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Building Resilience:

Economic Modeling for a Five-Year Midterm Livelihood Framework for Rohingya FDMNs in Bangladesh

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Dr. Selim Raihan

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Contact:
Advocacy for Social Change, BRAC
BRAC Centre
75 Mohakhali, Dhaka 1212, Bangladesh
www.brac.net

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This research report, Building Resilience: Economic Modeling for a Five-Year Midterm Livelihood Framework for Rohingya FDMNs in Bangladesh, represents a concerted effort to generate evidence-based insights into one of the most protracted and complex humanitarian and development challenges of our time. The successful completion of this work would not have been possible without the generous support, intellectual engagement, and institutional commitment of several individuals and organisations whose contributions deserve the highest recognition.

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Contents

Executive **Summary**

This report presents an economic model to estimate the financial resources required to support the basic needs of Rohingya refugees in Bangladesh over the next five years. It considers two scenarios: no repatriation and gradual repatriation. The report also explores the cost-sharing burden under different scenarios and proposes strategies for generating new jobs and investing in skills development among the Rohingya community. The goal is to develop a sustainable livelihood framework that promotes self-reliance and reduces dependence on humanitarian aid.

Over a million Rohingya refugees have sought shelter in Bangladesh due to persecution in Myanmar. The massive influx has created a humanitarian crisis, with refugees relying on aid for survival. While the situation has stabilized from a humanitarian perspective, the Rohingya remain aid-dependent with limited livelihood opportunities. The prospect of repatriation to Myanmar remains uncertain, making it crucial to explore alternative solutions that blend humanitarian assistance with development-oriented approaches.

The primary objective of this exercise is to develop a five-year midterm livelihood framework for Rohingya refugees and estimate the necessary costs through economic modelling. The framework will be shared with international communities to mobilize funding for its implementation. The goal is to promote a livelihood approach that empowers Rohingya refugees to contribute to their daily spending through livelihood activities, reducing their dependence on aid.

This exercise utilizes secondary information, and primary data collected through expert interviews, and consultation workshops. It employs quantitative and qualitative methods, with outcomes vetted by an advisory group. The study focuses on three key pillars:

- Estimating the resources required for Rohingya refugees over the next five years.
- Determining who shares the cost burden under different scenarios.
- Defining strategies for generating new jobs and investing in skills development.

The report estimates the total financial resources required to support Rohingya refugees over the next five years, considering factors such as population growth, inflation rates, and specific needs. It calculates the cost of basic needs (food, clothing, shelter), education, healthcare, and water, sanitation, and hygiene (WASH) services under two scenarios: no repatriation and gradual repatriation.

The report analyzes who shares the cost burden under different scenarios, considering the capacities of various stakeholders, including international donors, the Government of Bangladesh, and the Rohingya community. It examines scenarios with varying levels of financial contributions from each stakeholder group to determine the most equitable and sustainable distribution of costs.

The report explores strategies for generating new jobs for Rohingya refugees, focusing on sectors with high job creation potential, such as food processing, the apparel industry, and other labour-intensive industries. It estimates the investment required to generate 200,000 direct jobs over the next five years and analyzes the potential multiplier effects on indirect job creation.

The report highlights the importance of investing in skills development among Rohingya refugees to enhance their employability and self-reliance. It discusses the Government of Bangladesh-United Nations Framework on Skills Development for Rohingya Refugees and Host Communities, which aims to provide transferable skills training and expand livelihood opportunities.

The report emphasizes the need for integration and social cohesion between Rohingya refugees and host communities. It acknowledges the potential for increased competition for resources and employment and stresses the importance of addressing these challenges through coordinated interventions and inclusive policies.

The report identifies current challenges faced by Rohingya refugees, including unrecognized economic activities, tensions with host communities, and the impact on local job markets. It also highlights the uneven effects on different sectors and the need for a balanced and inclusive approach to address these complex dynamics.

The report proposes a midterm livelihood framework with key pillars focused on a whole-of-society approach, economic empowerment, employment opportunities, and institutional coordination. It leverages international experiences from countries like Jordan, Uganda, and Turkey to provide valuable lessons for structuring the framework.

The report offers key policy recommendations for skills development, economic inclusion, an enabling policy environment, and strengthened institutional coordination and financing. It emphasizes the need for a flexible, skills-based, and investment-driven approach to transform the refugee crisis into an opportunity for economic resilience and regional stability.

The report concludes that a coordinated, well-financed, and inclusive approach to refugee livelihoods is essential for transforming the Rohingya crisis from a humanitarian burden into an opportunity for economic empowerment and social stability. It calls for a multi-stakeholder strategy that integrates government initiatives, private sector engagement, international donor support, and collaboration with development agencies. By investing in skills training, economic integration, and institutional coordination, Bangladesh can build a sustainable midterm livelihood framework that benefits both Rohingya refugees and local populations, fostering self-reliance, economic development, and social cohesion.


19 NINETEEN
20 TWENTY
21 TWENTY ONE
23 TWENTY THREE
25 TWENTY FIVE
26 TWENTY SIX
28 TWENTY EIGHT
30 THIRTY
The Importance days of myanmar
January Independence Day
February Union Day
March Peasant
March Armed Forces Day
April Water Festival
May labour Day
July Martyr
December National and Christmas Day
Unit of Time
60 Seconds → 1 minute
60 minutes → 1 hour
24 hours → 1 day
7 days → 1 Week
365 days → 1 year
DIRECTION
RIGHTSIDE 1
LEFTSIDE 2
EAST 3
WEST 4
NORTH 5
SOUTH 6
CENTRE 7
DOWN 8
UP 9
FRON 10
BACK 11
ABOVE 12
T Truthful
E Education
A Active
C Character
H Honest
E Energetic
R Responsible
Word Zone
DUSTER
MOTHER
FINGER
BOOK
FATHER
PENCIL
CHAIR
STUDENT
Good Morning
unicef

Background

Over a million Rohingya population have taken refuge in Bangladesh, fleeing the atrocities in Myanmar in consecutive waves of forceful displacement since the early 1990s. In late August 2017, the Myanmar military led a disproportionate and indiscriminate crackdown – a clearance operation against the Rohingya ethnic population in the Rakhine state of Myanmar. These crimes against humanity prompted an unprecedented exodus of more than 742,000 Rohingya population to Cox's Bazar, Bangladesh.[1] The massive fresh influx has compounded the existing challenges and caused a major humanitarian crisis. The emergency needs of persecuted Rohingyas have been met with passionate support from the host community first, followed by a coordinated response from the Government of Bangladesh, national and international NGOs and UN agencies. After six years, the situation of Rohingyas has taken a stable position from the humanitarian perspective; however, the Rohingyas remain aid-dependent with a limited livelihood opportunity to become self-reliant. Rohingyas are not officially allowed to move or work outside the camps.

The Government of Bangladesh has been striving to expedite the discussion of repatriation of the Rohingyas sheltered in the camps in Cox's Bazar and Bhasan Char. However, the progress of the discussion is not bright as no significant response is perceptible from the Myanmar side. Moreover, the international pressure on the Myanmar Government is not significantly visible, which could positively push the discussion. Until peaceful repatriation is possible, the displaced Rohingyas will need various humanitarian support and services including livelihood support to help them become less burden to the Government of Bangladesh. Since the solution to the crisis has been taking time, it is high time to discuss other possible options, including making a blend with a livelihood approach for tackling the humanitarian crisis. For that reason, the first and foremost option is making a strategic shift to the livelihood approach from the humanitarian crisis management aspect.

[1] *https://www.unhcr.org/emergencies/rohingya-emergency*

The idea of blending the humanitarian approach with other approaches such as development-oriented solutions is not new. The UN and the World Bank have set a new way of working by blending the humanitarian approach with development actions. The Organisation for Economic Co-operation and Development (OECD) has prioritised the blending. The Development Assistance Committee (DAC) members are also taking actions in line with the prioritisation. It also strongly relates to the Grand Bargain and the UN Development System Reform (UNDS Reform). All UN agencies, many donors and NGOs are supportive of the approach.[2]

The funding flow for the Rohingya crisis response is diminishing. The fund for Rohingya crisis response ranged from 72% to 75% in the first three years, which came down to 65% in 2020.[3] In 2022, the supplied fund drastically declined and dropped to about 39% of what was demanded.[4] In 2023, the humanitarian agencies appealed for more than $876m to support the Rohingyas, however, the Joint Response Plan for supporting them was only 42% funded.

Since the prospect of repatriation is diminutive and funding flow is declining, there is a need to flag out the discussion on finding potential ways to make a strategic shift in the Rohingya crisis response. In this regard, the objective of the exercise is to develop a five-year-long mid-term livelihood framework for the Rohingya crisis response and necessary cost estimation through economic modelling. The framework will be shared with international communities to get their vetting and mobilise funding for the implementation of the framework.

2 *See Oxfam (2019).*

3 *See Daily Star (2021).*

4 *See Joint Response Plan (2022).*

Objective

To develop a five-year midterm livelihood framework for Rohingya crisis management and estimate the necessary cost, through economic modelling, to implement the livelihood framework, given that the responding agencies will be placed to promote a livelihood approach and the Rohingyas will be involved in livelihood activities.

The exercise is expected to provide an estimate of how much money the Rohingyas will be able to contribute to their daily spending through their livelihood activities and how much money the Government of Bangladesh and the donor agencies will need to provide backup support for helping the Rohingyas survive above the poverty level.

Methodology

This exercise uses mainly secondary information. However, some primary data are collected through expert interviews and consultation workshops with expert groups in Cox's Bazar and Dhaka. The study applies several quantitative and qualitative methods which together with the outcomes are vetted by an advisory group managed by BRAC ASC.

This exercise considers three pillars of the proposed framework of sustainable livelihood (Figure 1). These are (1) Estimation of the amount of resources required for the Rohingya Forcibly Displaced Myanmar Nationals (FDMNs) over the next five years; (2) Who shares the cost burden under different scenarios? (3) What should be the strategy?

Estimation of the amount of resources required for the Rohingya FDMNs over the next five years is crucial for planning and implementation. This estimation will involve a detailed analysis of various factors including population growth, inflation rates, and the specific needs of the Rohingya community. By understanding these needs, we can better allocate resources to ensure that the community is supported effectively and sustainably.

