Bangladesh. Therefore, the objectives of the study are to identify the opportunities and challenges of the blended finance mechanism involving climate funds and to recommend a generic blended finance framework with suggested key activities at different stages.
2. The blended finance mechanism has become a new and evolving concept in development finance to attain the SDGs in developing countries, having some key characteristics as follows—(i) combination of public and private finance, (ii) involves of both concessional and non-concessional funds, (iii) investment friendly, and (iv) allows stakeholder's participatory consultation. The mechanism has critical implications for addressing the substantial resource gap to implement development projects. This mechanism can play an exceptionally crucial role in financing ongoing as well as new projects in the post-COVID era in view of the unprecedented pressure facing global economies due to the COVID-19 crisis. With policy guidelines and support, blended finance can contribute to poverty reduction, job creation, small and medium-sized enterprises (SME) development, clean energy, women empowerment, gender equality, and supporting the public health system, for inclusive, resilient and sustainable development aligned with national development priorities. However, lack of regulation, inadequate financing opportunities, identifying development objectives with credible estimation of financing gap, failure to attract private investment, ethical issues, lack of education, and low level of skills are the challenges for establishing a blended finance mechanism in Bangladesh.
3. In this report, a generic and conceptual framework of blended finance is proposed for Bangladesh which has four key stages: diagnostic stage; fund mobilisation stage; risk management stage; and fund transfer, disbursement and repayment stage. The successful mobilisation of funds and sustainable implementation of blended fund interventions crucially depends on the existence of a proper policy as well as on regulatory, institutional and legal frameworks addressing governance and accountability issues. Therefore, each stage suggests certain vital activities and separate governance and monitoring and evaluation mechanism to oversee under a sound policy framework. Besides, the government should engage, consult and collaborate with other stakeholders in a participatory manner while developing these frameworks and mechanism. Regulatory bodies (i.e., Bangladesh Bank and other relevant government organs) need to work simultaneously in a coordinated manner to ensure accountability and transparency, and to consistently monitor and evaluate the credit disbursement process (including beneficiary selection) and repayment procedure. The proposed framework is a flexible and dynamic one that involves feedback loops allowing to make necessary revisions with reflections of stakeholders' opinions and suggestions.
4. Migration to overcrowded and unsafe urban slums in big cities is one of the damaging consequences of natural disasters and climate change. The marginal people living in the disaster-prone areas are more likely to migrate to other big cities in search of shelter, employment and livelihood which put pressure on the cities. With a limited access to basic amenities—water, sanitation, electricity, transportation, basic medication, education, etc.—cities like Dhaka and Chattogram are unable to serve the purpose of this huge population. As a result, the significant rise in the number of climate displaced people in Bangladesh raises concern as this may lead to increased urbanisation and adverse impact on environment.

5. The study suggests the following interventions: facilitating the cottage, micro, small and medium enterprises (CMSMEs) improved access to finance by providing credit from the formal financing (banking and non-banking) channel; using a blended finance mechanism with contributions from the climate fund; and promoting employment-generating green growth in disaster-prone areas/selected regional growth hub with appropriate geographical and sub-sectoral targeting at the implementation stage. The study also recommends that creating alternative employment opportunities by providing CMSMEs improved access to finance in selected geographical locations and promoting employment-rich green growth can be a high-impact intervention to address the problem.
6. This scoping study attempts to connect three important and vast topics: blended finance; development challenges imposed by climate migration to urban slums; and CMSMEs improved access to finance as a possible intervention to address the challenges. The aim of this report is to introduce and socialise these ideas among policymakers and other stakeholders with a framework to discuss and develop further.

Contents

<i>Acknowledgements</i>	<i>vii</i>
<i>Executive Summary</i>	<i>ix</i>
<i>Acronyms</i>	<i>xiii</i>

1. Introduction	1
2. Blended Finance: Concept, Opportunities and Challenges	2
3. Conceptualisation of a Generic Blended Finance Framework for Bangladesh	5
4. Village to City Slum: An Anatomy of Bangladesh's Climate Displacement Crisis and Searching an Impactful Intervention	9
5. Concluding Remarks	18
References	20

List of Table, Figures, Boxes and Map

Table 1: Drivers of Climate Induced Migration in Bangladesh	13
Figure 1: A Generic Conceptual Model	6
Figure 2: Per cent of Land Inundated During Flood Seasons in Bangladesh (1985-2018)	10
Figure 3: The Overview of Disaster Displacement in Bangladesh (2008-2020)	10
Figure 4: Trend of Urbanisation in Bangladesh	11
Figure 5: A Simplified and Partial Theory of Change	16
Box 1: Some De-risking Instruments for Risk Management	3
Box 2: Case Study on Yoma Bank Agribusiness Finance Programme	4
Box 3: Major Obstacles for CMSME Development in Bangladesh	14
Box 4: Credible and Updated Estimation of Financing Gap is Crucial	19
Box 5: The Green Climate Fund in Bangladesh	18
Map 1: A Map for Disaster Displaced People	12

List of Annex Tables, Figure and Box

Annex Table 1: Unified MSME Definition Adopted under the 2016 Industrial Policy	26
Annex Table 2: Number of People Displaced Newly by Different Disaster from 2008 to 2020	27
Annex Table 3: List of Low Carbon to Medium Carbon Enterprise List	28
Annex Table 4: Demand for Loans among Microenterprises	29
Annex Table 5: Loan Supply for Microenterprises	29
Annex Table 6: Total Additional Cost for SDGs in FY 2025 and FY 2030	29
 Annex Figure 1: Top Ten Countries with the Newest Displacements by Disaster in 2020	 26
 Annex Box 1: Case Study on Yoma Bank Agribusiness Finance Programme	 31

Acronyms

CMSME	Cottage, Micro, Small and Medium Enterprise
DRR	Disaster Risk Reduction
EGM	Expert Group Meeting
IsDB	Islamic Development Bank
KII	Key Informant Interview
LDC	Least Developed Country
LLF	Lives and Livelihood Programme
MoEF	Ministry of Environment and Forest
M&E	Monitoring and Evaluation
NPL	Non-Performing Loan
OECD	Organisation for Economic Co-operation and Development
ODA	Official Development Assistance
PPP	Purchasing Power Parity
SIR	Self-Insured Retention
SDG	Sustainable Development Goal
SME	Small and Medium Enterprise
SHS	Solar Home System

1. INTRODUCTION

Bangladesh is one of the most at-risk countries in the world to climate change with regular and frequent exposure to natural hazards. Due to geographical location, low-lying topography, and high population, density disasters pose considerable challenges to livelihoods, economy and development of the country. One of major consequences of natural disasters and climate vulnerability of Bangladesh is climate displacement and forced migration to overcrowded urban slums in big cities, directly hindering achieving several Sustainable Development Goals (SDGs). It is important to prioritise investments in high-impact interventions to address the climate vulnerability and associated development challenges, including climate displacement.

Several estimates suggest that there is a large financing gap prevails for achieving SDGs both globally and locally. For example, implementing the SDGs globally by 2030 will require an annual investment of USD 3.3-4.5 trillion with a financial gap of USD 2.5 trillion (UNCTAD, 2014), for Asia-Pacific the annual financing gap to achieve SDG targets estimated at USD 1.5 trillion annually (UN-ESCAP, 2019), and for Bangladesh the estimated annual gap is USD 144.81 billion (GoB, 2016). Furthermore, the COVID-19 crisis has deepened the development challenges of developing countries by the shrinkage the domestic fiscal space and by the increased competition for official development assistances (ODA). Bangladesh's transition of graduating from Least Developed Country (LDC) to middle income country pose additional challenges to secure ODA (Khatun et al., 2018; Khan and Kamal, 2018; Rahman and Bari, 2018).

Against this backdrop, Bangladesh needs to explore alternative financing options and mechanisms, such as blended finance, to attract ODA and private capital in its development activities. *The overarching objective of this study is to explore the possibilities and challenges of the introducing blended finance in Bangladesh in addressing climate vulnerabilities, with a possible contribution from the Green Climate Fund (GCF).* Being a relatively new concept in the development finance literature but with massive potential to fund high-impact, sustainable development projects, this study first discusses key characteristics, opportunities and challenges in a general context. The fact that there is no framework in place to operationalise a blended fund in Bangladesh and acknowledging the gap in research, the first major contribution of this study is to conceptualise a generic blended finance framework.

To illustrate the framework, climate displacement to urban slums from the rural areas and its damaging consequences is identified as a substantial multidimensional development challenge. In order to address this problem, Cottage, Micro, Small and Medium Enterprises' (CMSMEs') improved access to finance is selected as a high-impact, scalable and commercially viable intervention that can be financed by blended fund. Finally, this study attempts to identify key issues and constraints to operationalise the proposed blended finance to this particular intervention and provides policy recommendations.

In this study, to generate and validate information on various related issues an extensive literature survey including country specific case studies, a number of Key Informant Interviews (KIIs) and brain storming sessions with experts were conducted. To summarise, the key contributions of the study are:

1. To analyse characteristics, applications, potentials and challenges blended finance mechanism.
2. To develop a generic BF framework for Bangladesh with suggested key activities categorized in several stages.

3. To provide an anatomy of the climate displacement problem, drivers and consequences This will help to identify development challenges with underlying structural/root problems.
4. To design an intervention (Employment-rich CMSME growth by providing improved access to finance) to tackle the problem, with rationale and a simplified theory of change.
5. An application of the proposed blended finance framework with an illustration to the SME financing context.

2. BLENDED FINANCE: CONCEPT, OPPORTUNITIES AND CHALLENGES

“The strategic use of development finance and philanthropic funds to mobilise private capital flows to emerging and frontier markets - OECD/WEF, 2015.

In recent time blended finance - a new and evolving concept in development finance - has become a trending term for accomplishing the SDGs in developing countries (Pereira, 2017). This has critical implications for financing the substantial resource gap to implement development projects with high impact. In fact, when the global economies are facing unprecedented pressure stemming from the COVID-19 crisis, this financing mechanism can play exceptionally crucial role in financing on-going and new projects in the post-COVID era. In this chapter, some key features of a blended finance mechanism, along with its challenges and opportunities, are discussed.

2.1 Blended Finance Mechanism: Key Characteristics

Broadly speaking, blended finance aims to generate fund by engaging potential investors and donors, and mobilising capital to finance aid for development in a commercially viable way applying various risk management tools. Some key features of this mechanism are:

1. A combination of public and private finance in the presence of official development assistance (ODA).
2. Development finance and philanthropic funds are strategically used to mobilise private capital flow. The strategies are devised such as different financial and regulatory tools help to attract capital from different commercial sources towards development projects that contribute to achieve SDGs, while de-risking the investment and providing financial returns to investors.
3. The blended finance can involve both concessional (such as, lower interest rate, longer maturity etc.) and non-concessional funds. In non-concessional form, investors will lend the money at market rate, or if needed with subsidised rate (Quak, 2019). Examples of other types of financing are syndicated loan¹ and a credit line².
4. Risk management using financial engineering, modelling and other policy tools and supports to de-risk the investment and creating a favourable risk-return environment. Innovation and learning from experiences are two essential components in managing risk successfully. Some examples of de-risking financial instruments include equity, debt-to-equity ratio, partial risk/loss financing, partial shared risks (Box 1). Instead of entirely profit maximization, a balance between development outcomes and commercial returns should be emphasized in the risk management stage.
5. Prudent investor-friendly, yet accountable, regulatory framework to ensure the governance of the fund.

¹A group of investors work together to provide funds for a single for a single borrower such as corporation, a large project, or a sovereign government (Ivanov & Wang, 2019 and Honorine & Emmanuelle, 2019).

²An open-ended and revolving loan that a borrower may access on demand (de Rugy & Kling, 2020)

6. A flexible framework allowing stakeholder's participatory consultation, reflection and revision, as much as possible.

Box 1: Some De-risking Instruments for Risk Management

Equity: It is typically referred to as shareholders' equity (or owners' equity for privately held companies), represents the amount of money that would be returned to a company's shareholders if all of the assets were liquidated and all of the company's debt was paid off in the case of liquidation (Neeraja & Dhillip, 2020).

The Debt-to-Equity (D/E) Ratio: is used to evaluate a company's financial leverage and is calculated by dividing a company's total liabilities by its shareholder equity.

Partial Risk financing: is a risk financing term referring to an organization's retention of a portion of the risk and transfer of the remaining portion (Li et al., 2018).

Partial Shared Risk: This also known as "risk distribution," risk sharing allocates risks (premiums and losses) of each member of a group of policyholders according to a predetermined formula/rule.

First loss financing: is an insurance against a loss which guarantees compensations to lenders by a third party if the borrower defaults.

Other risk management criterion such as political risk guarantee, quasi-sovereign guarantee, and any other uncertainties can be considered in financial engineering. Usually, successfully mobilising blended funds require innovative combinations of different instruments.

2.2 Possibilities and Some Applications of Blended Finance

Blended finance uses public-sector development finance and ODA to attract supplementary private investment in a proposition to achieve development goals; such as reducing poverty promoting economic growth and creating jobs (Attridge & Engen, 2019). It can be used to mitigate existing and emerging risks and threats in achieving SDG targets by attracting required investments and has tremendous potentials to finance the sizeable SDG investment gap in developing countries. In particular, the inbuilt de-risking apparatus enables this approach to attract private capital flow to finance "risky" interventions with an unfavourable risk-return investment profile - that would not have been possible in the absence of such mechanism (IFC, 2016).

Policy guideline and support are required to apply blended finance for sectors that are crucial for inclusive, resilient and sustainable development aligning with national development priorities such as poverty reduction, job creation and SME development, clean energy, women empowerment and gender equality, supporting public health system (OECD, 2020). Some applications of the blended finance mechanism are given below.

- One of the operational examples of syndicated financing is the lives and livelihood fund by Islamic Development Bank (IsDB). On September, 2016, with a joint goal to raise the poor to out of poverty, the Islamic Development Bank (IsDB) and development cooperation partners launched a USD 2.5 billion Lives and Livelihoods Fund (LLF) in IsDB member countries.³
- Tonkonogy et al. (2018) identifies that with strong institutions and investment and climate friendly policy settings, blended finance will have more than USD 360 billion investment in clean energy by 2030 in Sub-Saharan Africa and South and East Asia.
- Rode et al. (2019) states that investment opportunities rarely meet the financial requirements of

³For more detail, please see: <https://www.isdb.org/llf>

commercial investors and thus, the study illustrate that the Unlocking Forest Financing (UFF) in three sub-nations as an example of sustainable landscape financing. The dominant sectors that deal with blended finance are agriculture, energy, and transport (Kasirye and Lakal, 2019).

- In Myanmar, Livelihoods and Food Security Trust Fund (LIFT) and Yoma Bank's 3 years Agribusiness Finance Programme (AFP) is a prime example of successful implementation of blended fund to achieve development objectives, and going beyond, with innovative applications of various de-risking instruments. (See Box-2).

Box 2: Case Study on Yoma Bank Agribusiness Finance Programme

In December 2015, Livelihoods and Food Security Trust Fund (LIFT) and Yoma Bank signed a 3 years Agribusiness Finance Programme (AFP) where LIFT contributed **USD 18.07 million** with an aim to increase agricultural productivity and improve rural livelihoods in Myanmar. To de-risk the perceived risky investment in agricultural markets, a *first loss financing* instrument was applied to buffer the risk of Yoma bank with the contribution of LIFT.

Under the AFP- Hire Purchase (HP), the client's minimum down payment is reduced to 10 percent from previous 30 percent, with bi-annual repayment cycles in order to accommodate farmers' seasonal cash flows replacing mostly monthly repayments with typical tenor of one year. LIFT's contribution was to absorb part of the increased risks through a **USD 56.65 million** first loss buffer and to cover most of the operating expenses of rolling out the programme.

There are four semi-secured products under the AFP, namely, *borrowing base*, *payable finance*, *seasonal overdraft for corn*, and *MFI lending* where the first three product benefit from 100 percent protection from the first loss buffer (the buffer size is limited to USD 3 million) and MFI lending is covered for 10 percent of the principal.

The results over the lifetime of the programme have strongly outperformed the targeted goal, with **USD 93.40 million** worth of agricultural equipment financed in three years' time. This translates into 6,530 assets, comprising 4,002 tractors, 967 (combine) harvesters, 272 tillers and 1,289 transport vehicles. Besides, the average asset price that was financed under the AFP increased from **USD 12.25 million** in 2016 to **USD 16.84 million** in 2018.

The financing had wide impact on families that depend on agriculture reaching to an estimated number of 200,000 of families. The success in terms of rate of return was outstanding as end of 2018, a total of **USD 42.87 million** had been repaid by borrowers in terms of loan instalments and, the cases of full loan repayments were 2,637.

Source: Yoma Bank Agribusiness Finance Programme: Narrative Progress Report ((206-2018) and Belton et al., (2021).

2.3 Key Challenges of Establishing a Blended Finance Mechanism

A number of studies have pointed out several challenges and critical issues to operationalize and realizing the potentials of blended finance in pursuit of achieving SDGs. Jung (2019) identifies that lack of expertise, transparency, governance and methodological challenges, and the selection of projects/ interventions are the critical five factors for blended finance mechanism in the context of Korean economy. Rahman & Bari (2019) assert that without cautionary measures blended finance may lead to market distortion undermining the local financial market and regulatory and institutional frameworks in Bangladesh should be strengthened to address the challenges for blended finance mechanism. Some studies have also raised concerns that blended finance and related financial mechanism (such as climate or forest bonds) may introduce "financialisation" and "neo-liberalisation" of conservation and development agendas by the commodification of nature (Jung, 2019; Murray & Spronk, 2019). In this paper we have categorized the challenges associated with operationalization of a blended finance mechanism into the following five broad sets:

1. The first set of challenging issues relate to establish a prudent, investor and development friendly regulatory and institutional framework to ensure the governance and accountability of the mobilized fund. In the absence of a transparent and effective monitoring and evaluation

process, potential investors become less interested in financing development interventions due to increased investment risks and asymmetric information.

2. The second set of challenges deals with the identification, prioritization, and selection of development problem and intervention to address the problem; with a credible estimate of finance gap to implement the intervention. These are critical issues in achieving the expected development outcome using a blended finance framework and requires a consultative framework that allows evidence and research-based identification of the development problem, and judicious selection of scalable and commercially viable interventions/projects with a sound underlying theory of change.
3. The third set of challenges focus on the fund mobilization issues, such as, identification of and reaching out to potential donors, private investors and public institutions, socializing the development impact with the commercial viability of the intervention to motivate them and negotiating the size and type of contribution to the mobilized fund.
4. Next set of challenges is efficient and transparent application of innovative financial modelling and engineering tools to manage financial risks and appropriate policy support to mitigate political and environmental risks that are associated with the choice of intervention. Debt management and debt servicing should be carefully be monitored. The dearth of required technical skills is a major hinderance to address this challenge.
5. The fifth and final set of challenges involve various issues that are related to developing a sustainable, transparent and speedy fund transfer (to financial institutes and beneficiaries) and repayment framework.

In the above, challenge sets (2)-(5) are directly related to diagnostic of problem(s), selection of intervention(s), mobilization and implementation of the blended finance framework. It is important to emphasize that each of these four sets has its own governance and M&E issues that overlaps and interacts with the regulatory reform and governance related challenges.

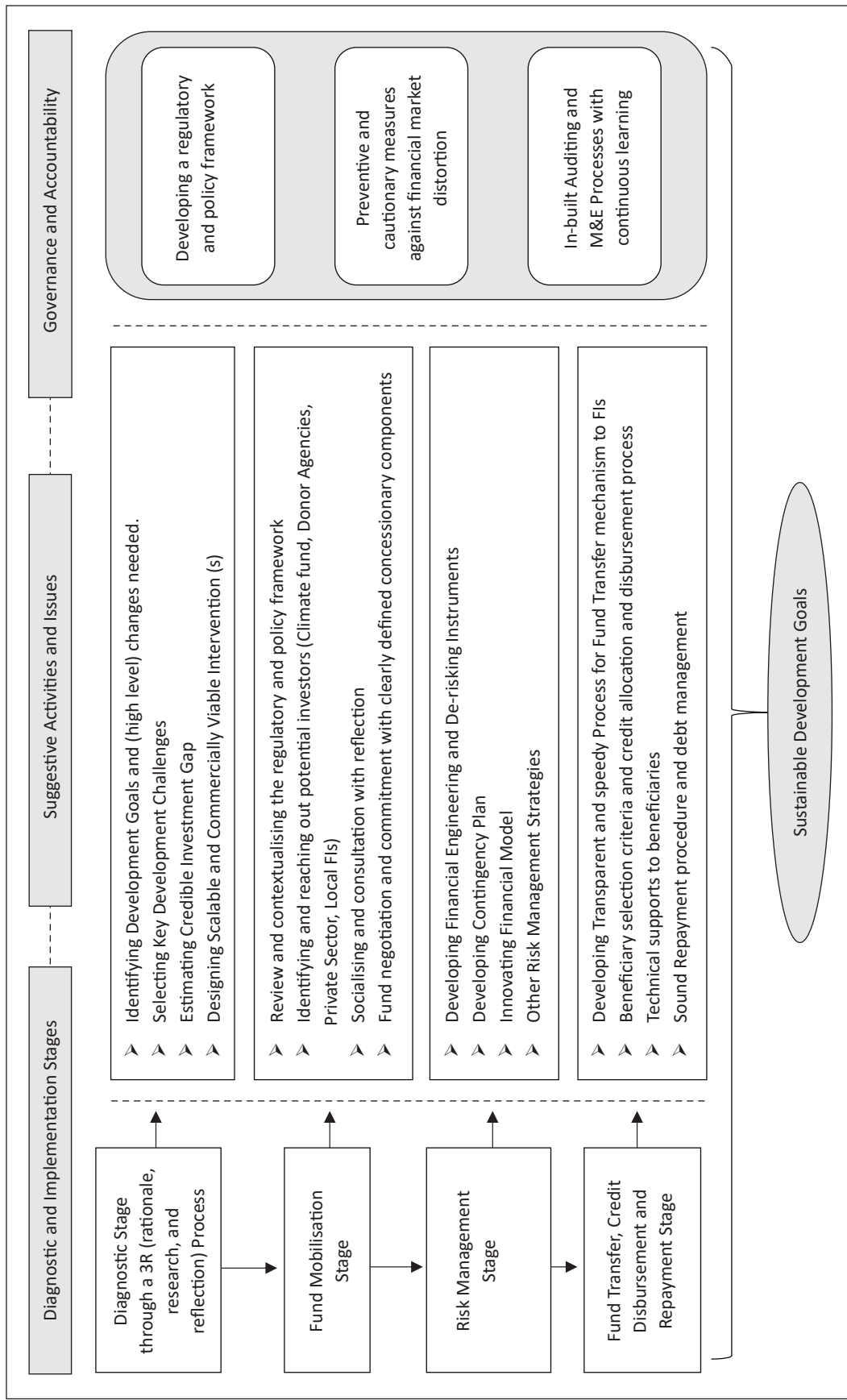
A generic model for blended finance mechanism will be discussed in the next chapter outlining the different stages to operationalize the mechanism that may help to mobilise additional finances through unlocking public and private sources in Bangladesh.

3. CONCEPTUALISATION OF A GENERIC BLENDED FINANCE FRAMEWORK FOR BANGLADESH

In view of the worsening SDG finance gap due to COVID-19 pandemic and shrinking fiscal space, it is of critical importance for Bangladesh to explore alternative financing options and attract private capital flows to invest in its efforts to achieve SDG targets. Blended finance, as discussed earlier, presents a bright prospect for Bangladesh to secure additional finances for achieving SDGs. The key issue is the absence of a generic model to operationalize blended finance in Bangladesh. In the absence of a universally applicable and practiced framework and mechanism, a generic framework for blended finance should be contextualized, customized and tailored to accommodate country-specific and problem specific requirements.

Noting this important gap, this chapter outlines a generic, sustainable, transparent, and accountable blended finance framework that would cover both key operational and regulatory issues. Indeed, this locally contextualized generic framework does not cover all relevant issues at this stage in a holistic way, rather the model is developed as a prototype to initiate discussions among policymakers, academics and other stakeholders and subject to revision to reflect expert opinions.

Figure 1: A Generic Conceptual Model



Source: Author's Own Illustration.