Who shares the cost burden under different scenarios? This question is crucial, as it determines the sustainability and feasibility of the proposed mid-term livelihood framework. The allocation of costs must be equitable and consider the capacities of different stakeholders, including international donors, the Government of Bangladesh, and the Rohingya community itself. Various scenarios will be analyzed to understand how costs can be distributed most effectively. For example, one scenario might involve a higher contribution from international donors, while another might see a greater emphasis on self-reliance within the Rohingya community. Evaluating these scenarios will help ensure that the burden of financial responsibility is shared in a way that is both fair and practical.

Finally, defining a clear and actionable strategy is essential to implement the framework successfully. This strategy will outline the steps necessary to mobilize resources, engage stakeholders, and monitor progress, ensuring that the livelihood framework meets its objectives and supports the Rohingya community sustainably.

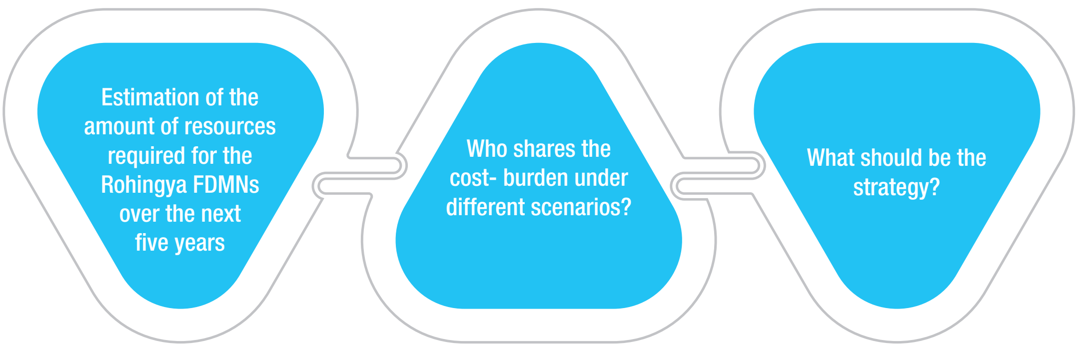


Figure 1: Three Pillars of the Proposed Framework of Sustainable Livelihood

CHAPTER 1

Requirement of **Financial Resources Over the Next Five Years for the Rohingya FDMNs**

1.1. Methodology of Calculation

To estimate the total amount of annual financial resource requirements we consider the following steps:

The total financial resources in year t

$$R_t = R_t^1 + R_t^2 + R_t^3 + R_t^4 \qquad (1)$$

$$R_t^1 = N_t \times PLI_t \times 365 \qquad (2)$$

$$R_t^2 = N_t^c \times PE_t \qquad (3)$$

$$R_t^3 = N_t \times PH_t \qquad (4)$$

$$R_t^4 = N_t \times PWASH_t \qquad (5)$$

Where,

R_t	=	total financial resources in year t
R_t^1	=	total basic (food + cloth + housing) financial resources in year t
R_t^2	=	total financial resources required for education in year t
R_t^3	=	total financial resources required for health in year t
R_t^4	=	total financial resources required for WASH in year t
N_t	=	The number of Rohingya FDMN population in year t
H_t	=	The number of Rohingya FDMN households in year t
N_t^c	=	The number of Rohingya FDMN population in year t who will need education
PLI	=	The poverty line income (PLI) (US$ per person per day)
PE_t	=	Per capita education expenditure in year t
PH_t	=	Per capita health expenditure in year t
$PWASH_t$	=	Per capita WASH expenditure in year t

1.2. Projection of Rohingya FDMN Population Under Different Assumptions

To project the number of Rohingya FDMN population between 2024 and 2028, we start with the current population figures and incorporate an annual growth rate of 3%. We consider two scenarios: no repatriation and some repatriation, as outlined in Table 1. According to these projections, the population of Rohingya FDMN would rise to 1,115,704 by 2028 under the no-repatriation scenario. Conversely, under the scenario where there is some repatriation (an annual 50,000 from 2024 to 2028), the population would decrease to 850,247 by 2028. These projections are essential for planning and allocating resources effectively to ensure the well-being of the Rohingya FDMN population. The different scenarios help us understand the potential impact of repatriation on population dynamics and resource needs.

Assumption	Description
No repatriation	There will not be any repatriation of Rohingya FDMNs in the next five years.
Repatriation	Some repatriation (annual 50,000 from 2024 to 2028).

Table 1: Assumptions About Repatriation

Source: Author

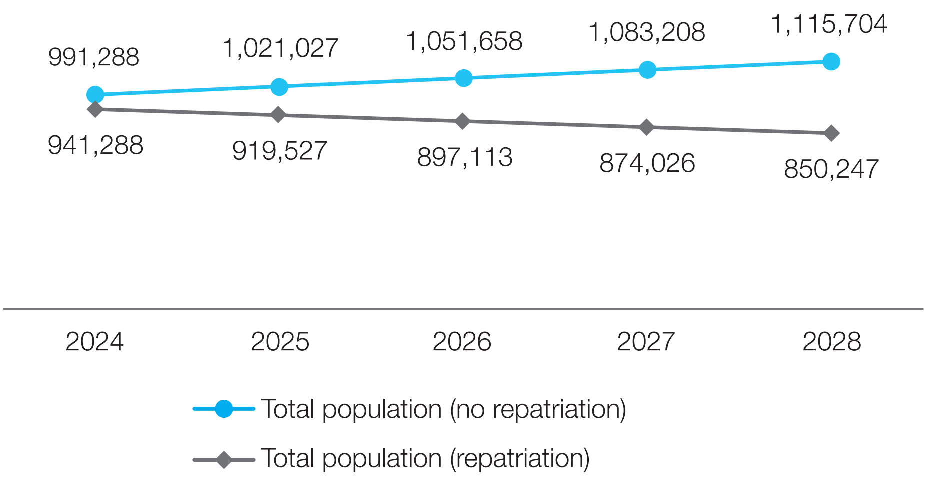


Figure 2: Projection of Rohingya FDMN population

Source: Author's projection using figures from the official sources

1.3. Calculation of the Cost of Basic Needs

To estimate the financial requirements for supporting the Rohingya FDMNs in Bangladesh, we calculate the cost of basic needs using the rural poverty line income for Chattogram from the Household Income and Expenditure Survey (HIES) 2022. This cost is adjusted for inflation and includes essential expenditures on education, healthcare, and Water, Sanitation, and Hygiene (WASH) services. The calculated estimates for the cost of food, clothing, and shelter under different repatriation scenarios are presented in Table 2. The table outlines two scenarios—one in which no repatriation takes place and another where gradual repatriation of the Rohingya population occurs.

Scenario 1: No Repatriation: If repatriation does not take place, the total cost of fulfilling basic needs for the Rohingya FDMN population is projected to rise steadily from $427.92 million in 2024 to $481.63 million in 2028. This increase is primarily due to inflationary pressures, population growth, and rising costs of essential services. The upward trend highlights the long-term financial burden on Bangladesh and international donors in maintaining the refugee population without a durable solution.

Scenario 2: Gradual Repatriation: Under the repatriation scenario, the cost burden shows a declining trend, decreasing from $406.33 million in 2024 to $367.03 million in 2028. This scenario assumes a structured return of Rohingya refugees to Myanmar, leading to a gradual reduction in resource requirements. The decline in cost reflects the easing of fiscal pressure on Bangladesh and a lower dependency on humanitarian aid. However, successful repatriation depends on favourable conditions in Myanmar, including security, citizenship rights, and livelihood opportunities for returnees.

	2024	2025	2026	2027	2028
No repatriation	427.92	440.76	453.98	467.60	481.63
Repatriation	406.33	396.94	387.26	377.30	367.03

Table 2: Cost of Basic Needs (Food, Clothing, Shelter) (Million US$)

Source: Author's projection

It is essential to recognize that shelter maintenance is an ongoing and repetitive cost. Given the Rohingya community's location in a cyclone-prone area, they face significant protection risks. Currently, the Rohingya do not have access to cyclone shelters in Cox's Bazar. An alternative approach would be for the Government of Bangladesh to invest in safer and more sustainable shelter options, potentially including the establishment of semi-permanent or permanent structures within the camps. This investment would also incur costs. The World Bank is providing funds for large-scale cyclone shelters, highlighting the importance of these decisions. Effective and meaningful discussions with policymakers are crucial to addressing these issues.

1.4. Calculation of the Cost of Education

Education is a critical component of humanitarian assistance for the Rohingya FDMNs in Bangladesh. Ensuring access to primary and secondary education is essential for the well-being of Rohingya children, equipping them with fundamental skills and preventing the emergence of a lost generation. To estimate the financial requirements for providing education, we have calculated the number of primary and secondary school-going children based on demographic data. The unit cost of education is derived from government expenditure per student at both the primary and secondary levels, expressed as a percentage of GDP per capita. The cost projections for education under two scenarios—no repatriation and gradual repatriation—are detailed in Tables 3 and 4 respectively.

Scenario 1: No Repatriation: Under the assumption that no repatriation takes place, the cost of education is projected to increase steadily from $125.58 million in 2024 to $171.80 million in 2028. This rise reflects the growing number of school-age children in the Rohingya community and the escalating costs of educational services due to inflation and higher resource demands. Without repatriation, the burden of funding Rohingya education will continue to grow, necessitating sustained financial commitments from the government of Bangladesh and international donors.

Scenario 2: Gradual Repatriation: In the repatriation scenario, where a portion of the Rohingya population returns to Myanmar each year, the cost of education still rises but at a slower rate, increasing from $120.38 million in 2024 to $132.17 million in 2028. This relatively moderate growth indicates a reduction in the number of students requiring education services in Bangladesh. However, successful repatriation depends on Myanmar’s ability to provide quality education and safe learning environments for returnees, which remains uncertain given the current political and security situation.