A Generic Framework for Blended Finance

A generic, conceptual framework of blended finance is proposed for Bangladesh and presented in Figure 1. It has four key diagnostic and implementation stages, each having certain key activities, and a separate governance and M&E mechanism to oversee and administer these stages under a sound policy framework. It is to be emphasized that activities grouped under these four stages are neither strictly sequential nor mutually exclusive, rather these are often complimentary - synchronisation and coordination between activities are essential. The proposed framework is a flexible and dynamic one that involve feedback loops between activities of different stages and stakeholder's consultation processes from the early stage. This allows to make corrections/revisions where necessary by reflecting stakeholders' opinions and suggestions, and from the lessons learnt while implementing the interventions.

Four Key Implementing Stages

3.1 Identification of the Development Challenges and Selection of Interventions

To manage the limited financial resources efficiently by funding high impact projects, it is crucial to identify and prioritise areas to intervene based on research and evidence. Therefore, the first stage requires, through a rigorous *3R (Rationale, Research, and Reflection)* process, to identify key challenges and obstacles in achieving development goals and targets, and then to design efficient, scalable, and commercially viable intervention(s) with large developmental impact to address the identified challenges.

The successful implantation of the interventions depends on a credible estimation of the financing gap between the demand and supply side (Ojo & Ayanwale, 2019; Veiga & McCahery, 2019; Lopez-de-Silanes et al., 2018). The estimation of finance requirement should be based on updated data and preferably under alternative scenarios.

To have a sense of shared ownership, identified development objectives and interventions should go through a stakeholder participatory consultation process to reflect their inputs and forming a basis of consensus among different stakeholders.

3.2 Possible Financing Sources: Identification and Engagement

Successful mobilisation of the fund depends on identifying and engaging potential financing partners and stakeholders. At the onset of fund mobilization stage, a regulatory framework needs to be established (if there is none in place) or reviewed for possible reforms to ensure the transparency and accountability of fund mobilization, utilization and repatriation.

The rational of the interventions and its possible impact needs to be introduced and socialised with a particular reference to commercial viability (by managing risks, discussed next) and sustainability of the proposed interventions (Schmalz et al., 2018 and Clark et al., 2018). The possible financing sources can be donor countries, climate fund, commercial fund and other specialised funds (Lee, 2021 and Nigohosyan & Vutsova, 2018). All interested financers should negotiate and commit the size of contributions to this stage.

3.3 Risk Management: Developing de-risking Instruments for Fund Management

In this stage, financial risk will be managed by identifying, analysing and mitigating the uncertainty associated with the projects. To mitigate the extent of risks, sophisticated financial engineering is required to design and implement innovative financial models, tools and products by exploring new financial opportunities with a de-risking mechanism in place to reduce the risk of investment.

The financial risk management can include a variety of instruments such as partial risk financing, partial shared risk coverage, and supplementary non-exclusive guarantees. Different combination of these instruments can be applied innovatively to incentivise and motivate the private sector investors to invest in risky projects (i.e., debt-equity mix, equity and partial risk management).

Determination of the interest rate changed at various stage of fund flow is another key aspect that should be considered at this stage.

3.4 Fund Transfer and Credit Disbursement and Repayment

In the final stage, the fund is transferred to the financial institutes to disburse to selected projects/beneficiaries with a sustainable repayment system in place. Thus, this stage comprises of three important components:

- i) A fund transfer mechanism to ensure a speedy yet transparent flow of mobilised fund to the financial institutions.
- ii) A guideline for the FIs to disburse credit among the selected recipient along with technical support and training where required. This is a crucial stage in determining the impact of the interventions. An effective targeting of the beneficiary projects and assessment of credit worthiness is a paramount importance.
For some interventions, socialization and sensitization campaign may be revived to create interest and demand among the targeted beneficiaries.
- iii) A framework of repayment procedure (i.e., frequency and size of repayment instalments, defaulter penalty/fees and mitigating measures etc.) should be in place to monitor and manage debt burden within an acceptable limit.

Governance, Accountability and M&E Mechanism

The successful mobilisation of funds and sustainable implementation of blended funded interventions crucially depends on the existence of a proper policy, regulatory, institutional and legal frameworks addressing governance and accountability issues. The impact of the development fund in the root level depends on proper regulatory and risk management frameworks (Sinclair, 1994 and Chatterjee, 2014). In fact, these frameworks are necessary to create an enabling environment and to instil investors confidence to invest in developmental projects. The clarity of responsibilities of different stakeholders, including public institutions with clearly defined goals, power and authority should be established.

A reliable, dynamic and responsive monitoring, evaluation, and learning mechanism is an integral part to ensure accountability and to detect risks and warning signs at early stage. This will help to trigger appropriate responses and contingency plan to offset the risks in a timely manner.

Government should engage, consult and collaborate with other stakeholders in a participatory manner while developing these frameworks and mechanism. Regulatory bodies (i.e., Bangladesh Bank and other relevant government organs) need to work simultaneously in a coordinated manner to ensure accountability and transparency, and to consistently monitor and evaluate the credit disbursement process (including beneficiary selection) and repayment procedure.

4. VILLAGE TO CITY SLUM: AN ANATOMY OF BANGLADESH'S CLIMATE DISPLACEMENT CRISIS AND SEARCHING AN IMPACTFUL INTERVENTION

Bangladesh is considered one of the most vulnerable countries to climate change in the world. The country is a low-lying delta in South Asia that has been hit by natural disaster almost every year due to climate change causing damages to land, livelihood, crops, and livestock (Chiba et al., 2018; Haque et al., 2019; Aktar & Rahman, 2019). Disasters, and in particular, cyclones and floods, cause significant economic losses in Bangladesh particularly in the disaster-prone coastal and haor area (Shadat, 2021 and Shahid, 2012). Migration to overcrowded and unsafe urban slums in big cities is one of the damaging consequences of natural disasters and climate change. In this chapter, following an overview of Bangladesh's risk and vulnerability to natural disasters in Section 4.1, the consequences and a diagnostic of the critical factors of Bangladesh's climate and disaster induced urban slum migration problem is presented in Section 4.2. Based on this analysis, in Section 4.3 an intervention is proposed to tackle this substantial development challenge.

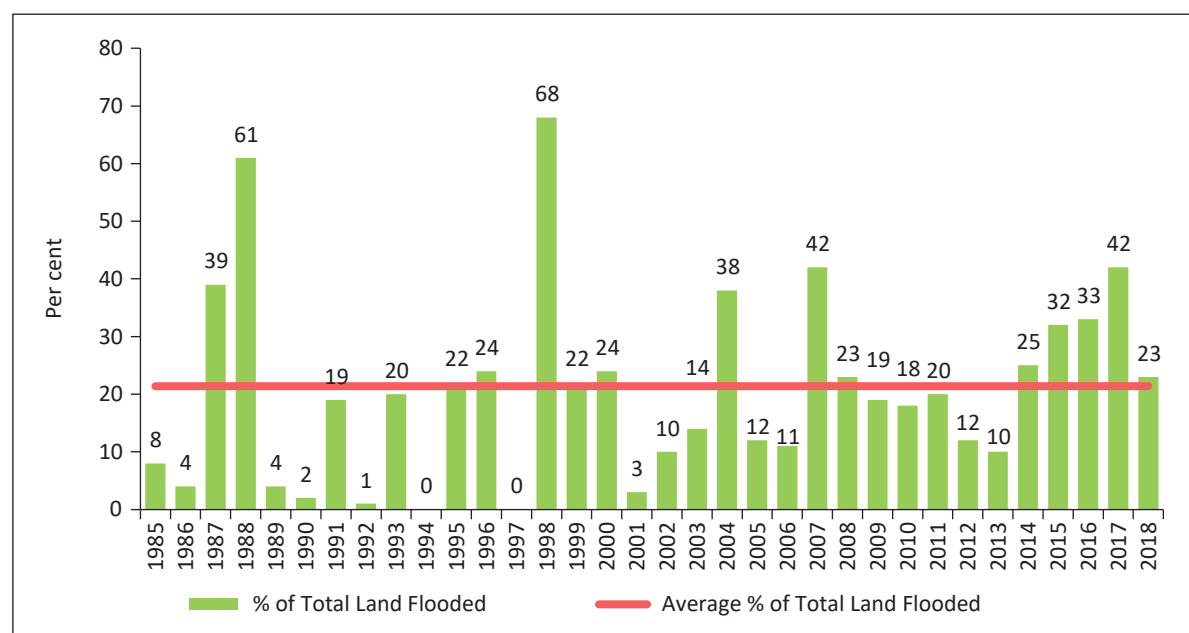
4.1 Natural Disasters in Bangladesh: Increasing Risks and Vulnerability

Due to increase number of adverse climate events and its consequences, Bangladesh stood among the 10 most climate change affected countries across the world from 2000 to 2019 where the country ranked at number 7 (Global Climate Risk Index, 2021).

Both the frequency and severity of adverse climate events have increased in recent years due to climate change in Bangladesh (see Table 1). The country has suffered 185 extreme weather events during the period of 2000 to 2019 (Global Climate Risk Index, 2021). Besides, seasonal flood has been a recurring issue for the country for recent years. The frequency of flood incidence has increased from the year 2010 and, on an average, 21 per cent of total land inundated from 1985 to 2018 (see Figure 2). In the last 5 years, a total number of 3.05 million of people were affected due to multiple flood events each year (on an average 2 floods in a year) (The International Disaster Database, CRED, 2021). There had also been 9 severe cyclones from 2007 to 2020 in Bangladesh which caused damages to both livelihood and wealth (Bangladesh Meteorological Department, 2020). During the period 2000 to 2019, the estimated climate induced damages was USD 1.86 billion (equivalent to 0.41 per cent of the GDP) (Global Climate Risk Index, 2021). The adverse climatic events have severe impact on environment because of the destruction of assets, salinity and river erosion (Bangladesh Climate Change Strategy Action Plan, 2009). The marginal people living in the disaster-prone areas are more likely to migrate to other big cities in search of shelter, employment and livelihood which put pressure on the cities.

4.2 Climate Induced Displacement to Urban Slums: A Critical Development Challenge

The recurring natural disaster in Bangladesh damages household's assets, reduce household's overall wealth including future productive capacity and affects households' consumption behaviour and decision. As a consequence, household's livelihood security, both in short and long term, is

Figure 2: Per cent of Land Inundated During Flood Seasons in Bangladesh (1985-2018)

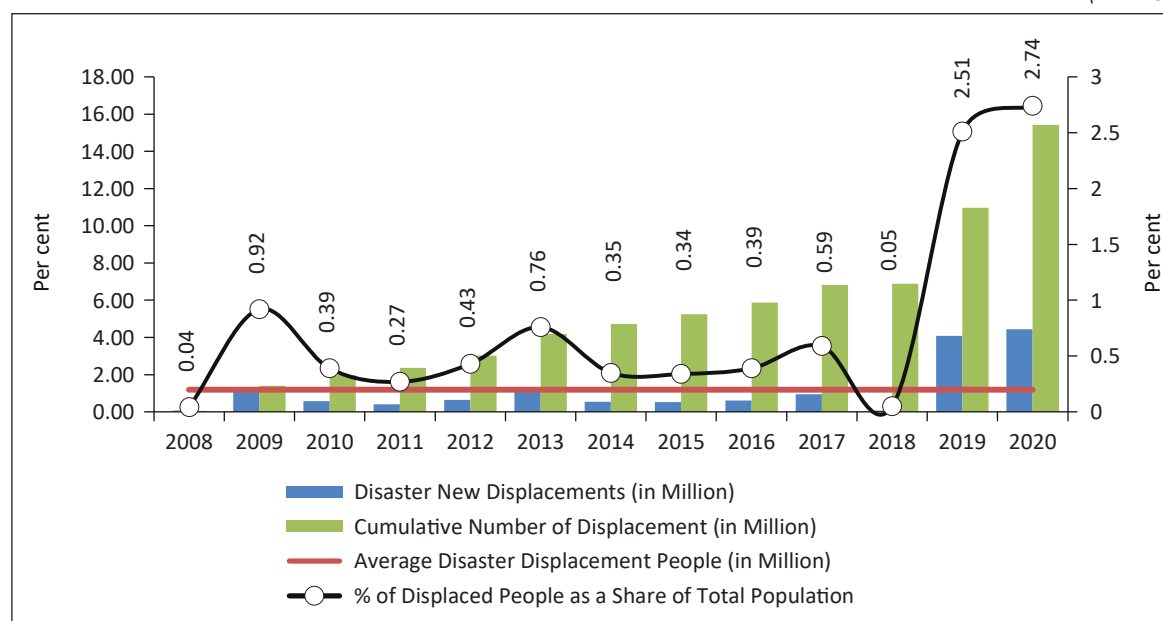
Source: Annual Flood Report by Flood Forecasting and Warning Centre Bangladesh (2018).

compromised and in the absence of adequate alternative employment opportunities in the locality lead to internal migration (Shadat, 2021; Petrova, 2021; Kabir et al., 2018).

In recent years, disaster displacement has been an alarming issue for Bangladesh posing serious threat in the pursuit of attaining SDGs. During 2008 to 2020, a total number of 15.42 million people had been displaced by disasters with a yearly average of 1.2 million people (see Figure 4.2). An alarming jump has been observed in 2019 (4.1 million or 2.5 per cent of total population) and in 2020 (4.4 million or

Figure 3: The Overview of Disaster Displacement in Bangladesh (2008-2020)

(In Million)



Source: Internal Displacement Monitoring Centre (2020).

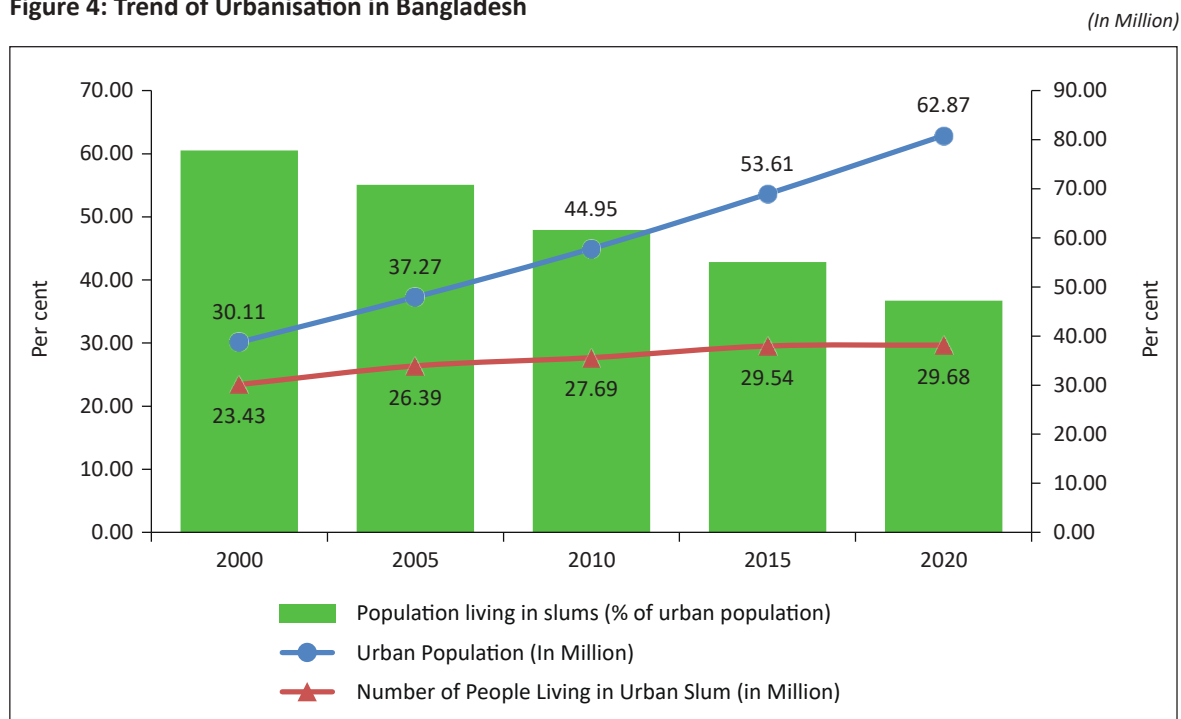
2.7 per cent of total population) that makes the country top ranked in South Asia and 3rd globally (see Figure 3). The significant rise in the number of climate displaced people in Bangladesh raises concern as this may lead to increased urbanisation and adverse impact on environment.

Consequences and Development Challenges

Spatial distribution shows that the major destinations of disaster or climate displaced people are slums of big cities like Dhaka, Chattogram, and Rajshahi etc. (Khan et al., 2021 and Ahsan, 2019). People living in the coastal and cyclone prone areas of south-east and south-west of the country (Noakhali, Bhola, Shatkhira, Bagerhat, Khulna, Barguna) and Brahmaputra-Jamuna flood plain areas (Chilmari, Kurigram, Gaibandha, Jamalpur, Sariakandi, Kazipur, Sirajganj, Lauhajang Chandpur, Bhola) faces the severe brunt of the adverse climatic events resulting to loss of land and livelihood and migration to big cities (see Map 1) (Zaman, 2019; Arsenault et al., 2015; Islam, 2015). As a result, the pressure of human habitation is increasing day by day in the big cities like Dhaka and Chittagong (Khan et al., 2021).

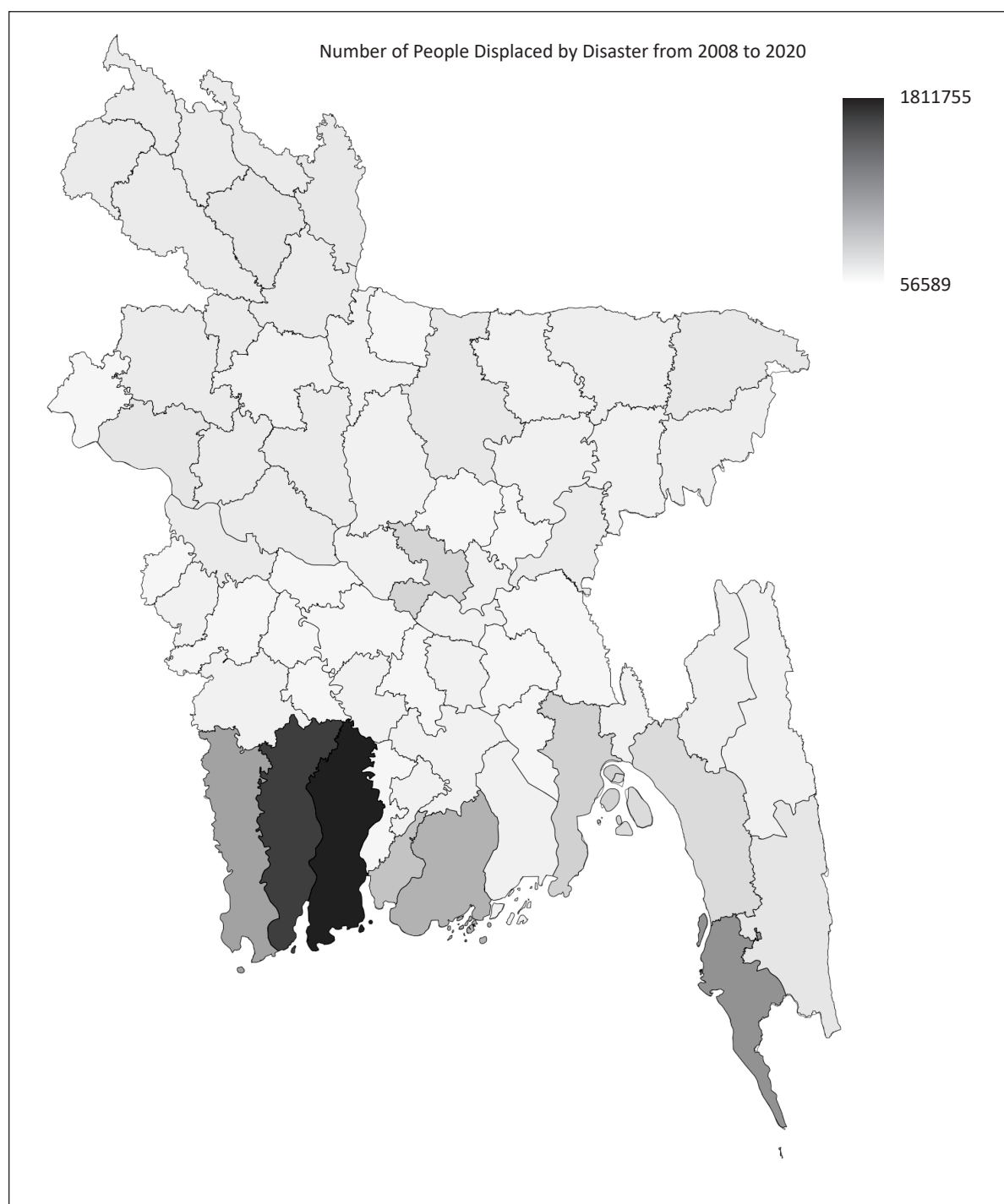
The alarming upward trend of migration to big cities puts tremendous pressure on the presently overcrowded, unsafe, and unhealthy city slums and significantly contribute to the high urbanisation growth in Bangladesh. Over the last 20 years, the trend growth rate of urbanization was 3.25 per cent on an average which is one of the highest in the world (Hassan, 2017). Though the percentage of people living in urban slum has decreased from 55.10 per cent in 2015 to 47.20 per cent in 2020, the total number of people living in urban slum has increased from 29.54 million in 2015 to 29.67 million in 2020 (see Figure 4). With a limited access to basic amenities like water, sanitation, electricity, transportation, basic medication, and education etc. cities like Dhaka and Chattogram are unable to serve the purpose of this huge population. Moreover, the urban migration leads to critical environmental consequences such as water and air pollution and jeopardise a city's ability to plan for future.

Figure 4: Trend of Urbanisation in Bangladesh



Source: World Development Indicator (2020).

Map 1: A Map for Disaster Displaced People



Source: Internal Displacement Monitoring Centre (IDMC).

The problem of internal disaster displacement to urban slums in big cities has massive implications for the specific development objectives and goals of the country. Achieving at least 9 SDGs are directly threatened by the observed upward trend of internal migration to big cities. These are SDG 1 (No poverty), SDG 2 (Zero hunger), SDG 3 (Good health and well-being), SDG 6 (Clean water and sanitation), SDG 8 (Decent work and economic growth), SDG 11 (Sustainable cities and communities), SDG 12 (sustainable consumption and production patterns), SDG 13 (Climate action) and SDG 15 (Life

and land). It is, therefore, crucial to search the solution to minimise the level of internal migration to big cities.

Driving Factors for Climate Induced Big City Migration

In general, the disaster affected people in Bangladesh prefer to stay close to their ancestral root and most of the migration decisions are forced as they lack alternative options to secure post-disaster livelihood in their locality.

The migration decision of disaster-hit people depends on their assessment of the situation (extent of the damages and losses) and the options (choice set) available to them to cope and recover from the shock. An affirmative decision favouring migration, presents the next crucial decision question: where to migrate (migration destination). The decisions on both these are driven by a complex interplay of a number of structural problems. The observed centralized and urban-centric (mostly in big cities) growth mechanism in Bangladesh has resulted in inadequate employment and lower amenities and quality of life for citizens living in small towns and rural areas. Given the low level of education, skills, and endowment of the poorest segment of the society, another important contributing factor to migration decision is the belief and perception of better earning opportunities for low-skilled population in big cities. Often, this (mis)perception is built and propelled by networks of family and friends who have already migrated to cities. As a result, they end up in overcrowded city slums (Roy & Sultana, 2010 and Kolmannskog, 2008).

Table 1 lists a number of economic, environmental, social and political drivers that can potentially contribute to the climate induced migration to big cities. After a careful scrutiny of the literature and observations, this study argues that *household's compromised livelihood security and scarcity of decent income generating activities in local area* can be identified as out as **underlying and structural cause** for the incidence of internal migration.

Table 1: Drivers of Climate Induced Migration in Bangladesh

Drivers	Reasons
Economic	• Loss of income generating activities due to hazards • Impact on traditional livelihood strategies (i.e., agriculture, fishing) by increasing climatic stresses and shocks. • Poverty • Seasonal circular migration during harvest and sowing seasons from rural-to-rural area for livelihood • Due to loss and damage of homestead and arable land in the river erosion • No agricultural work available during the off-season (Monga period) • Lack of roads and means of transportation
Environmental	• Higher frequency and unpredictability of natural hazards (Flooding, cyclones, riverbank/coastal erosion, salinization, water-logging, drought/lack of rain, erratic rainfall, cold waves) • Declining land fertility and reduced crop yields
Social	• Unsecured life and livelihoods • High dependence on agriculture for livelihood • Local food crises • Absence or lack of services (health, education, electricity, etc.)
Political	• Conflicts and violence related to land • Absence of police or other government structures for enforcement of the law • Corruption of local authorities and no transparency in the process of land acquisition • Risk of eviction by landowners or the government

Source: Poncelet et al. (2010); Kälin (2010); Graya & Muellerb (2012).