	2024	2025	2026	2027	2028
Population (no repatriation)	991,288	1,021,027	1,051,658	1,083,208	1,115,704
Proportion of children (5-17 years)	0.36	0.36	0.36	0.36	0.36
Number of children (5-17 years)	356,864	367,570	378,597	389,955	401,653
Proportion of children (3-5 years) (assumed)	0.07	0.07	0.07	0.07	0.07
GDP per capita (Current US$)	2,822	2,964	3,112	3,267	3,431
Government expenditure per student, primary (% of GDP per capita)	0.076	0.076	0.076	0.076	0.076
Proportion of primary school going children	0.61	0.61	0.61	0.61	0.61
Number of primary school going children	217,687	224,218	230,944	237,872	245,009
Per child primary education expenditure (US$)	215	225	236	248	261
Total primary education expenditure (US$)	46,694,373	50,499,965	54,615,712	59,066,892	63,880,844
Adjusted total primary education expenditure for refugees (US$) (1.3 times the preliminary cost)	60,702,685	65,649,954	71,000,425	76,786,960	83,045,097
Total cost for ECD (3-5 years) (30% of adjusted primary cost)	18,210,806	19,694,986	21,300,128	23,036,088	24,913,529
Government expenditure per student, secondary (% of GDP per capita)	0.099	0.099	0.099	0.099	0.099
Proportion of secondary school going children	0.39	0.39	0.39	0.39	0.39
Number of secondary school going children	139,177	143,352	147,653	152,082	156,645
Per child secondary education expenditure (US$)	279	293	308	323	340
Total secondary education expenditure (US$)	38,888,476	42,057,887	45,485,605	49,192,681	53,201,885
Adjusted total secondary education expenditure for refugees (US$) (1.2 times the preliminary cost)	46,666,171	50,469,464	54,582,726	59,031,218	63,842,262
Total education expenditure (Million US$)	125.58	135.81	146.88	158.85	171.80

Table 3: Cost of Education (No Repatriation) (Million US$)

Source: Author's projection

	2024	2025	2026	2027	2028
Population (no repatriation)	941,288	919,527	897,113	874,026	850,247
Proportion of children (5-17 years)	0.36	0.36	0.36	0.36	0.36
Number of children (5-17 years)	338,864	331,030	322,961	314,649	306,089
Proportion of children (3-5 years) (assumed)	0.07	0.07	0.07	0.07	0.07
GDP per capita (Current US$)	2,822	2,964	3,112	3,267	3,431
Government expenditure per student, primary (% of GDP per capita)	0.076	0.076	0.076	0.076	0.076
Proportion of primary school going children	0.61	0.61	0.61	0.61	0.61
Number of primary school going children	206,707	201,928	197,006	191,936	186,714
Per child primary education expenditure (US$)	215	225	236	248	261
Total primary education expenditure (US$)	44,339,137	45,479,778	46,589,732	47,660,315	48,681,826
Adjusted total primary education expenditure for refugees (US$) (1.3 times the preliminary cost)	57,640,878	59,123,712	60,566,652	61,958,409	63,286,374
Total cost for ECD (3-5 years) (30% of adjusted primary cost)	17,292,263	17,737,114	18,169,996	18,587,523	18,985,912
Government expenditure per student, secondary (% of GDP per capita)	0.099	0.099	0.099	0.099	0.099
Proportion of secondary school going children	0.40	0.40	0.40	0.40	0.40
Number of secondary school going children	135,546	132,412	129,184	125,860	122,436
Per child secondary education expenditure (US$)	279	293	308	323	340
Total secondary education expenditure (US$)	37,873,810	38,848,128	39,796,234	40,710,709	41,583,268
Adjusted total secondary education expenditure for refugees (US$) (1.2 times the preliminary cost)	45,448,572	46,617,754	47,755,481	48,852,851	49,899,922
Total education expenditure (Million US$)	120.38	123.48	126.49	129.40	132.17

Table 4: Cost of Education (Repatriation) (Million US$)

Source: Author's projection

1.5. Calculation of the Cost of Healthcare

Access to healthcare is a fundamental component of humanitarian assistance for the Rohingya FDMNs in Bangladesh. Given their vulnerable living conditions in refugee camps, healthcare services are crucial in preventing disease outbreaks, managing malnutrition, and addressing maternal and child health needs. To estimate the financial requirements for providing healthcare services to the Rohingya population, we have used data on current health expenditure per capita (in US dollars), adjusted for inflation, and applied it to the total Rohingya population. The cost estimates under the assumptions of no repatriation and gradual repatriation are presented in Table 5.

Scenario 1: No Repatriation: If repatriation does not take place, the total healthcare cost is projected to increase from $52.73 million in 2024 to $72.14 million in 2028. This steady rise is driven by two primary factors. Inflationary pressures raise per capita healthcare costs each year, from $53.19 in 2024 to $64.66 in 2028. Population growth leads to an increasing number of people requiring medical services. Under this scenario, Bangladesh will face growing financial pressure to sustain healthcare services for the Rohingya population. Without additional external funding, this burden could strain resources allocated to the healthcare system in host communities.

Scenario 2: Gradual Repatriation: Under a structured repatriation scenario, the total cost of healthcare still rises over time but at a significantly slower rate, increasing from $50.07 million in 2024 to $54.97 million in 2028. The decline in healthcare cost growth reflects a decreasing refugee population requiring medical assistance in Bangladesh. However, for this scenario to be feasible, Myanmar must ensure access to healthcare facilities and services for returning Rohingya, which remains uncertain due to ongoing political instability and concerns about healthcare infrastructure in Rakhine State.

	2024	2025	2026	2027	2028
Current health expenditure per capita (US$)	53.19	55.85	58.65	61.58	64.66
No repatriation (Million US$)	52.73	57.03	61.67	66.70	72.14
Repatriation (Million US$)	50.07	51.36	52.61	53.82	54.97

Table 5: Cost of Healthcare

Source: Author's projection

1.6. Calculation of the Cost of WASH

Access to safe water, sanitation, and hygiene (WASH) services is a fundamental requirement for maintaining public health and preventing the spread of diseases, particularly in densely populated refugee camps. The WASH infrastructure for the Rohingya FDMNs in Bangladesh requires ongoing investment in clean water supply, sanitation facilities, and hygiene promotion.

To estimate the financial requirements for providing WASH services, we have used the unit cost of WASH per capita per year[5], adjusted for inflation, and applied it to the total Rohingya population. The cost projections under two scenarios—no repatriation and gradual repatriation—are presented in Table 6.

Scenario 1: No Repatriation: In the no-repatriation scenario, the cost of WASH services is expected to increase from $8.33 million in 2024 to $11.39 million in 2028. The primary factors driving this upward trend include inflationary pressures, which increase the per capita WASH cost from $8.40 in 2024 to $10.21 in 2028. Also, population growth raises the total number of individuals requiring access to clean water and sanitation facilities. The steady increase in costs highlights the long-term financial burden of sustaining WASH services in the camps, requiring continuous support from the Bangladesh government and international donors.

Scenario 2: Gradual Repatriation: Under the repatriation scenario, where a portion of the Rohingya population returns to Myanmar annually, the total cost of WASH services still rises over time but at a slower rate, increasing from $7.91 million in 2024 to $8.68 million in 2028. This lower cost trajectory reflects a declining refugee population in Bangladesh, which reduces the demand for WASH infrastructure and maintenance. However, repatriation is contingent on Myanmar's ability to provide adequate water and sanitation facilities in Rakhine State, which remains uncertain given the ongoing political instability.

	2024	2025	2026	2027	2028
WASH cost per person (US$)	8.40	8.82	9.26	9.72	10.21
No repatriation (Million US$)	8.33	9.01	9.74	10.53	11.39
Repatriation (Million US$)	7.91	8.11	8.31	8.50	8.68

Table 6: Cost of WASH

Source: Author's projection

There are growing concerns regarding the underinvestment in public expenditures on health and Water, Sanitation, and Hygiene (WASH) services for the Rohingya FDMNs. This raises the question of whether these essential services will continue to be provided by UN agencies and non-governmental organizations (NGOs) or if the Government of Bangladesh will assume responsibility for delivering these services. Ensuring continuous and adequate support is crucial to maintaining the well-being and health standards of the Rohingya population.

[5] *See Wash Alliance (2016).*

1.7. Total Resources Requirement

The overall financial requirements for sustaining essential services for the Rohingya FDMNs in Bangladesh are substantial. These costs stem from providing basic needs (food, clothing, shelter), education, healthcare, and water, sanitation, and hygiene (WASH) services. The resource estimations for the period 2024-2028, under two scenarios: no repatriation and gradual repatriation are presented in Tables 7 and 8 respectively.

Scenario 1: No Repatriation: Under the assumption that no repatriation occurs, the financial burden steadily increases, requiring a total of $3,707.08 million (or $3.71 billion) over five years. The annual cost grows from $676.01 million in 2024 to $810.65 million in 2028, reflecting rising expenditures due to inflation and an increasing population in need of assistance.

Scenario 2: Gradual Repatriation: If repatriation proceeds at a steady pace, the financial requirements remain significant but gradually decline. The total cost over five years in this scenario amounts to $3,158.25 million (or $3.16 billion), approximately 15% lower than the no-repatriation scenario. Annual expenditures decrease from $643.16 million in 2024 to $619.15 million in 2028, as fewer people require services in Bangladesh.

	2024	2025	2026	2027	2028	Total (2024-2028)
Basic cost	427.92	440.76	453.98	467.60	481.63	2,271.88
Education	125.58	135.81	146.88	158.85	171.80	738.93
Health	52.73	57.03	61.67	66.70	72.14	310.27
WASH	8.33	9.01	9.74	10.53	11.39	49.00
Sub-Total	614.55	642.60	672.28	703.69	736.96	3,370.08
Protection/GBV/CP	61.46	64.26	67.23	70.37	73.70	337.01
TOTAL	**676.01**	**706.86**	**739.50**	**774.06**	**810.65**	**3,707.08**

Note: In line with the JRP, we have included Protection/GBV/CP as a 10% additional cost.

Table 7: Resource Requirements Under No Repatriation (Million US$)

Source: Author's projection

	2024	2025	2026	2027	2028	Total (2024-2028)
Basic cost	406.33	396.94	387.26	377.30	367.03	1,934.87
Education	120.38	123.48	126.49	129.40	132.17	631.92
Health	50.07	51.36	52.61	53.82	54.97	262.83
WASH	7.91	8.11	8.31	8.50	8.68	41.51
Sub-Total	584.69	579.89	574.68	569.02	562.86	2,871.13
Protection/GBV/CP	58.47	57.99	57.47	56.90	56.29	287.11
TOTAL	**643.16**	**637.88**	**632.14**	**625.92**	**619.15**	**3,158.25**

Note: In line with the JRP, we have included Protection/GBV/CP as a 10% additional cost.