4.3 Conceptualisation of an Impactful Intervention to Address the Problem

Following the preceding discussion and identification of an underlying ground-level problem, it is clear that providing choices for disaster hit people by creating sustainable, green and decent livelihood opportunities in the locality and nearby city centres can potentially solve the problem in a holistic way. In particular, our search for a high-impact intervention aims to boost sustainable, green, and employment generating economic growth in disaster-prone areas. Due to the labour-intensive nature of the CMSMEs, the sector is capable of creating jobs and promote localised growth. The intervention should operate in a limited scale with appropriate targeting at initial stage, but should be scalable to increase the coverage. Therefore, to address the internal migration to slums in big city, this scoping study conceptualise an intervention involving sustainable expansion of the SME sector.

CMSMEs in Bangladesh: Importance and Challenges

In Bangladesh, CMSMEs, a labour-intensive sector, play an important role in socioeconomic development through various channels such as job creation, poverty reduction, gender equality and women empowerment, and improved standard of life. At present, SMEs in Bangladesh contributes 25 per cent of the GDP and 45 per cent of manufacturing value addition and 90 per cent of total industrial units and (Ministry of Planning, 2019). This sector accommodates about 25 per cent of the total labour forces and 80 per cent of industrial employment.

However, the existing policy measures for expansion of CMSME in Bangladesh are partially unsuccessful due to some root level blockages (Rahman & Kabir, 2021). Box 3 presents the major obstacles for the expansion of the CMSME sector. A number of studies reveal that the high cost of capital and access to financing from formal banking channel is the major obstacle to SME growth in Bangladesh (Rahman & Kabir, 2021; Rahman & Majumder, 2020; Parvin & Rahman, 2012). Moreover, CMSME is among the most hardly hit sectors due to the socio-economic shocks induced by the COVID-19 and associated containment measures. The allocation, implementation and disbursement processes of GoB's stimulus package has once again demonstrated the extent and gravity of CMSME's problem in accessing finance from the formal channels, highlighting both demand and supply side constraints.

Box 3: Major Obstacles for CMSME Development in Bangladesh

Most of the entrepreneurship in Bangladesh and their economic opportunities are city oriented while rural entrepreneurship are still in its nascent stage having some socioeconomic obstacles (Rahman & Kabir, 2021). The major obstacles include-

- access to financing from formal banking channel (Hassani-Mahmoee & Parris, 2012; Cattaneo et al., 2019; Rahman & Majumder, 2020).
- high cost of capital (Rahman & Kabir, 2021; Boas, 2019; Parvin & Rahman, 2012).
- poor quality of collateral, inadequate documentation and ill-defined business plans, limited capacity, short duration of business, business knowledge and lack of management skill (Andrianaivo et al, 2018; Chowdhury and Alam, 2017).
- Lack of appropriate interventions, financial inventions and evolving ideas to boost the SME sector in Bangladesh to address the insufficient domestic financing problem (Qamruzzaman & Jianguo, 2019 and Rahman et al., 2020).
- Estimating the demand for credit by SMEs is difficult due to data constraints (Andrianaivo et al., 2018).

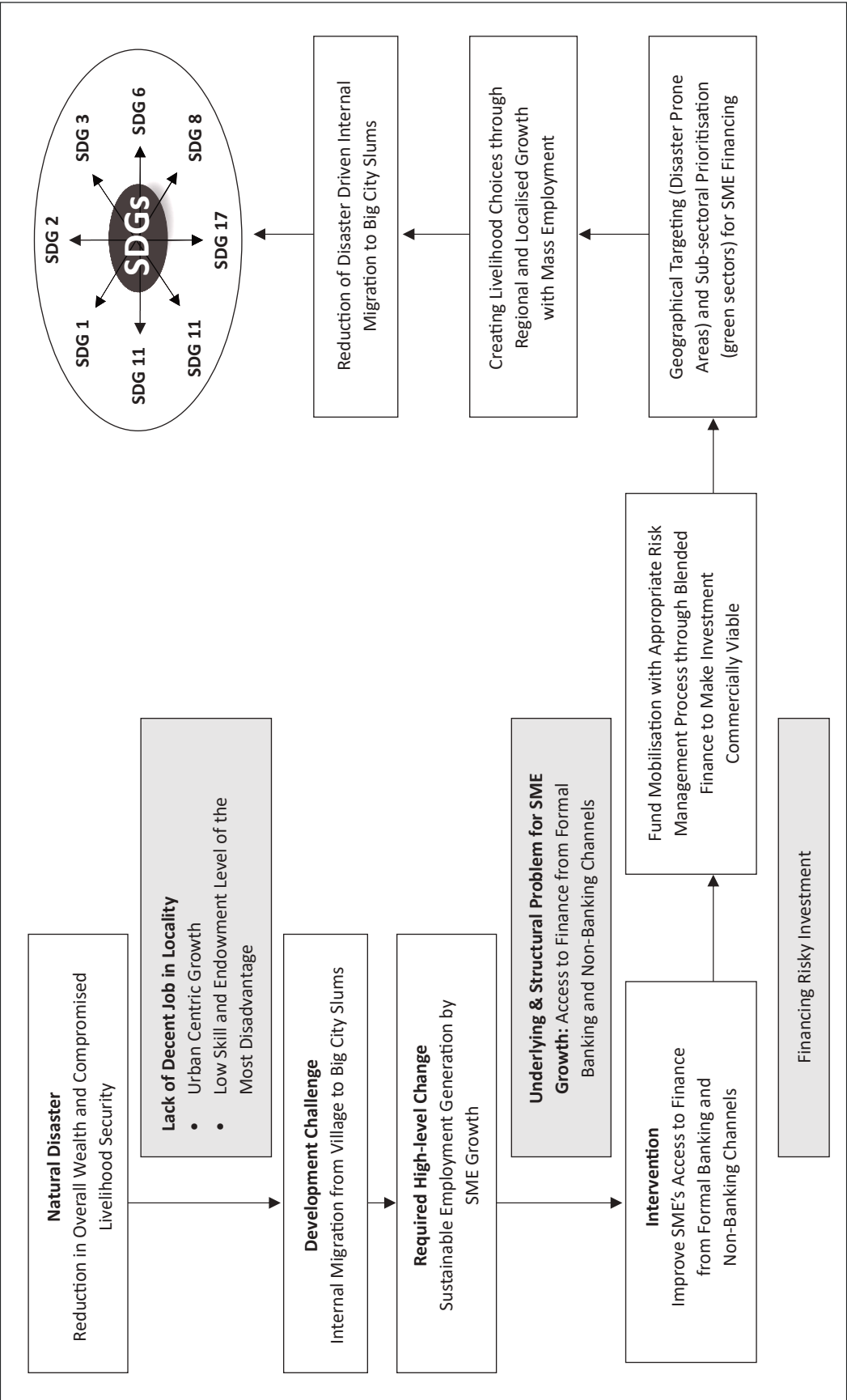
A Proposed Intervention

We argue that promoting sustainable growth of the CMSMEs (both firm and non-firm) by facilitating improved access to finance would be an impactful intervention to significantly reduce disaster driven displacement to big cities. The employment and livelihood opportunities - generated through sustainable expansion of CMSMEs in targeted smaller and remote cities, towns and regional growth hubs - will provide disaster-hit people a much-needed choice in their migration decision making process. Availability of a job nearer home in a known environment is more likely to discourage them taking a migration decision to big cities. To address the critical issue of financing modality this study explores the possibility to use a blended finance mechanism involving GCF and other potential investors. For illustrative purpose, Figure 5 presents a simplified and partial theory of change.

With this rationale, this study broadly conceptualizes the following intervention:

Facilitating SME's improved access to finance by providing credit from the formal financing (banking and non-banking) channel, using a blended finance mechanism with contributions from the climate fund, and with appropriate geographical and sub-sectoral targeting at implementation stage to promote employment generating green growth in disaster-prone areas/ selected regional growth hub.

Figure 5: A Simplified and Partial Theory of Change



4.4 An Illustration of the Blended Finance Framework: Some Key Issues with CMSME Intervention

To address this significant development challenges posed by climate migration, the proposed blended finance framework can be applied to explore possible financing solutions.⁴ Some key issues and challenges for these particular interventions are summarized below:

- The intervention needs to be fine-tuned to identify green CMSME sub-sectors and to select appropriate geographical locations. This requires more focused and serious research.
- A credible and updated estimation of SME's demand for credit, and thereby of resource gap, is crucial. IFC (2011) projected SME financing gap amounting USD 1.8 billion while Institute for Inclusive Finance and Development (2016) estimated a gap of USD 1.07 billion. These estimates are dated and underestimated to some extent as the growth of the sector was not considered. (See Box 4)
- The GCF can play a significant role in mobilising the fund. Some examples of other potential financing sources include: World Bank IFC, World Bank SME Finance, Bangladesh Climate Change Trust Fund, Bangladesh Bank Disaster Management and Corporate Social Responsibility Fund. (See Box 5)
- To attract private capital flow, efficient risk management using innovative financial and non-financial instruments is a pre-requisite. To de-risk the investment, institutional expertise and skills are required to be developed and strengthened.
- A balance between development outcome and return from investment is important.
- Deciding the role of local financial institutes (i.e., whether intermediary only or Investor and intermediary) is another key issue.
- Determination of concessional lending rate, longer tenure and favourable repayment schemes for beneficiaries is important to realise the expected development outcome.
- Minimising operational and transaction costs of financial institutes by adapting innovative technologies.
- Women entrepreneurs should be prioritized in approval stage. A certain proportion of disbursed credit may be reserved for eligible women entrepreneurs.
- Training and technical support should be integrated in the intervention to beneficiaries to develop demand side capacity such as managerial capacity, transparent accounting, banking support, business idea generation and expansion, etc.
- Well-designed skills training programmes need to be introduced in targeted areas to re-skill, to up-skill and to provide new skills to prepare the workforce for the selected CMSME subsectors.
- Easy, less bureaucratic and user-friendly application procedure need to be in place with required support for beneficiaries.
- Quick and transparent approval, credit allocation and credit disbursement to beneficiaries.

⁴This exercise also allows to examine the applicability, usefulness and shortcomings of the proposed generic framework.

Box 4: Credible and Updated Estimation of Financing Gap is Crucial

A substantial amount of financing gap exists between the demand for credit and supply of credit to the SMEs in Bangladesh but estimating the demand for credit by SMEs is difficult due to data constraint. International Finance Corporation projected an estimate of the SME financing gap in Bangladesh in 2011 to be USD 1.8 billion combined with an estimated total number of SME enterprises of 804041 (IFC, 2011). A comprehensive survey by Institute for Inclusive Finance and Development in 2016 based on 600 microenterprises estimated the total demand for loan is USD 4.57 billion against the supply of USD 3.50 billion resulting a gap of USD 1.07 billion (InM, 2016). Since the SME growth was not considered over time, this figure should be considered to be underestimated (see Annex Table 4 and Table 5).

A large number of SMEs is still outside the coverage of formal banking sector implying that they have no credit history or relationship with banks. Due to data constraint and inability of financial institutions to assess the risk and credit worthiness of SMEs the contribution (share) of formal banking sector in total SME credit disbursement stands at very lower rate (11.1 percent in 2016) while the MFIs disbursed the bulk of SME loans (86.8 percent in 2016).

Box 5: The Green Climate Fund in Bangladesh

The Green Climate Fund (GCF) was formally established at the 16th Conference of Parties in 2010 (COP16), under the Cancun Agreement as part of the Convention's financial mechanism and within the United Nations Framework Convention for Climate Change (UNFCCC), to contribute developing countries response to climate change challenges. Initial resource mobilization of the fund was launched in 2014, and rapidly gathered pledges worth USD 10.3 billion. Currently, there are 177 ongoing project that attracts USD 8.8 billion of GCF financing commitment to mitigate 1.8 billion tonnes of carbon and contribute to build resilience for 500.5 million of people, with 70 percent of implementation rate (USD 6.1 billion).

Unfortunately, Bangladesh's success rate with regard to submitting feasible climate change-oriented project proposals and obtaining external finance from various international funds is quite low. There are 6 ongoing climate projects in Bangladesh with USD 368.6 million of GCF financing. These are promoting private sector investment through large scale adoption of energy saving technologies and equipment for textile and readymade garment (RMG) sectors of Bangladesh (USD 340.5 million), extended community climate change project-flood (ECCCP-Flood) (USD 13.3 million), global clean cooking program – Bangladesh (USD 40.0 million), enhancing adaptive capacities of coastal communities, especially women, to cope with climate change induced salinity (USD 33.0 million), climate resilient infrastructure and instreaming (CRIM) (USD 81.0 million), and cooling facility (USD 879.8 million).⁵

For the seven readiness activities in Bangladesh, USD 3 million has been disbursed out of USD 5.1 million approved support. Bangladesh has also managed to obtain external financing of USD 320.18 million from 2009 to 2018 for climate change-oriented projects from various international funds.

Source: <https://www.greenclimate.fund/countries/bangladesh> and <https://www.greenclimate.fund/projects>.

5. CONCLUDING REMARKS

This scoping study attempts to connect three important and vast topics: blended finance, development challenges imposed by climate migration to urban slums, and CMSME's improved access to finance as a possible intervention to address the challenges. The aim of this report is to introduce and socialise these ideas among policymakers and other stakeholders with a framework to discuss and develop further.

In view of the sizeable SDG financing gap, shrinking fiscal space due to the pandemic and Bangladesh's graduation to middle-income country, the blended finance mechanism can be extremely useful to attract private capital flows and funding from donors in the coming days. Noting the gap, a generic framework to operationalize blended finance in Bangladesh is conceptualized and key activities under

⁵The project values are the total of global allocation for the respective projects.

four diagnostic and implementing stages are suggested. However, a transparent and accountable regulatory framework is the first thing to focus in order to ensure the governance of the fund. The identification of development challenges and underlying causes, and the selection of the intervention should follow a rigorous 3-R (rationale, research, and reflection) process to have the desirable development outcome. Innovative de-risking instruments via financial engineering and modelling and making the development intervention commercially viable is a pre-requisite to attract investors and mobilise fund. Prudent guidelines, framework and policies for beneficiary selection, fund allocation, fund transfer, and repayment process are essential for the successful implementation of the project.

Climate change and natural disasters are posing increasingly higher level of threat to Bangladesh's growth and development endeavour. Climate migration to the urban city slums due to the compromised livelihood security by disasters is on the rise in recent times and has critical development and environmental consequences that directly threaten achieving at least seven SDGs. This study argues that creating alternative employment by providing CMSME improved access to finance in selected geographical location and promoting employment-rich green growth can be a high-impact intervention to address the problem. To finance this intervention, the proposed blended finance mechanism can be used to mobilise funds. A number of issues have been identified that require further research and fine-tuning to operationalise the framework in Bangladesh and to implement the proposed CMSME financing intervention.

REFERENCES

- Ahsan, R. (2019). Climate-Induced Migration: Impacts on Social Structures and Justice in Bangladesh. *South Asia Research*, 39(2), 184–201. DOI: <https://doi.org/10.1177/0262728019842968>
- Aktar, S., & Rahman, M. (2019). Infrastructure Rehabilitation Intervention for Reducing Natural Disaster Damages in the South-West Coastal Bangladesh. *International Journal of Research in Social Sciences*, 9(8), 290-298.
- Andrianaivo, M., Skamnelos, I., & Ndiaye, A. (2018). *Financing Solutions for Micro, Small, and Medium Enterprises in Bangladesh* (No. 132967, pp. 1-64). The World Bank.
- Arsenault, M.-P., Azam, M. N., & Ahmad, S. (2015). Riverbank Erosion and Migration in Bangladesh's Char Lands. Dhaka: AHDPH.
- Attridge, S., & Engen, L. (2019). Blended finance in the poorest countries: The need for a better approach. London: Overseas Development Institute.
- Bangladesh Meteorological Department (2020).
- Bangladesh Bank. (2014). A Primary Survey on Banks in Promoting Women Entrepreneurship in Bangladesh. Dhaka: Monetary Policy Department and Research Department, Bangladesh Bank.
- Bangladesh Climate Change Strategy Action Plan (2009).
- Belton, B., Win, M. T., Zhang, X., & Filipski, M. (2021). The rapid rise of agricultural mechanization in Myanmar. *Food Policy*, 101, 102095.
- Boas, I., Farbotko, C., Adams, H., Sterly, H., Bush, S., van der Geest, K., ... & Hulme, M. (2019). Climate migration myths. *Nature Climate Change*, 9(12), 901-903.
- Cattaneo, C., Beine, M., Fröhlich, C. J., Kniveton, D., Martinez-Zarzoso, I., Mastroiillo, M., ... & Schraven, B. (2019). Human migration in the era of climate change. *Review of Environmental Economics and Policy*, 13(2), 189-206.
- Clark, R., Reed, J., & Sunderland, T. (2018). Bridging funding gaps for climate and sustainable development: Pitfalls, progress and potential of private finance. *Land Use Policy*, 71, 335-346.
- Chatterjee, R. (2014). *Practical methods of financial engineering and risk management: tools for modern financial professionals*. Apress.
- Chowdhury, M., & Alam, Z. (2017). Factors Affecting Access to Finance of Small and Medium Enterprises (SMEs) of Bangladesh. *USV Annals of Economics and Public Administration*, 17(2(26)), 55-68. Retrieved from https://touro scholar.touro.edu/gsb_pubs/12
- Chiba, Y., Prabhakar, S. V. R. K., Islam, M. A., & Akber, M. A. (2018). Priority practices for addressing non-economic loss and damages caused by cyclones in Bangladesh: Case study of Koyra. *International journal of disaster resilience in the built environment*.

- de Rugy, V., & Kling, A. (2020). A Government-Backed Line of Credit Would Help Small Businesses More Than Current Relief Efforts. Mercatus Special Edition Policy Brief. Global Climate Risk Index (2021)
- Graya, C. L., & Muellerb, V. (2012). Natural disasters and population mobility in Bangladesh. *PNAS*, 109(16). DOI: <https://doi.org/10.1073/pnas.1115944109>
- GoB. (2016). SDGs Financing Strategy: Bangladesh Perspective. Dhaka: *General Economic Division, Planning Commission, Ministry of Planning, Government of Bangladesh*.
- GPEDC (2018), Private Sector Engagement through Development Co-operation in Bangladesh, Global Partnership for Effective Development Co-operation (GPEDC), https://www.effectivecooperation.org/system/files/2019-04/Bangladesh_Country_Report.pdf.
- Hassan, M. M. (2017). Monitoring land use/land cover change, urban growth dynamics and landscape pattern analysis in five fastest urbanized cities in Bangladesh. *Remote Sensing Applications: Society and Environment*, 7, 69-83.
- Hassani-Mahmooui, B., & Parris, B. W. (2012). Climate change and internal migration patterns in Bangladesh: an agent-based model. *Environment and Development Economics*, 17(6), 763-780.
- Haque, M., Pervin, M., Sultana, S., & Huq, S. (2019). *Towards establishing a national mechanism to address losses and damages: a case study from Bangladesh*. In *Loss and Damage from Climate Change* (pp. 451-473). Springer, Cham.
- Honorine, A. N. D., & Emmanuelle, D. (2019). Stage financing and syndication in the IPO underpricing of venture-backed firms: Venture capital and IPO underpricing. *The International Journal of Entrepreneurship and Innovation*, 20(4), 289-300.
- International Finance Corporation (IFC) (2016). Destination: One million new jobs, International Finance Corporation, Washington, DC. International Finance Corporation (IFC) (2011).
- Institute for Inclusive Finance and Development (InM) (2016). Microenterprise Survey.
- Jung, H. (2019). Development finance, blended finance and insurance. *Development Finance*, 4(1), 47-60. DOI: <https://doi.org/10.1108/ITPD-12-2019-0011>
- Ivanov, I. T., & Wang, J. Z. (2019). The impact of bank supervision on corporate credit: Evidence from syndicated loan reviews.
- Islam, I. (2015). *Displacement and Migration from Cyclone-Affected Coastal Areas*. In B. Mallick, & B. Etzold (Eds.). Dhaka: AHDPH.
- Islam, M., & Shamsuddoha, M. (2017). Socioeconomic consequences of climate induced human displacement and migration in Bangladesh. *International Sociology*, 33(3), 277-298. DOI: <https://doi.org/10.1177/0268580917693173>
- Kabir, M. E., Serrao-Neumann, S., Davey, P., Hossain, M., & Alam, M. T. (2018). Drivers and temporality of internal migration in the context of slow-onset natural hazards: Insights from north-west rural

- Bangladesh. *International Journal of Disaster Risk Reduction*, 31, 617-626. DOI: <https://doi.org/10.1016/j.ijdrr.2018.06.010>
- Kasirye, I., & Lakal, J. (2019). Blended Finance in Uganda: Opportunities, Challenges and Risks. *Southern Voice Occasional Paper Series* 45.
- Kälin, W. (2010). Conceptualising Climate-Induced Displacement. (F) McAdam.
- Khan, M. R., Huq, S., Risha, A. N., & Alam, S. S. (2021). High-density population and displacement in Bangladesh. *Science*, 372(6548), 1290-1293.
- Khan, M. R. (2013). Toward a binding climate change adaptation regime: A proposed framework. Routledge.
- Khan, T. I., & Kamal, M. (2018). Pursuing a graduation strategy within the global and regional environment: What are the pitfalls for Bangladesh?. In *Bangladesh's Graduation from the Least Developed Countries Group*, 198-242, Routledge.
- Khatun, F., Pervin, S., & Rahman, M. M. (2018). Bangladesh's pursuit of the 2030 Agenda: Will it facilitate smooth transition after LDC graduation?. In *Bangladesh's Graduation from the Least Developed Countries Group*, 153-197, Routledge.
- Kolmannskog, V. (2008). Future floods of refugees: A comment on climate change, conflict and forced migration. Norwegian Refugee Council.
- Lee, K. J. (2021). Introduction of Entrepreneurship Development Fund for Startups and Small and Medium-sized Enterprises: Case of Kazakhstan. In *Investment in Startups and Small Business Financing* (pp. 233-261).
- Lopez-de-Silanes, F., McCahery, J. A., Schoenmaker, D., & Staniscic, D. (2018). Estimating the financing gap of small and medium-sized enterprises. *Journal of Corporate Finance Research/ Корпоративные Финансы* | ISSN: 2073-0438, 12(2), 20-100.
- Li, B., An, S. M., & Song, D. P. (2018). Selection of financing strategies with a risk-averse supplier in a capital-constrained supply chain. *Transportation Research Part E: Logistics and Transportation Review*, 118, 163-183.
- Ministry of Planning (2019). Study on Future Direction of SMEs in Bangladesh. Retrieved from: <https://plandiv.gov.bd/site/files/079fcf12-77f4-47ce-8c89-4d0e16a1687a/-Future-Direction-of-SMEs-in-bd>
- MoEF. (2009). Bangladesh Climate Change Strategy Action Plan. Dhaka, Bangladesh: Ministry of Environment and Forest, Government of the People's Republic of Bangladesh.
- MoF. (2020). Climate Financing for Sustainable Development: Budget Report 2020-21. Dhaka: Finance Division Ministry of Finance, Government of the People's Republic of Bangladesh.