Table 8: Resource Requirements Under Repatriation (Million US$)

Source: Author's projection

The results suggest that a sustained financial commitment is essential: Even in the best-case scenario (gradual repatriation), Bangladesh and international donors will need to mobilize over $3.16 billion over the next five years to ensure the well-being of the Rohingya population. Without a clear, long-term funding strategy, service disruptions could severely impact refugee welfare.

The total cost difference between the two scenarios is $548.83 million, highlighting the additional financial strain Bangladesh faces if repatriation does not occur. This increasing burden underscores the need for international burden-sharing through donor commitments and global humanitarian funding.

Given the magnitude of resource requirements, efficiency improvements in service delivery—such as localized food production, community-led education models, preventive healthcare, and decentralized WASH solutions—could help optimize spending.

The findings from Tables 7 and 8 reinforce the magnitude of financial and policy challenges associated with supporting the Rohingya FDMN population. While gradual repatriation could reduce the long-term fiscal burden, immediate planning is required to secure sustainable funding, enhance service efficiency, and prepare for potential long-term humanitarian assistance. A coordinated approach involving the Government of Bangladesh, international donors, and humanitarian organisations will be crucial in navigating this complex and evolving crisis.

CHAPTER 2

Who Shares **the Cost-Burden Under Different Scenarios?**

2.1. Business-as-Usual Scenario of Financing Resources for Rohingya FDMNs

Under the Business-as-Usual (BAU) Scenario, the financial and policy framework for supporting the Rohingya FDMNs remains largely unchanged, with minimal repatriation, continued donor dependency, and limited economic integration. This scenario reflects the current humanitarian response model, where immediate relief efforts persist, but sustainable long-term solutions remain uncertain. Key Features of the Business-as-Usual Scenario:

1. Minimal Repatriation

- The pace of repatriation remains extremely slow, with only a small fraction of Rohingya refugees returning to Myanmar.
- The political and security conditions in Myanmar do not improve sufficiently to enable large-scale, voluntary, and dignified repatriation.
- Many refugees remain in Bangladesh indefinitely, increasing the long-term financial burden on the government and international donors.

2. Limited Informal Job Opportunities

- The Rohingya continue to operate within a constrained livelihood framework, where most economic activities occur in the informal sector.
- Given movement restrictions and the lack of legal work permits, employment opportunities remain limited, primarily in daily labour, small-scale trade, or illicit activities in the shadow economy.
- Skill development programs by NGOs and humanitarian agencies provide basic livelihood training, but the lack of formal employment pathways means economic self-sufficiency remains unattainable for most refugees.

3. Continued Donor Dependency and Government Support for Public Infrastructure

- The Rohingya remain heavily reliant on donor funding for basic needs, including food, shelter, healthcare, and education.
- Donors, including international agencies and foreign governments, continue to provide substantial funding, but there is growing donor fatigue, increasing the uncertainty of future funding streams.
- While the Bangladesh government does not directly fund refugee sustenance, it remains responsible for developing and maintaining public infrastructure, such as roads, drainage systems, and WASH facilities in and around the camps.
- The growing costs of maintaining this infrastructure place additional fiscal pressure on the government, especially as donor support fluctuates.

4. Social Cohesion and Increasing Government Involvement in Managing Tensions

- The prolonged refugee situation strains relations between Rohingya and host communities, particularly in Cox's Bazar and Teknaf, where competition for resources, land, and job opportunities fuels resentment.
- The Bangladesh government is compelled to invest more in managing social cohesion and implementing programs to prevent tensions from escalating into broader conflicts.
- There is a risk that localized conflicts over land, employment, and aid distribution could lead to larger security challenges if not addressed through proactive social policies.

Under this scenario, with respect to donor funding, the uncertainty will continue and there will be growing fatigue. The Rohingya humanitarian response has received significant financial contributions from international donors, including the United Nations (UN), the European Union (EU), the United States (US), and other bilateral and multilateral donors. However, after years of funding humanitarian aid, donor fatigue is becoming evident, leading to funding shortfalls for essential services such as food, healthcare, and education. If donor commitments decline without alternative financing mechanisms, the living conditions of Rohingya refugees could deteriorate, increasing social instability and security risks. In the absence of a long-term economic integration plan, the financial burden will continue to be borne by Bangladesh and the global humanitarian community.

Under this scenario, many Rohingya engage in low-paying, informal work, such as day labour in agriculture, construction, fishing, and small-scale trade, but they lack legal recognition in the labour market. NGOs and UN agencies provide stipends to Rohingya volunteers, helping them sustain their livelihoods, but the long-term impact of these stipends on economic self-sufficiency remains unclear. While official policies restricting Rohingya movement remain unchanged, in practice, many refugees are informally working beyond the camps due to loosening enforcement of mobility restrictions. The lack of formal job opportunities forces many Rohingya to accept exploitative working conditions, with little to no legal protection, making them vulnerable to abuse and extortion.

There are, however, issues related to the security and costs of exclusion, discussed as follows:

1. Rising Security Costs

- The absence of economic opportunities and legal recognition forces many Rohingya to adopt risky coping mechanisms, increasing the likelihood of criminal activities, human trafficking, and drug smuggling in the region.
- Without structured interventions, the cost of security management in and around the refugee camps will continue to rise, requiring increased government spending on policing, border security, and surveillance.
- Law enforcement agencies struggle to prevent the emergence of criminal networks, which exploit vulnerable refugees and undermine local stability.

2. The Cost of Exclusion

- The lack of economic integration pushes the Rohingya into the margins of society, leaving them highly vulnerable to exploitation, child labour, forced marriages, and illicit activities.
- Exclusion from formal job markets means poverty and desperation persist, leading to greater humanitarian needs and higher long-term costs for both donors and the government.
- Many Rohingya face daily threats, extortion, and discrimination, further deepening their sense of marginalization and hopelessness.
- If exclusionary policies continue, social unrest, crime, and radicalization risks may rise, posing a broader security challenge for both Bangladesh and the region.

The business-as-usual scenario presents significant financial, social, and security challenges for both the Rohingya refugees and the Bangladesh government. Minimal repatriation, continued donor dependency, and limited economic inclusion mean that the current approach is financially unsustainable and socially destabilizing in the long run.

While short-term humanitarian assistance remains critical, the situation demands a shift in policy towards:

1. Exploring sustainable financing models, such as development-based assistance rather than purely humanitarian aid.
2. Introducing structured livelihood programs that allow Rohingya to contribute productively to the economy.
3. Strengthening security and law enforcement strategies to prevent criminal networks from exploiting vulnerable populations.
4. Fostering diplomatic efforts to accelerate repatriation in a safe and dignified manner while ensuring Myanmar's accountability.

Without proactive policy adjustments, the costs of inaction will continue to rise, exacerbating economic strain, social tensions, and security threats for Bangladesh and the international community.

2.2. Pessimist Scenario: The Implications of Declining External Support for Rohingya Refugees

The pessimistic scenario envisions a worst-case trajectory for the Rohingya refugee crisis, where external donor support declines significantly, leaving the Bangladeshi government with the burden of sustaining the refugee population. The economic, social, and security consequences of this scenario could be severe, leading to heightened instability, increased crime, and potential regional security threats.

1. Declining External Support and Increased Government Burden

- Over the past several years, international donors and humanitarian agencies have played a critical role in providing food, healthcare, education, and shelter to the Rohingya refugees in Bangladesh.
- However, donor fatigue and shifting global priorities may reduce financial commitments, significantly cutting aid for basic necessities such as food rations, medical services, and WASH facilities.
- If external funding declines sharply, the Bangladeshi government would face immense fiscal pressure, as it would be forced to divert domestic resources to cover critical gaps.
- Given Bangladesh's own economic challenges, including high inflation, public debt concerns, and social sector needs, sustaining nearly one million refugees without international support would be financially unsustainable.

Potential Consequences:

- Drastic cuts in food assistance could lead to severe malnutrition, hunger, and increased mortality rates among refugees.
- Health services could deteriorate, increasing the spread of infectious diseases, maternal mortality, and child malnutrition.
- Tensions could rise between Rohingya and local host communities as refugees become more desperate for resources, fueling social unrest.

2. Economic Desperation and Expansion of the Shadow Economy

- Without external assistance and legal livelihood opportunities, refugees would have no choice but to participate in illicit and informal economic activities.
- The shadow economy—which includes unregistered labour, smuggling, illicit trade, and underground employment—would expand as refugees seek alternative ways to survive.
- Increased competition with host communities for informal jobs, especially in sectors like fishing, agriculture, and day labour, could escalate economic tensions and hostility.
- Local businesses may exploit Rohingya labour due to their vulnerable status, leading to wage suppression, poor working conditions, and human rights abuses.

Potential Consequences:

- Rise in human trafficking networks, with more Rohingya—especially women and children—falling victim to forced labour and sex trafficking.
- Strained relationships between host communities and Rohingya refugees, increasing the likelihood of violent clashes over employment opportunities.
- Greater engagement in illegal activities, such as the drug trade (Yaba smuggling), further exacerbating security risks in the region.

3. Escalation of Crime and Violence within Refugee Camps

- As resources become increasingly scarce, competition for aid, employment, and basic survival needs will fuel internal conflicts within the refugee camps.
- The deterioration of law and order could lead to warlordism, where armed gangs, criminal groups, or extremist elements take control of parts of the camps.
- Inter-group rivalries within the refugee population—whether based on ethnicity, political factions, or criminal alliances—could erupt into open violence.
- In the absence of strong security enforcement, criminal organizations could expand their operations, including drug smuggling, arms trafficking, and extortion.

Potential Consequences:

- Gang warfare and assassinations among rival Rohingya factions, leading to increased fatalities.
- More frequent violent clashes between refugees and law enforcement agencies, making security management increasingly challenging.
- Radicalization risks, where desperate and alienated youth could become targets for militant recruitment, posing long-term security threats beyond Bangladesh.

4. Refugee Spillover and Regional Instability

- Facing worsening conditions, Rohingya refugees may attempt to leave Bangladesh, either by moving deeper into the country or embarking on perilous migration journeys to neighboring nations.
- Large numbers of refugees attempting to reach urban centers like Dhaka and Chattogram could create unprecedented urban pressures, leading to increased homelessness, informal settlements, and social unrest.
- Many Rohingya may also attempt dangerous maritime journeys towards Malaysia, Indonesia, Thailand, or India, exacerbating human trafficking, maritime security risks, and regional diplomatic tensions.
- The Indo-Pacific region could face a destabilizing refugee crisis, leading to increased border tensions, stricter immigration controls, and possible conflicts between nations over refugee policies.

Potential Consequences:

- Increased cases of refugee boats capsizing, leading to mass drownings and humanitarian tragedies in the Bay of Bengal and Andaman Sea.
- Tighter border enforcement by India, Myanmar, and Thailand, possibly leading to violent pushbacks of Rohingya refugees.
- Political tensions between Bangladesh and neighboring countries, as Bangladesh struggles to contain mass refugee movements across borders.
- Geopolitical ramifications, as countries in the Indo-Pacific face heightened pressure to address a worsening humanitarian crisis.

The Pessimist Scenario presents a high-risk trajectory that could result in a multi-dimensional crisis—humanitarian, economic, social, and security-related—for Bangladesh and the broader region. If external donor funding continues to decline sharply, and no alternative policies are introduced to manage the crisis, the situation could quickly spiral into:

1. Mass food and health insecurity, leading to worsening humanitarian conditions.
2. A significant rise in criminal activities, both within and outside the refugee camps.
3. Potential radicalization and security threats, creating long-term instability.
4. Uncontrollable refugee movement, leading to regional diplomatic challenges and wider Indo-Pacific security concerns.

2.3. Optimist Scenario: Pathways to Sustainable Refugee Livelihoods and Inclusive Development

The Optimist Scenario envisions a future where Rohingya refugees in Bangladesh can access dignified economic opportunities that enable them to meet most of their essential needs. Rather than being entirely dependent on humanitarian assistance, refugees would participate in productive activities, contributing to the local economy in a way that benefits both refugee and host communities. This scenario relies on sustained donor engagement, proactive policy measures, and strategic investments to create an enabling environment where self-reliance, social cohesion, and economic development can thrive.

1. Economic Empowerment: Access to Dignified Livelihoods

- In this scenario, refugees are granted structured access to employment and livelihood programs, allowing them to earn incomes that cover their essential needs.
- Opportunities are developed within a regulated framework, ensuring that refugees do not displace local workers but instead complement the labour market with their skills and contributions.
- Skills development programs are expanded, equipping refugees with market-relevant skills in sectors such as:
  - Agriculture (contract farming, poultry, fisheries)
  - Handicrafts and textiles (leveraging skills from the RMG sector)
  - Construction and infrastructure work
  - Services sector (hospitality, retail, transport, and IT-enabled services)
- Social enterprises and microfinance programs facilitate small business development among refugees, promoting entrepreneurship and self-sufficiency.

Potential Benefits:

- Refugees transition from aid dependence to self-reliance, reducing the financial burden on donors and the government.
- Local economies grow, as refugee earnings increase consumption, demand, and business activity in host communities.
- Social tensions ease, as economic inclusion fosters a sense of shared prosperity rather than zero-sum competition.

2. Market Expansion and Host Community Benefits

- Investments by donors, humanitarian agencies, and development organizations help expand the local market, benefiting both refugees and host communities.
- Infrastructure projects, such as roads, markets, and storage facilities, enhance trade, connectivity, and access to goods and services.
- Local businesses and cooperatives engage both refugees and host communities, fostering economic interdependence and reducing tensions.
- Sustainable interventions ensure that host communities are not left behind—for example:
  - Investment in agricultural productivity, benefiting both local farmers and refugee workers.
  - Microcredit programs for host and refugee entrepreneurs alike.
  - Public-private partnerships (PPPs) that create jobs for both groups.

Potential Benefits:

- Increased economic activity in Cox's Bazar and surrounding areas, leading to higher incomes and tax revenues for Bangladesh.
- Stronger host-refugee relations, as communities see refugees as economic contributors rather than burdens.
- Reduced informal labour exploitation, as formal employment pathways are introduced, ensuring fair wages and legal protection.

3. Provision of Essential Services by Public and Private Entities

- Depending on competitive advantages and available resources, various stakeholders—including NGOs, private sector players, and government agencies—step in to deliver key social services to refugees and host communities.

Education:

- Refugee children gain access to quality education, preparing them for future opportunities in Bangladesh or their home country.
- Vocational training and digital literacy programs equip refugees with job-relevant skills.
- Private and non-governmental initiatives help expand secondary and higher education opportunities.

Healthcare:

- Investments in health infrastructure ensure that both refugees and local residents receive adequate care.
- NGOs and private-sector healthcare providers complement public services, reducing strain on government resources.
- Preventive healthcare programs reduce disease outbreaks, lowering long-term public health costs.

Water, Sanitation, and Hygiene (WASH):

- Upgraded WASH facilities improve public health outcomes for refugees and locals alike.
- Sustainable water and sanitation solutions prevent disease outbreaks and environmental degradation.

Potential Benefits:

- Long-term human capital development, as refugees receive education, healthcare, and skills training.
- Stronger service delivery systems, benefiting both host and refugee populations.
- More efficient aid utilization, as a mix of public, private, and NGO efforts optimizes resource allocation.

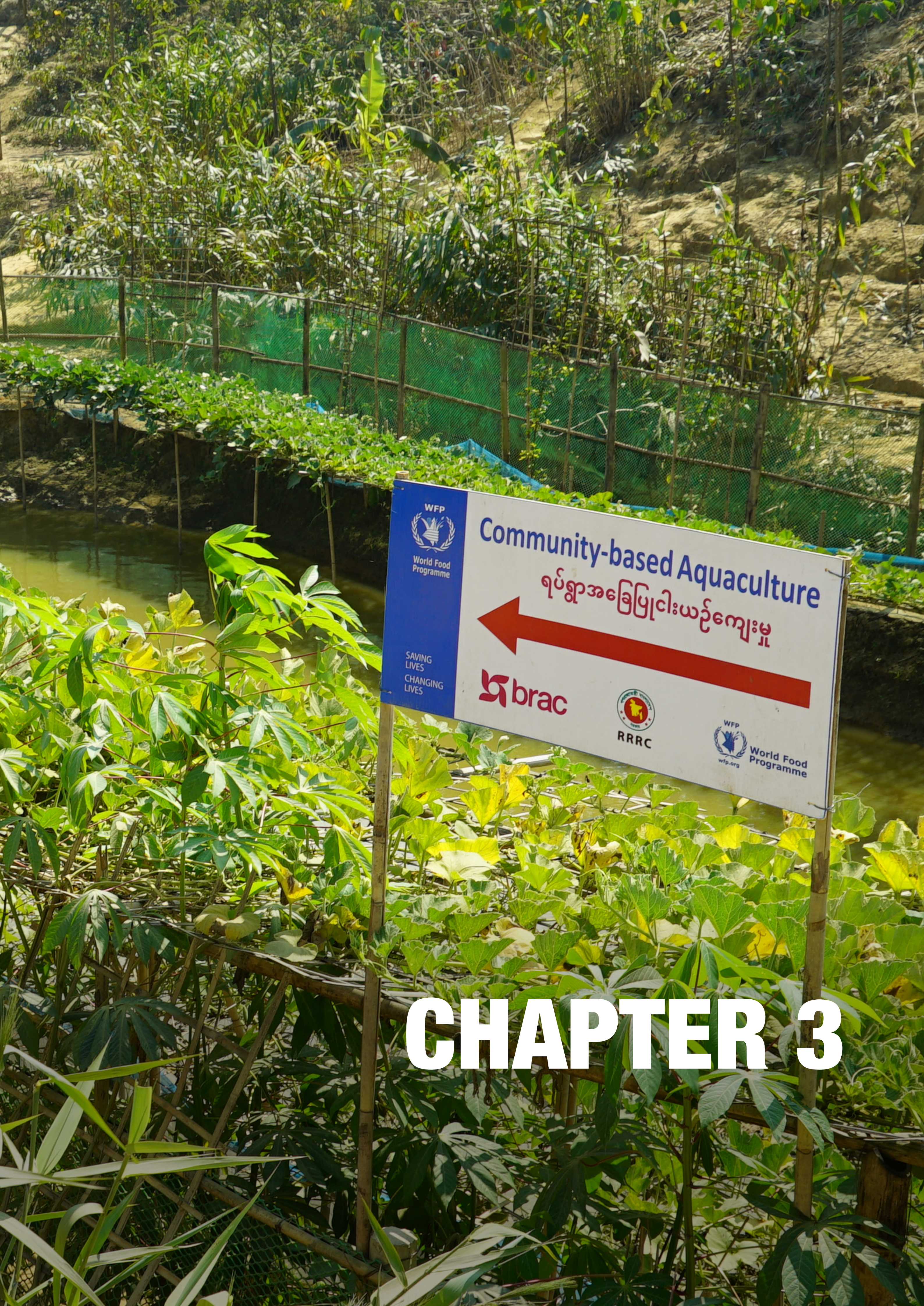
4. Continued Donor Engagement and Bridging the Earnings Gap

- While refugee livelihoods improve over time, their earnings may not be sufficient in the initial years to cover all essential needs.
- Donors and humanitarian organizations continue to provide targeted assistance to bridge this gap, ensuring basic food security, healthcare access, and emergency support.
- International funding mechanisms, such as long-term development financing, complement humanitarian aid, ensuring sustained support for integration efforts.
- Bangladesh strengthens diplomatic efforts to advocate for continued donor commitments, leveraging support from the UN, World Bank, Asian Development Bank (ADB), and bilateral partners.

Potential Benefits:

- A gradual transition from full aid dependency to partial self-reliance, reducing long-term financial strain.
- Increased international goodwill and diplomatic support for Bangladesh's efforts to manage the crisis.
- A model for refugee integration that could inform the global best practices for other displacement crises.