- Murray, A., & Spronk, S. (2019). Blended financing, Canadian foreign aid policy, and alternatives. *Studies in Political Economy a Socialist Review*, 100(3), 270-286. DOI: <https://doi.org/10.1080/07078552.2019.1682781>
- National Plan for Disaster Management (2021). Action for Disaster Risk Management Towards Resilient Nation.
- National Plan for Disaster Management (2016-2020). Ministry of Disaster Management and Relief.
- Neeraja, M. B., & Dhillip, M. V. (2020). Retail investors perspectives towards equity investment decision on innovative business. *Journal of Contemporary Issues in Business and Government*, 26(2), 743-748.
- Nigohosyan, D., & Vutsova, A. (2018). The 2014–2020 European regional development fund indicators: the incomplete evolution. *Social Indicators Research*, 137(2), 559-577.
- OECD/World Economic Forum (2015). Blended finance, a primer for development finance and philanthropic funders, OECD/World Economic Forum, Paris/Cologny, Switzerland, Vol. 1.
- OECD. (2020). Blended finance in the least developed countries. Paris: OECD Publishing.
- Ojo, M. P., & Ayanwale, A. B. (2019). Estimating farm-level financing gap: a technical efficiency approach. *Agricultural Finance Review*. 79(2), 174-191. <https://doi.org/10.1108/AFR-02-2018-0008>
- Parvin, L., & Rahman, W. (2012). Determinates of women micro-entrepreneurship development: An empirical investigation in rural Bangladesh. *International Journal of Economics and Finance*, 4. DOI: <https://doi.org/10.5539/ijef.v4n5p254>
- Pereira, J. (2017). Blended Finance: What it is, how it works and how it is used. England and Wales: OXFAM. Retrieved from <http://hdl.handle.net/10546/620186>
- Petrova, K. (2021). Natural hazards, internal migration and protests in Bangladesh. *Journal of Peace Research*, 58(1), 33-49.
- Poncelet, A., Gemenne, F., Martiniello, M., & Bousetta, H. (2010). A Country Made for Disasters: Environmental Vulnerability and Forced Migration in Bangladesh. Springer, 211-222.
- Quak, E. J. (2019). How losing access to concessional finance affects Small Island Developing States (SIDS).
- Qamruzzaman, M., & Jianguo, W. (2019). SME financing innovation and SME development in Bangladesh: An application of ARDL. *Journal of Small Business & Entrepreneurship*, 31(6), 521-545.
- Rahman, A.F.M.A., & Kabir, F.A., (2021). Why is entrepreneurship not developing in rural Bangladesh? The case of Lakshmipur. in the book titled “A Handbook on the Future of Work and Entrepreneurship for the Underserved”, Edited Book by Centre for Business & Economic Research

- (CBER). (<https://cberuk.com/book/a-handbook-on-the-future-of-work-and-entrepreneurship-for-the-underserved>)
- Rahman, M. M., Muhammad, N., & Dana, L. P. (2020). A comparative study of SME policies: Bangladesh and Pakistan. *Journal of Enterprising Culture*, 28(02), 93-120.
- Rahman, M. H., & Majumder, S. C. (2020). Feasibility of NGO initiatives in SME, rural benefits and challenges: A case study in Cumilla, Bangladesh. *Journal of Economic Info*, 7(1), 26-39.
- Rahman, M., & Bari, E. (2018). Pathways to Bangladesh's sustainable LDC graduation: Prospects, challenges and strategies. In *Bangladesh's Graduation from the Least Developed Countries Group*, 109-152, Routledge.
- Roy, K., & Sultana, U. T. (2010). Climate Change Disasters and Rural Poverty: Case of Coastal Bangladesh. 3rd International Conference on Bangladesh Environment (BAPA-BEN). Dhaka.
- Rode, J., Pinzon, A., Stabile, M. C., Pirker, J., Bauch, S., Iribarrem, A., ... & Wittmer, H. (2019). Why 'blended finance' could help transitions to sustainable landscapes: Lessons from the Unlocking Forest Finance project. *Ecosystem Services*, 37, 100917. <https://doi.org/10.1016/j.ecoser.2019.100917>
- Schmalz, S., Ludwig, C., & Webster, E. (2018). The power resources approach: Developments and challenges. *Global Labour Journal*, 9(2).
- Sinclair, T. J. (1994). Passing judgement: credit rating processes as regulatory mechanisms of governance in the emerging world order. *Review of international political economy*, 1(1), 133-159.
- Shahid, S. (2012). Vulnerability of the power sector of Bangladesh to climate change and extreme weather events. *Regional Environmental Change*, 12(3), 595–606. DOI: <https://doi.org/10.1007/s10113-011-0276-z>
- The International Disaster Database, CRED, (2021)
- Tonkonogy, B., Brown, J., Micale, V., Wang, X., & Clark, A. (2018). Blended Finance in Clean Energy: Experiences and Opportunities. Retrieved from Climate Policy Initiative: Available from: <https://climatepolicyinitiative.org/wp-content/uploads/2018/01/Blended-Finance-in-Clean-Energy-Experiences-and-Opportunities.Pdf>
- UNCTAD (2014). World Investment Report. https://unctad.org/system/files/official-document/wir2014_en.pdf
- UN-ESCAP (2019). Economic and social survey of Asia and the Pacific 2019: Ambitions beyond growth. Retrieved from: <https://repository.unescap.org/handle/20.500.12870/1651>
- Veiga, M. G., & McCahery, J. A. (2019). The financing of small and medium-sized enterprises: an analysis of the financing gap in Brazil. *European Business Organization Law Review*, 20(4), 633-664.

World Bank. (2015). From billions to trillions: Transforming development finance. Washington, DC: AfDB, ADB, EBRD, EIB, IADB, IMF and World Bank Group for the 18 April Development Committee Meeting.

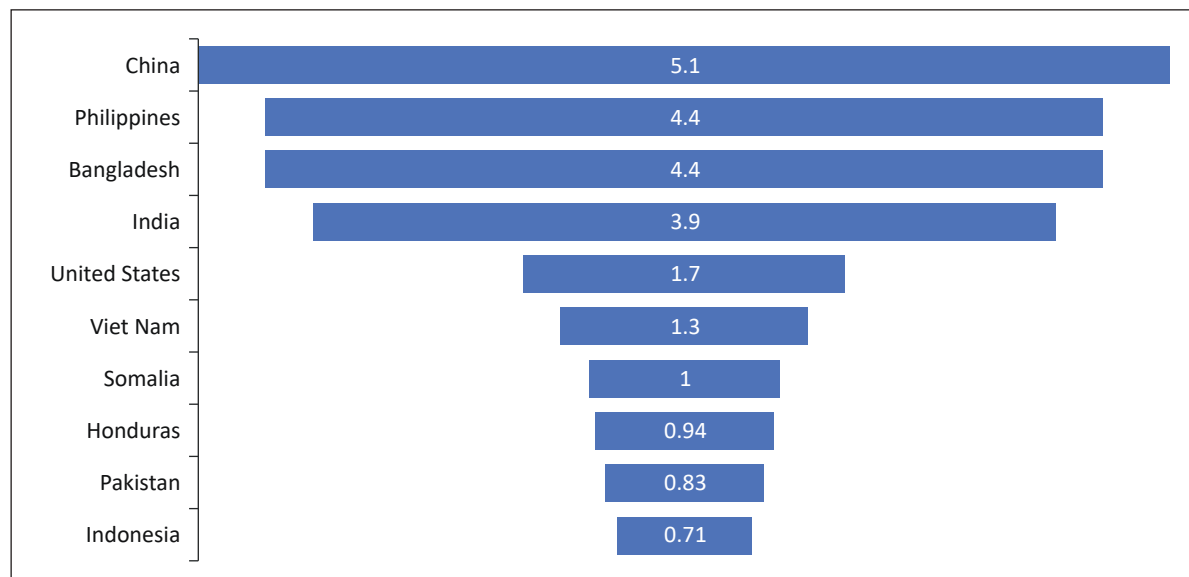
World Development Indicator by World Bank (2020).

Yoma Bank Agribusiness Finance Programme: Narrative Progress Report. Reporting period 2016–2018, Yoma Bank and LIFT, Yangon (2019)

Zaman, M. (2019, March 17). Home: Views. Retrieved 2019, from The Financial Express: <https://thefinancialexpress.com.bd/views/views/understanding-complex-challenges-of-disaster-displacement-1552492330>

ANNEXES

Annex Figure 1: Top Ten Countries with the Newest Displacements by Disaster in 2020



Source: Internal Displacement Monitoring Centre (2020).

Annex Table 1: Unified MSME Definition Adopted under the 2016 Industrial Policy

Type of Industry		Amount of Investment in Tk (Replacement Cost and Value of Fixed Assets, excluding Land and Factory Buildings)	Number of Employed Workers
Cottage Industry		Below 1 million	Maximum 15
Micro Industry		1 to 7.5 million	16-30
Small Industry	Manufacturing	7.5 to 150 million	31-120
	Service	1 to 20 million	16-50
Medium Industry	Manufacturing	150 to 500 million	121-300
	Service	20 to 300 million	51-120

Source: National Industrial Policy, Government of Bangladesh, 2016.

The MSME definition set by the 2016 Industrial Policy is now broadly accepted as a unified definition at the policy level. It is based on the value of fixed assets (excluding land and buildings) and/or the number of employees. This unified national definition should be followed by all government entities.

Annex Table 2: Number of People Displaced Newly by Different Disaster from 2008 to 2020

Year	Location	Number of People Displaced Newly by Disaster Type					
		Flood	Storm	Wet Mass Movement	Dry Mass Movement	Earthquake	Total
2008	-	59000	0	2000	0	0	61000
2009	Khulna, Shatkhira	500000	842000	0	0	0	1342000
2010	-	512000	45000	12000	0	0	569000
2011	-	400000	0	0	0	0	400000
2012	-	600000	51000	0	0	0	651000
2013	Kurigram, Brahmanbaria, Thakurgaon, Gaibandha, Dinajpur Panchagarh, Nilphamari, Lalmonirhat, Jamalpur, Sirajgonj, Patuakhali, Cox's Bazar, Barguna, Noakhali	22000	1137000	0	0	0	1159000
2014	Netrokona, North-Western Region	542000	1000	0	0	0	543000
2015	Teknaf, Cox's Bazar, Bandarban, Chittagong, Sylhet, Bogra, Northern District	104000	426000	0	0	100	530100
2016	Sandwip, Hatia, Kutubdia, Sitakundu, Feni, Jessore	118000	496000	0	0	0	614000
2017	Chittagong, Cox's Bazar, Pabna, Rangpur, Rajshahi, Mymensingh, Sylhet, Dhaka, Khulna, Moulvibazar, Sunamganj, Habiganj, Netrokona, Kishoreganj	448000	490000	2000	6000	0	946000
2018	Bagerhat, Sylhet, Moulvibazar, Maheshkhali, Cox's Bazar, Dighinala, Khagrachari, Gaibandha, Bogra, Jamalpur, Tangail, Barisal, Bhola, Jhalakathi, Rupganj, Feni, Sunamganj	30200	584	46017	0	0	76801
2019	Lalmonirhat, Cox's Bazar, Munshiganj, Dhaka, Manikganj, Jashore, Chuadanga, Shariatpur, Kushtia, Bagerhat, Bamna, Pathorghata, Barguna, Joypurhat, Panchbibi, Dinajpur, Parbatipur, Khulna, Rangamati, Dinajpur, Rangpur	307200	3777505	450	0	0	4085155
2020	Thakurgaon, Cox's Bazar, Brahmanbaria, Lalmonirhat, Rangpur, Kurigram, Chittagong, Dhaka, Tangail, Gaibandha, Barisal, Tangail	1925000	2511250	6621	0	0	4442871
	Total Number of People Displaced by Different Category	5567400	9777339	69088	6000	100	15419927

Source: Internal Displacement Monitoring Centre (IDMC).

Annex Table 3: List of Low Carbon to Medium Carbon Enterprise List

SME Group (Low Carbon)	Gender Group (Male/Female)	SME Group (Medium Carbon)	Gender Group (Male/Female)
Agricultural Product Processing	Both	Making Fishing Boat	Mostly Male
Agricultural Activities	Mostly Male	Bakery	Both
Weaving and Nakshi Katha	Female	Hatchery	Both
Food Seed Preservation	Both	Dry Fish Processing	Both
Information and Technology Activities	Both	Cyber Cafe	Both
Horticulture, Flower Harvesting and Processing	Both	Entertainment, Documentary Making and DVD Making	Both
Telecommunication	Both	Forestry and Furniture	Mostly Male
Mobile Phone Accessories	Both	Hospital and Clinic	Both
Renewable Energy	Both	Hotel, Restaurant and Tourism	Both
Light Engineering	Both	Printing and Packaging	Both
Cosmetic and Toiletries	Female	Producing Puff Rice	Female
Beauty Industry	Female	Rice Machine	Both
Handicraft	Female	Agricultural Machine Accessories Business	Male
Herbal Product	Both	Iron and Cement Trading	Male
Jute Product	Both	LP Gas Business	Male
Stationary Product	Both	Jewelry Shop	Both
Iodised Salt	Both	Diagnostic Centre	Both
Whole Sale and Retail Shop	Both	Making Toys	Female
Pharmacy Shop	Both	Ice Factory	Male
Phone and Fax	Both	Dairy and Fish Feed	Both
Mobile Banking Shop	Both	Candle and Agarbati	Female
Mobile and Accessories Shop	Both	Exportable Soil Made Handicraft	Both
Fabrics and Shoe Business	Both	Food Processing	Both
Small Tailoring	Female	Oil and Grain Mill	Both
Hardware Business	Male	Mini Sugar Mill	Both
Grocery and Grain Business	Both	Welding Industry	Male
Commercial Tree Plantation	Both	Digital Color Lab	Both
Photography	Both	Partex Industry	Male
Silk and Cocoon Industry	Both	Biogas Plant	Both
Boutiques Shop	Female	Poultry and Dairy	Both
Intelligence and Skill Based Business (Consultancy)	Both		
Mushroom Cultivation	Both		
Eco Friendly Transportation	Male		
Khadi Industry	Female		
Spice Processing	Both		
Call Centre	Both		
Bamboo and cane Industry	Both		
Wood and Steal Business	Both		
Rice and Paddy Business	Both		

(Annex Table 3 contd.)