The Optimist Scenario presents a transformative vision where economic empowerment, market expansion, and strategic investments create sustainable solutions for both refugees and host communities. While full repatriation remains the ultimate goal, this approach ensures that, until they return home, Rohingya refugees can live with dignity, contribute productively, and coexist peacefully with their hosts. By implementing proactive policies and fostering a collaborative approach, Bangladesh and the international community can turn the refugee crisis into an opportunity—one that upholds human dignity, strengthens regional stability and contributes to shared prosperity.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CHAPTER 3

In Exploration of **Strategies**

3.1. Generating New Jobs for Sustainable Livelihoods for Rohingya FDMNs

Figure 3 illustrates an integrated economic modelling framework designed to estimate the investment required to generate employment for 200,000 individuals, particularly in the context of accommodating 1 million Rohingya FDMNs in greater Chattogram. This framework consists of four interconnected components:

1. **Investment Shocks:** The process begins by determining the scale of investment needed, leveraging secondary data sources such as investment figures from relevant authorities (e.g., BEZA and BHTPA). This serves as the input for stimulating job creation.
2. **Economic Assessment Model (SAM Model):** The Social Accounting Matrix (SAM) model is used to assess how investment flows through different sectors of the economy. It captures the interdependence between various economic actors and estimates the direct and indirect effects of investment on economic output.
3. **Employment Module:** This module incorporates labour market data, including employment elasticities, wage structures, and sector-specific job multipliers, to translate economic output changes into employment impacts.
4. **Employment Impacts:** The integrated model links investment shocks to employment outcomes by simulating how different levels of investment generate jobs. It uses the SAM-employment model to quantify the employment effects, thereby informing policymakers about the investment requirements for job creation.

This structured approach ensures a systematic estimation of the investment required to generate 200,000 jobs, contributing to evidence-based policy formulation for economic integration and sustainable livelihoods for the affected population.

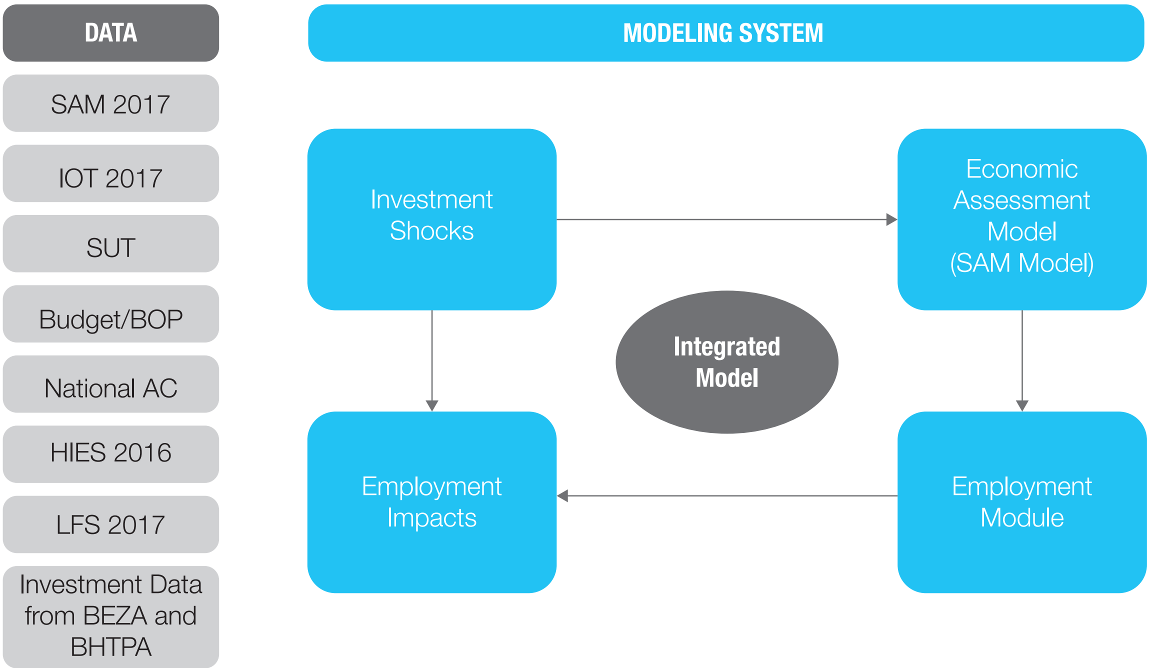


Figure 3: Economic Modeling Framework

Source: Author

A SAM is an accounting framework that assigns numbers to the income and expenditures within the circular flow of the economy (Table 9) [6]. It is represented as a square matrix where each row and column is termed an ‘account’. This matrix provides a comprehensive snapshot of the economic activities and interdependencies between different sectors and agents. Each cell in the matrix represents a financial flow from a column account to a row account. For instance, private consumption spending is depicted as a flow of funds from households to commodity markets. This is recorded in the household column and the commodity row, adhering to double-entry accounting principles. Consequently, for each account in the SAM, total revenue equates to total expenditure, ensuring a balanced and accurate representation of economic transactions. The SAM model is instrumental in capturing the intricate web of economic interactions and dependencies. It highlights how investments in one sector can ripple through the economy, affecting other sectors and ultimately influencing overall economic output and employment. By providing detailed insights into these relationships, the SAM model serves as a valuable tool

[6] *See Pyatt and Round (1985).*

for policymakers, allowing them to make informed decisions about investment allocations and their potential impacts on job creation and economic growth. Furthermore, by integrating the SAM model with employment data, the framework can translate economic output changes into tangible employment impacts. This holistic approach ensures that the investment required to generate 200,000 jobs is systematically estimated, considering both direct and indirect effects on the economy. The model also accounts for the costs associated with skill development and market infrastructure, ensuring that the generated jobs are sustainable and contribute to long-term economic stability. In essence, the SAM-based integrated economic modelling framework provides a robust and systematic method for estimating the investment needed to create sustainable livelihoods for the Rohingya FDMNs and the host communities, ultimately aiding in evidence-based policy formulation and economic integration.

SAM Accounts	Production Account			Institution Account					
				Current Accounts				Capital Accuount	
	Activity	Commodity	Factor	Household	Government	Enterprise	Row		Total
Activity (AC)		Domestic output							Total Activity Use
Commodity (CM)	Input-output			Private Consumption	Public Consumption		Exports	Investment	Total Commodity Use
Factor (FP)	Distribution of value added								Total Factor Income
Household (HH)			Redistribution of value added (Labour and capital)	Inter-Household Transfers	Government Transfers	Enterprises Transfers	Remittances		Total Household Income
Government (GoV)	Value added Tax	Indirect Tax (Production and Import)	Redistribution of Capital value added	Income Tax		Corporation Tax			Total Government Income
Enterprise (ENT)			Redistribution of Capital value added						Total Enterprise Income
Rest of the World (RoW)		Intermadiate import		Imports of Consumption Goods				Imports Of Capital Goods	Total Row Payments
Capital (CAP)				Household Savings	Government Savings	Enterprise Savings	Foreign Savings	Flow of Funds	Total Savings
Total Supply (TSS)	Domestic Output	Commodity Supply	Payments of Factors of Production	Outlays by Household	Outlays by Government	Outlays by Enterprises	RoW Recceipts	Investment	

Table 9: SAM Data Framework

Source: Author

It is found that to generate 200,000 direct (decent) jobs, which will provide sustainable livelihood support for employed people, keeping them above the poverty line income, the total size of the investment over the next five years would need to be US$ 3.3 billion. This substantial investment will be channelled into various sectors, facilitating the overall economic growth and stability of the region. The funds will be utilized not only to create jobs but also to improve the necessary infrastructure and skill development programs, ensuring that these jobs are sustainable and contribute to the long-term economic stability of the local communities. Moreover, this investment will be strategically allocated to sectors with high job creation potential, such as food processing, the apparel industry, and other labour-intensive industries (Table 10). By focusing on these areas, investment will foster a more inclusive economic environment, providing employment opportunities to a wider demographic, including marginalized groups and informal sector workers. This comprehensive approach aims to build a resilient economy that can support both the Rohingya FDMNs and the host communities, ultimately promoting social cohesion and economic integration. In addition to direct job creation, this investment is projected to have a significant multiplier effect, generating around 1 million indirect jobs through backward and forward linkages, primarily in the informal sectors. These indirect jobs will further enhance the economic prospects of the host communities, enabling them to benefit from increased economic activities and improved livelihoods. Therefore, over the next five years, the annual average investment requirement would be US$ 660 million, and the annual average direct job creation would be 40,000. Such investment will lead to an annual average rise in GDP of 0.51% over the next five years. It is assumed that the costs of skill development and the development of market infrastructure are included in these investment figures. Also, as most of these jobs are likely to be created in the SEZs and designated areas, we can assume that these jobs will be green.

Sectors	Number of new jobs	% of new jobs
Food Processing	39,068	19.5
Apparel Industry	27,560	13.8
Furniture, Paper, Printing and Packaging Industry	19,839	9.9
Pharmaceuticals and Chemicals	9,969	5.0
Plastic Industry	32,444	16.2
Steel Industry	1,847	0.9
Automotive Industry	1,297	0.6
Construction	11,710	5.9
Power Industry	7,527	3.8
Ship Building	12,193	6.1
Information Technology	979	0.5
Others	35,568	17.8
	200,000	100.0

Table 10: Sectoral Distribution of New Jobs

Source: SAM Simulation

Such an extensive investment is feasible as there is already a committed investment of US$ 3.9 billion in SEZs (Table 11). This substantial financial commitment underscores the confidence investors have in the potential growth and development of these zones. The Food Processing sector has attracted the highest amount of investment, accounting for 46.68% of the total. This dominance highlights the sector's critical role in the economy, driven by the increasing demand for processed food products both domestically and internationally. Following closely is the Automotive Industry, which has secured 9.55% of the committed investment. This sector's growth is fueled by the rising demand for vehicles and automotive components, as well as advancements in technology and manufacturing processes. The Power Industry, with a 9.00% share of the investment, reflects the ongoing efforts to enhance energy production and distribution infrastructure, essential for supporting industrial and economic activities within the SEZs. Additionally, the Plastic Industry has garnered 6.14% of the investment, indicating its significance in providing materials for various manufacturing processes. The remaining investment is distributed across other sectors, each contributing to the diverse and dynamic economic landscape of the SEZs. The strategic allocation of investment across these sectors ensures a balanced and sustainable growth trajectory for the Special Economic Zones.

Area	Broad Sector	Sectoral Investment (Million US$)	Percent share
SEZs	Food Processing	1845.14	46.68
	Apparel Industry	124.98	3.16
	Furniture, Paper, Printing and Packaging Industry	79.32	2.01
	Pharmaceuticals and Chemicals	114.46	2.90
	Plastic Industry	242.55	6.14
	Steel Industry	176.57	4.47
	Automotive Industry	377.59	9.55
	Construction	221.14	5.59
	Power Industry	355.60	9.00
	Ship Building	209.70	5.30
	Information Technology	127.09	3.21
	Others	78.88	2.00
	Total	**3953.02**	**100.00**

Table 11: Committed Investment in the SEZs

Source: Author's compilation from BEZA

There is no input-output table available for Cox's Bazar. At the same time, the kind of household survey data required to show the breakdown of households into Rohingya and host communities, their consumption, and labour market participation is not available. Therefore, in the absence of any Social Accounting Matrix (SAM) for Cox's Bazar, the national-level SAM has been used for the modelling exercise. The amount of investment required, indicated by the modelling exercise, is, therefore, an estimate. Given the current investment scenario in Bangladesh, it is understandable that mobilizing such an amount of resources for investment in the productive sectors would be challenging. This would require significant improvements in the investment environment and the swift operationalization of some Special Economic Zones (SEZs) or designated investment areas.

However, the results from the modelling exercise show that there are significant positive impacts on employment prospects for both the Rohingya and host communities if such investments are made. The modelling exercise suggests potential benefits such as increased job creation, improved economic activities, and heightened social cohesion. Therefore, the results from the modelling exercise can help provide support to policy decisions by highlighting the economic benefits of targeted investments.

In addition, these investments could lead to the development of infrastructure, improved access to essential services, and enhanced quality of life for the residents of Cox's Bazar. This underscores the importance of ensuring that any investment plans are inclusive and consider the needs and potentials of both the Rohingya and the host communities. Effective implementation of these investment strategies would pave the way for sustainable economic growth and stability in the region.

3.2. Investment in Skills Among the Rohingya FDMNs

The Government of Bangladesh-United Nations Framework on Skills Development for Rohingya Refugees/FDMNs and Host Communities, endorsed in August 2022, aims to create sustainable livelihood pathways. The key goals include:

1. Enhancing Skills for Future Livelihoods: The program provides transferable skills training aligned with the Myanmar Curriculum, preparing Rohingya refugees for potential repatriation and reintegration in Rakhine State.
2. Expanding Livelihood Opportunities: Beneficiaries, including host community members, will receive access to livelihood programs, helping to improve economic conditions and reduce dependency on aid.
3. Fostering Sustainable Repatriation: Skill-building efforts ensure that Rohingya FDMNs have the necessary capacities to engage in productive economic activities upon their return to Myanmar when conditions allow.

Figure 4 presents key statistics related to the Livelihoods and Skills Development Sector in 2023, highlighting the scale of need, targeted beneficiaries, and required funding. The figures underscore the necessity of investing in skills development among Rohingya FDMNs and host communities to enhance self-reliance and facilitate eventual voluntary repatriation. Key highlights from Figure 4 are as follows:

- USD 36.6 million is required to implement livelihoods and skills development programs.
- 44 partners are involved in delivering these initiatives, ensuring a collaborative approach.
- 694,445 people are in need, emphasizing the large-scale humanitarian and developmental challenge.
- 88,312 people are targeted for skills development, a subset of the overall need.
- 57,009 Rohingya refugees/FDMNs are directly targeted, aligning with the goal of equipping them with skills relevant to livelihood opportunities in Rakhine State, Myanmar.
- 31,303 members of the host community are also included, ensuring that the program supports both displaced populations and local Bangladeshis affected by the refugee crisis.

Figure 4: Key Figures of The Livelihoods and Skills Development in 2023

Source: https://rohingyaresponse.org/sectors/coxs-bazar/livelihoods-and-skills-development/

The substantial funding requirement of USD 36.6 million reflects the scale of the intervention needed. Investing in skills among Rohingya FDMNs and host communities is essential to reduce vulnerability, create economic opportunities, and support social cohesion. Without proper skill development, the Rohingya community may remain dependent on humanitarian assistance, limiting prospects for sustainable repatriation.

Effective operationalization of the Livelihoods and Skills Development Sector is crucial for economic self-sufficiency among Rohingya FDMNs and host communities. Ensuring adequate funding and coordination among partners will be key to the program's success.

3.3. Need for Integration and Social Cohesion

We can't achieve our desired outcomes without integration. The cost of social cohesion may need to be factored in. Even if we create 100,000 jobs or 50,000 jobs, this will still create a lot of issues. Cox's Bazar is not a large region. Transportation costs and food prices will likely increase.

Integration and social cohesion are crucial elements in addressing the challenges faced by both the Rohingya refugees and the host communities in Cox's Bazar. As we strive to provide economic opportunities and enhance the livelihoods of these populations, it is essential to recognize the potential impact of increased competition for resources and employment.

The region of Cox's Bazar is relatively small, and the influx of refugees has already put significant pressure on local infrastructure and resources. Creating tens of thousands of jobs may alleviate some economic burdens, but it could also lead to unintended consequences, such as rising transportation costs and food prices. These effects could exacerbate existing tensions between the host communities and the Rohingya refugees.

Furthermore, it is essential to explore existing tools, plans, and policies led by the Government of Bangladesh, and consider how the Rohingya can play a role in existing government initiatives without raising mobility or integration issues. By aligning our efforts with the government's strategies, we can ensure a more coordinated and sustainable approach to addressing the needs of both populations.

In conclusion, fostering social cohesion and integration is vital for the success of our initiatives in Cox's Bazar. We must consider the broader implications of our actions and work collaboratively with the government and other stakeholders to create a balanced and inclusive environment that benefits both the Rohingya refugees and the host communities.

3.4. Current Challenges

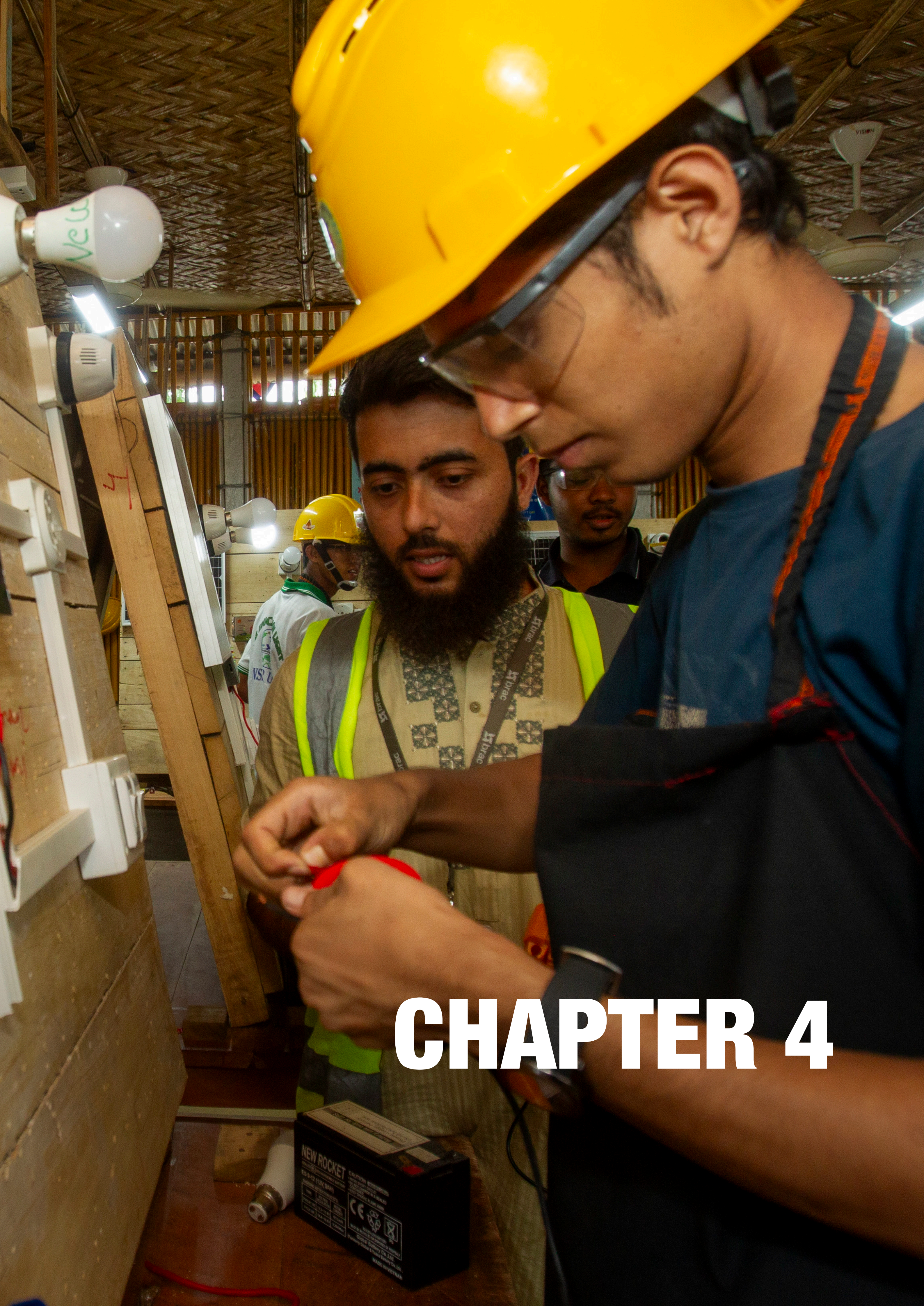
At present, the Rohingya FDMNs in the camps are engaged in various economic activities which are not officially recognized. They work informally in different sectors, both within the camps and in the surrounding local communities. Their economic activities extend beyond the camps into Cox's Bazar and other areas outside the immediate vicinity. These activities primarily fall into the agricultural and services sectors.

In agriculture, Rohingya families are involved in crop cultivation, livestock rearing, and fishing. These activities, while providing some level of sustenance, are not formally acknowledged, adding layers of uncertainty and insecurity to their livelihoods. Informal economic engagement also includes construction, trade, transport, hotel and restaurant services, and various other smaller-scale services. Some Rohingya families benefit from remittances sent by relatives abroad, which helps them manage their daily needs.