(Annex Table 3 contd.)

SME Group (Low Carbon)	Gender Group (Male/Female)	SME Group (Medium Carbon)	Gender Group (Male/Female)
Cool Carpet (Shitol Pati)	Female		
Nursery	Female		
Sweet Business	Both		
Fisheries	Both		
Lime Making from Oysters	Female		
Fruit Processing	Female		
Producing Seed by Tissues Culture	Female		

Source: Bangladesh Bank (<https://bb.org.bd/sme/index.php>)**Annex Table 4: Demand for Loans among Microenterprises**

Category	Total Loan Demand (BDT Billion)		
	Urban	Rural	Total
Cottage	186.4	533.2	719.6
Micro	9.4	8.4	17.8

Source: InM Microenterprise Survey (2016), and Economic Census (2013).

Annex Table 5: Loan Supply for Microenterprises

Supply Source	Total Amount Disbursed in 2015-16 (BDT Billion)	Amount Disbursed to Microenterprises (BDT Billion)	Percentage Share
Banks	63.1	63.1	11.1
Public Institutions	11.8	11.8	2.1
MFIs	955.8	491.6	86.8
Total	1030.7	566.5	100

Source: Credit and Development Forum (2016).

Annex Table 6: Total Additional Cost for SDGs in FY 2025 and FY 2030

SDGs	Total Additional Costs (USD Billion)	
	FY 2025	FY 2030
SDG 1: No Poverty	1.87	2.49
SDG 2: Zero Hunger	1.02	0.53
SDG 3: Good Health and Well-being	7.47	11.19
SDG 4: Quality Education	7.47	10.20
SDG 5: Gender Inequality	0.71	0.63
SDG 6: Clean Water and Sanitation	0.69	0.51
SDG 7: Affordable and Clean Energy	3.86	3.43
SDG 8: Decent Work and Economic Growth	35.25	67.85
SDG 9: Industry, Innovation and Infrastructure	19.67	27.79
SDG 10: Reduced Inequalities	0.51	0.71
SDG 11: Sustainable Cities and Communities	0.30	0.40
SDG 12: Responsible Consumption and Production	1.62	3.20

(Annex Table 6 contd.)

(Annex Table 6 contd.)

SDGs	Total Additional Costs (USD Billion)	
	FY 2025	FY 2030
SDG 13: Climate Action	8.97	12.43
SDG 14: Life below Water	0.75	0.78
SDG 15: Life on Land	0.38	0.33
SDG 16: Peace, Justice and Strong Institutions	1.78	2.33
SDG 17: Partnership for the Goals	0.01	0.01
Total	92.33	144.81

There is a large financing gap prevails for achieving SDGs both globally and locally. The United Nations Conference on Trade and Development (UNCTAD) estimated that implementing the SDGs by 2030 will require an investment of USD 3.3-4.5 trillion annually. However, there will be a financial gap of USD 2.5 trillion annually to achieve the SDGs.⁶ The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) has addressed that the developing countries in Asia and Pacific is not on track to achieve the targeted development goals as there is a financing gap of USD 1.5 trillion annually for the region. Bangladesh as an emerging country, will require a total additional cost of USD 92.33 billion and USD 144.81 billion per year by 2025 and 2030 respectively to achieve the SDGs (Planning Commission, GoB, 2016).⁷

⁶For more details, please see: <https://unctad.org/press-material/developing-countries-face-25-trillion-annual-investment-gap-key-sustainable>.

⁷The cost of achieving SDGs is estimated by using various sources of data that are common in case of several goals. For more details, please see: <https://www.sdg.gov.bd/resource/80/0#1>.

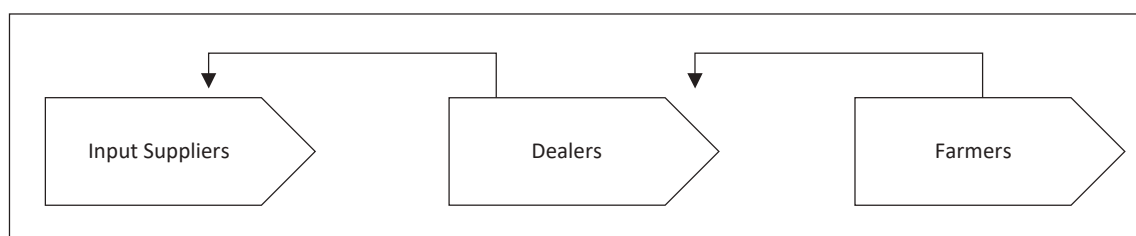
Annex Box 1: Case Study on Yoma Bank Agribusiness Finance Programme

In December 2015, Livelihoods and Food Security Trust Fund (LIFT) and Yoma Bank signed a three-year Agribusiness Finance Program (AFP) in which LIFT donated USD 18.07 million to increase agricultural productivity and improve rural livelihoods in Myanmar. As funding for various agricultural products and their various components is associated with higher risk, the first funding tool has been used to curb the risk of Yoma Bank with LIFT contribution.

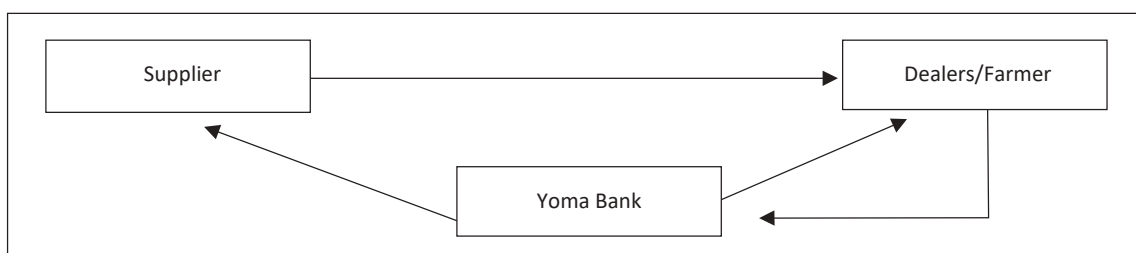
Under AFP, Yoma Bank reduced interest rates by 10 percent, allowed long-term employers and provided additional loans at twice-the-year cycles to meet the annual cash flow of farmers. The contribution of LIFT was to recover part of the increased risks with the first buffer of losses of USD 56.65 million and to cover the many operating costs of the program roll-out.

One of the goals of LIFT - the partnership of Yoma Bank to increase the provision of unsecured loans (loans) in the agri chains in Myanmar. AFP has tried to break the mold with the help of technology to the Yoma Bank and the first refuge for loan losses obtained in the agricultural sector. There are four products that are less secure under AFP and that is borrowing, fees, overtime payments on corn, and MFI loans where the first product gains 100 percent protection from the first loss buffer (buffer size is limited to USD 3 million) and MFI loans accounted for 10% of the principal.

Borrowing Base: The product of the Borrowing Foundation is originally intended for the value chain of agri inputs (e.g. seeds, fertilizers), but can also be widely used to cover any operating costs. In the import product in Myanmar, the major suppliers usually operate through a network of vendors, who act as distributors to farmers. Yoma Bank adds liquidity to the system by lowering the sales slip for top input suppliers. As such, this debt enables the importer to increase sales, resulting in higher prices flowing to farmers / producers. For each supplier, Yoma Bank authorizes a certain number of merchants with a non-discounted acquisition.



Payable Finance: Providing shares by providing an overdraft to a major supplier is straightforward, as one partner can earn significant money to solve the problem of identifying each potential customer. The paid channel is not complicated and there is little need for automation. Payment Product is structured in such a way that retailers, rather than suppliers, become bank customers. The business case is exactly the same as under a Borrowing Fund product: sellers buy farm implants on credit from a supplier, and then sell this to small retailers and / or farmers. By giving money to sellers, they can pay the supplier in cash when he delivers the goods and then sell the items on credit to the farmers.



MFI Lending: Eager to diversify the loan book and use a channel that can see that funds reach the depths of Myanmar, Yoma Bank developed a financing product specifically for MFIs. Product features include a tenor for up to three years and a USD 40% of the total loan amount. In addition to meeting the financial need, the unique loan structure allows MFIs to secure their access to the MMK - USD exchange rate by promising their dollar and / or equity debt to Yoma Bank. In exchange, Yoma Bank uses a mortgage. 2.5 times, allow MFI that they borrowed from MMK while risking their foreign exchange rate.

(Annex Table 1 contd.)

(Annex Table 1 contd.)

The results during the lifetime of the program have achieved much of what was intended, with agricultural equipment costing USD 93.40 million over three years. The translation into 6,530 goods, including 4,002 tractors, 967 (combined) harvesters, 272 tillers and 1,289 transport vehicles. In addition, the estimated price of subsidized under AFP increased from USD 12.25 million in 2016 to USD 16.84 million in 2018.

Funding has had a significant impact on families relying on agriculture to reach an estimated 200,000 households. Successful repayment rate remains at the end of 2018, amounting to USD 42.87 million has been repaid by borrowers in terms of loan installments and, 2,637 total loan repayments.

One of the major challenges of Yoma Bank's digital strategy in general and the Personal Development Account (IDA) in particular is how to simplify Cash-In Cash-Out (CICO). The people of rural Myanmar, far from banks and ATMs, need to be able to convert their money into a digital savings balance on their phone (and on the go) at their leisure, without significant travel, time or cost restrictions. In a world that relies heavily on money, with a limited banking network but a massive smartphone penetration, solving the CICO challenge is the key to reaching millions of unregistered people. Imagine a farmer in front of his home in North Shan province, holding ten-thousand-kyat notes in one hand and his smartphone in the other. The challenge is to build a network that allows people to spend money easily.

Recent CPD Working Papers

- Paper 140 Implications of COVID-19 for Bangladesh's Graduation from the LDC Status
- Paper 139 Proposed Power and Energy System Master Plan (PESMP): Perspective on Analytical Frame, Methodology and Influencing Factors on Demand Forecasting
- Paper 138 Power Sector in the 8th Five Year Plan: Reflection on Its Strategy and Initiatives
- Paper 137 Belt and Road Initiative: What Are Bangladesh's Interests?
- Paper 136 COVID-19—A Rapid Assessment of Stimulus Packages and Relief Measures: Will the Target Groups Get the Benefits?
- Paper 135 The Challenges of Policymaking in the Time of Pandemic: State of the Bangladesh Economy in FY2019–20
- Paper 134 CPD's Recommendations for the National Budget FY2020–21
- Paper 133 Corona Pandemic and Bangladesh: Health and Economic Risks and Recommendations
- Paper 132 Challenges for the Marginalised Youth in Accessing Jobs: How Effective is Public Service Delivery?
- Paper 131 Role of Media in Delivering the SDGs: A Mapping Exercise on Bangladesh
- Paper 130 Prospects and Risks for the Global Economy in 2019
- Paper 129 New Minimum Wage of the RMG Sector: Addressing the Issues of Non-Compliance in Implementation
- Paper 128 Financial Sector in Bangladesh: Recent Trends and Benchmarking for the Government
- Paper 126 Potential of Personal Income Tax in Bangladesh: An Examination of Survey Data
- Paper 125 Finance for SDGs: Addressing Governance Challenge of Aid Utilisation in Bangladesh
- Paper 124 Women in Bangladesh Labour Market: Determinants of Participation, Gender Wage Gap and Returns to Schooling
- Paper 123 'Data Universe' of Bangladesh's RMG Enterprises: Key Features and Limitations
- Paper 122 Livelihood Challenges of RMG Workers: Exploring Scopes within the Structure of Minimum Wages and Beyond



House 40/C, Road 11 (new)
Dhanmondi, Dhaka-1209, Bangladesh
Telephone: (+88 02) 48118090, 55001185, 58156979
Fax: (+88 02) 48110414
E-mail: info@cpd.org.bd
Website: www.cpd.org.bd