The unrecognized economic activities of the Rohingya FDMNs have created significant tensions within the host communities. The informal nature of their work often leads to conflicts and misunderstandings. Furthermore, the presence of the Rohingya in the local job market has negatively impacted the daily wages of Bangladeshi workers, creating an oversupply of labour that drives wages down. This situation is further compounded by illegal activities, such as drug smuggling, which have escalated as a result of the unregulated economic environment.

The host communities themselves face a scarcity of formal employment opportunities, with various sectors being unevenly affected. Marginalized groups, particularly those reliant on forest resources, have been severely impacted by the influx of refugees. Conversely, those involved in transportation, such as auto-rickshaw owners and drivers, have found new economic opportunities due to increased demand for mobility. The shared use of common resources, especially forest resources, by both host communities and FDMNs, is unique compared to other refugee situations where a significant distance usually separates the two groups.

The influx of FDMNs has not only strained local resources but also exacerbated tensions and competition for jobs. Host communities have had to bear the brunt of these challenges, experiencing losses and damages due to the influx of refugees and the resulting economic disruptions. As efforts to provide sustainable solutions continue, it is crucial to address these complex dynamics and support both the Rohingya and the host communities in finding a balanced and inclusive way forward.



CHAPTER 4

Towards a Midterm Livelihood Framework of the Rohingya FGMNs: **Need for Coordinated Interventions**

4.1. Key Pillars of the Midterm Livelihood Framework

The Rohingya crisis in Bangladesh remains a protracted humanitarian and development challenge. While short-term relief efforts have focused on addressing basic needs, a medium-term livelihood framework is essential to support self-reliance, economic integration, and eventual voluntary repatriation. This framework adopts a Whole of Society approach to ensure that interventions benefit both Rohingya FDMNs and host communities, with a particular focus on skills development, employment, and economic inclusion. The key pillars of the Midterm Livelihood Framework are as follows:

1. **Whole of Society Approach to Refugee Response [7]**

- A coordinated effort involving the Government of Bangladesh, development agencies, private sector actors, and civil society is necessary to create sustainable livelihood solutions.
- Policies should be designed to enhance social cohesion between Rohingya refugees and host communities, preventing economic competition and tension.

2. **Economic Empowerment and Employment Opportunities**

- Allowing Rohingya FDMNs to work will enable them to save resources for voluntary repatriation, facilitating reintegration in Myanmar by supporting land purchases, home construction, and education expenses.
- Formalizing employment opportunities through work permits, skill certification, and job matching services.
- Encouraging geographic dispersion of workers through safe and affordable transport, reducing labour market saturation in Cox's Bazar.
- Enhancing access to formal sector employment to prevent exploitation in informal sectors.

[7] *See Post et al (2019).*

3. **Institutional Coordination for Effective Implementation**

- The Government of Bangladesh should establish a government-led coordination platform to:
  - Design, implement, and monitor livelihood programs.
  - Coordinate information-sharing on population needs and socioeconomic outcomes.
  - Define shared outcomes and key performance indicators to measure progress for both Rohingya and host communities.
- Collaboration with international financial institutions such as the World Bank and Asian Development Bank (ADB) can leverage financing for necessary policy reforms and infrastructure development.

4.2. Leveraging International Experience

Global examples of refugee economic integration provide valuable lessons for structuring a midterm livelihood framework for Rohingya FDMNs. Countries like Jordan, Uganda, and Turkey have implemented innovative policies that facilitate refugee participation in local economies while fostering broader economic benefits.[8]

1. **Learning from Other Country Examples**

- **Jordan:** The government introduced work permit schemes that allowed refugees to own and operate home-based businesses, enabling economic self-reliance.
- **Uganda:** Refugee-run businesses were linked to national and regional distribution networks, benefiting both refugees and host communities. Some expanded beyond Uganda, importing goods from Kenya, Dubai, and China.
- **Turkey:** Between 2011 and 2017, Syrian refugees established over 10,000 businesses, attracting US$334 million in investments and generating employment, with an average annual revenue of US$450,000 per business.
- These models demonstrate that when given economic opportunities, refugees can transition from aid dependence to self-sufficiency, contributing to the host country's economy.

2. **Adapting the Jordan Compact Model**

The Jordan Compact stands out as a structured approach to integrating refugees into the labour market through donor financing, regulatory reforms, and economic incentives. Key takeaways include:

- Donor Funding and Investment Incentives: Jordan secured US$12 billion in new financing, concessional loans, and trade benefits, ensuring long-term economic inclusion.
- Work Permit Reforms: Work permit fees for Syrian refugees were waived to simplify access to formal employment.
- Economic Integration Through Special Economic Zones (SEZs): The Compact promoted refugee employment through SEZs, offering preferential EU market access to companies employing refugees.

[8] *See Post et al (2019).*

3. Key Challenges and Lessons

While the Jordan Compact made significant strides, it also revealed challenges that should inform the Rohingya response:

- Overreliance on SEZs: Many SEZs were located far from refugee settlements, increasing transportation costs and safety concerns, limiting their effectiveness.
- Work Permit Restrictions: Employer-specific work permits hindered employment flexibility, as many refugees relied on multiple jobs for survival.
- Limited Support for Entrepreneurship: Stringent business registration requirements, such as proving legal residency and a minimum bank deposit of US$70,000, made it difficult for refugees to start businesses.
- Lack of Centralized Employment Information: The absence of digital or physical job hubs created barriers to job matching.

4. Applying These Lessons to the Rohingya Context

Bangladesh can draw from these global experiences to develop a context-specific, sustainable livelihood model for Rohingya FDMNs by:

- Creating a simplified work permit scheme that allows refugees to engage in formal employment and self-employment.
- Facilitating access to markets by linking refugee-run businesses with national and regional trade networks.
- Providing financial and technical support for refugee entrepreneurs through microfinance, cash grants, and business training.
- Adopting a phased and adaptive approach that tests small-scale livelihood initiatives, evaluates their impact, and scales up successful models.
- By leveraging international best practices while adapting them to local realities, Bangladesh can build a more inclusive and sustainable economic framework for Rohingya FDMNs.

4.3. Key Policy Recommendations

To ensure the success of a midterm livelihood strategy for Rohingya FDMNs, Bangladesh should implement targeted interventions across skills development, policy reforms, and institutional coordination. These measures can facilitate economic inclusion while supporting host communities and ensuring long-term sustainability.

1. **Skills Development and Economic Inclusion**

- Align skill-building programs with Myanmar's labour market needs to facilitate repatriation when conditions allow.
- Develop a vocational training framework focused on transferable skills such as construction, agriculture, and handicrafts, ensuring employment opportunities both in Bangladesh and Myanmar.
- Establish entrepreneurship support programs with cash grants, business registration assistance, and mentorship to foster self-reliance.

2. **Enabling Policy Environment**

- Introduce flexible work permits to allow refugees to engage in multiple jobs rather than being restricted to a single employer.
- Issue special ID cards/work permits for Rohingya FDMNs, enabling them to work in designated areas and sectors while ensuring regulatory oversight.
- Provide legal pathways for business formalization to encourage refugee entrepreneurship and reduce dependency on humanitarian aid.
- Implement transport subsidies and childcare stipends to remove employment barriers, particularly for women and vulnerable groups.
- Grant Rohingya FDMNs access to local educational institutions and medical services to enhance long-term human capital development.

3. **Strengthening Institutional Coordination and Financing**

- Leverage financing from the World Bank and ADB to support policy reforms and infrastructure development for refugee livelihoods.
- Accelerate the completion of Special Economic Zones (SEZs) and facilitate private investment while allowing Rohingya FDMNs to work in these zones.
- Encourage private sector participation in hiring and training refugees, creating sustainable employment pathways.
- Facilitate integrated value chains where Rohingya FDMNs and local host communities jointly participate in economic activities such as handicrafts and small manufacturing, fostering social cohesion and shared prosperity.
- Establish joint economic zones where both refugees and host communities benefit from investment opportunities, ensuring inclusive growth.

A well-structured livelihood framework can empower Rohingya FDMNs while strengthening the Bangladeshi economy. By adopting a flexible, skills-based, and investment-driven approach, Bangladesh can transform the refugee crisis into an opportunity for economic resilience and regional stability.

CHAPTER 5

Conclusion

A coordinated, well-financed, and inclusive approach to refugee livelihoods is essential for transforming the Rohingya crisis from a humanitarian burden into an opportunity for economic empowerment and social stability. The sheer scale of displacement, coupled with the protracted nature of the crisis, necessitates a shift from short-term aid dependency to long-term, self-reliant solutions. This requires a multi-stakeholder strategy that integrates government initiatives, private sector engagement, international donor support, and Collaboration with development agencies.

Lessons from international experiences—including models from Jordan, Uganda, and Turkey—demonstrate that refugees can be active contributors to economic growth when provided with the right policy framework and institutional support. Bangladesh can leverage these insights by implementing strategic reforms that balance humanitarian concerns with economic opportunities, ensuring that Rohingya refugees gain access to skills development, regulated employment, and entrepreneurial opportunities. At the same time, policies should be designed to support host communities, minimizing tensions and fostering shared prosperity.

By investing in skills training, economic integration, and institutional coordination, Bangladesh can build a sustainable midterm livelihood framework that benefits both Rohingya FDMNs and local populations. Well-designed work permit schemes, business registration processes, and SEZs can provide controlled yet productive avenues for Rohingya participation in the labour market while ensuring that economic gains are equitably distributed. Furthermore, partnerships with the private sector and international donors can help mobilize sufficient financial and technical resources, making these initiatives viable and impactful.

Ultimately, an inclusive and forward-looking livelihood strategy will not only enhance refugee self-reliance but also contribute to Bangladesh's broader economic development. Moreover, by equipping Rohingya refugees with market-relevant skills and work experience, Bangladesh will be laying the groundwork for voluntary, dignified repatriation when conditions in Myanmar permit. A strategic, well-executed approach can thus turn challenges into opportunities, creating a model for refugee resilience and economic adaptation in the region.

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BRAC
BRAC Centre
75 Mohakhali
Dhaka 1212
Bangladesh

T: +88 02 2222 81265
F: +88 02 2222 63542
E: info@brac.net
W: www.brac.net

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