



Endline Study Report

Resilience Strengthening of Vulnerable Populations in Northern, Western and Eastern Bangladesh through a Network Approach of 5 Partner Organizations

Submitted by

Center for Sustainable Innovation and Resilient Futures (CSIRF)

Daffodil International University

Address: Daffodil Smart City (DSC), Birulia, Savar, Dhaka-1216

Tel: +8801731585287

E-mail: khalid.esdm@diu.edu.bd

Submitted to

PHALS (Program for Helpless And Lagged Society)

Bypass Road, Jhilongja,

Cox's Bazar-4700, Bangladesh



The Program for Helpless And Lagged Society (PHALS) started a powerful initiative titled “Resilience Strengthening of Vulnerable Populations in Northern, Western, and Eastern Bangladesh through a Network Approach of 5 Partner Organizations.” Running from November 2022 to December 2025, this project is supported both technically and financially by Malteser International (MI), Germany, and focuses on the Khuruskul and Chowfaldandi unions in the Sadar Upazila of Cox’s Bazar district, Bangladesh.

Building resilience and fostering sustainable development in the face of adversity requires a deep and nuanced understanding of the unique challenges faced by vulnerable communities. I am proud to highlight the comprehensive research and analysis that underpin this project's endline study. This study lays the directions for informed interventions, providing essential guidance for empowering vulnerable populations in Khuruskul and Chowfaldandi unions.

Our collaboration with PHALS and Malteser International demonstrates the power of partnerships. By joining forces, we create a shared vision for sustainable change. This project focuses on supporting communities in overcoming environmental, social, and economic challenges, while providing them with the resources, tools, and support needed to not just survive but thrive. It is our belief that the resilience we help build today will allow these communities to grow stronger and more self-sufficient in the future.

We extend my heartfelt appreciation to the visionary leadership of PHALS and Malteser International for their firm commitment to uplifting vulnerable communities. Their steadfast support is a witness to a shared mission to create a more inclusive and resilient society. As we continue on this transformative journey, I encourage all stakeholders to actively engage with the project’s activities. Together, we can create a sustainable future where the most vulnerable communities in Bangladesh are empowered to face the challenges of tomorrow.

I look forward to seeing the remarkable progress of this project, as it continues to make a meaningful and lasting difference in the lives of those who need it most.

Sincerely,



Khalid Md. Bahauddin

Assistant Professor

Department of Environmental Science and Disaster Management (ESDM)

Deputy Director, CSIRF

Daffodil International University

Daffodil Smart City (DSC), Ashulia

Dhaka, Bangladesh

Acknowledgement

We would like to express our heartfelt gratitude to everyone who contributed to the successful completion of this project's endline study, titled "Resilience Strengthening of Vulnerable Populations in Northern, Western, and Eastern Bangladesh through a Network Approach of 5 Partner Organizations."

First, we extend our sincere thanks to the Program for Helpless And Lagged Society (PHALS) for their visionary leadership and firm guidance throughout the project. Their dedication to empowering vulnerable communities has been fundamental to the success of this initiative. We also express our appreciation to Malteser International (MI), Germany, for their invaluable technical and financial support, which has played a crucial role in the implementation and progress of this project.

We would like to convey our sincere appreciation to the management of Daffodil International University (DIU), particularly to the Member of the Board of Trustees, DIU, Prof. Dr. Mohamed Emran Hossain, for his continuous support, invaluable suggestions, and encouragement throughout this endeavor. We also acknowledge Dr. Mahfuza Parveen, Director, Division of Research and Associate Professor of the Department of Environmental Science and Disaster Management (ESDM), DIU, for her consistent support and contributions to the research process.

A special thanks to the dedicated team at the Center for Sustainable Innovation and Resilient Futures (CSIRF) at DIU, whose expertise, collaborative spirit, and commitment to excellence were key to carrying out this endline study. Their multidisciplinary approach provided invaluable insights and strengthened the research process at every stage.

We would also like to express our deepest appreciation to the local communities in Khuruskul and Chowfaldandi unions in Cox's Bazar district for their active participation and important contributions. Their resilience, willingness to share their experiences, and involvement in the study have been vital to shaping its outcomes. Additionally, the cooperation and support of local government bodies, community leaders, and various stakeholders have been essential to the success of this project.

Finally, our sincere thanks to all the faculty members and mentors at DIU, especially in the Department of Environmental Science and Disaster Management (ESDM), for their continuous support and intellectual contributions throughout this project. Their guidance and encouragement have been crucial in completing this study.

We are optimistic that the outcomes of this project will continue to inspire change and contribute to building a more resilient future for the vulnerable communities in Bangladesh.

TEAM LEADER

Khalid Md. Bahauddin

Assistant Professor

Department of Environmental Science and Disaster Management (ESDM)

Deputy Director, CSIRF

Daffodil International University

Expertise: Interdisciplinary Research, Project Management, Sustainable Development,
Governance and Policy analysis

TECHNICAL EXPERT

Dr. Mahfuza Parveen

Associate Professor

Department of Environmental Science and Disaster Management (ESDM)

Director, Division of Research (DoR)

Daffodil International University

Expertise: Environmental Impact Assessment, Climatic Disaster Management, Gender and
Environment

TECHNICAL EXPERT

Maruf Ahmed Tamal

Assistant Professor

Department of Computer Science and Engineering

Military Institute of Science and Technology (MIST)

Expertise: Data science, Machine Learning, Quantitative analysis

TECHNICAL EXPERT

Syed Nazmus Sakib

Lecturer

Department of Environmental Science and Disaster Management (ESDM)

Daffodil International University

Expertise: Climate Justice, DRR, Community Resilience, Vulnerability and Capacity Assessment

DATA COLLECTORS

Galib Bin Shahadat, Rafis Anam Rahi, Jubaer Alam, Md. Sabbir Rahman, MD. Robiuzzaman Panna
Students, Daffodil International University

Table of CONTENTS

ii	Forward
iii	Acknowledgement
iv	Study team
vi	List of abbreviation
vii	Executive summary
01	01. Background
01	02. Understanding of the evaluation of the project and its scope
	2.1. Understanding the evaluation
	2.2. Scope of the evaluation
	2.3. Geographic and contextual focus
	2.4. Key areas of evaluation
02	03. Objective of the evaluation of the BMZ-PT project
03	04. Scope and expected outcomes of the evaluation of the BMZ-PT project
	4.1. Scope of evaluation
	4.2. Expected outcomes of the evaluation
04	05. Literature review
05	06. Methodology
	6.1. Consultation meeting
	6.2. Literature review strategy
	6.3. Study design
	6.4. Data collection instrument
	6.5. Data collectors training
	6.6. Data collection and quality control mechanism
	6.7. Data analysis, data synchronization, and triangulation
	6.8. Compliance with policies and ensuring quality
	6.9. Gender consideration in the study
	6.10. Child and most at risk adult safeguarding
	6.11. Overall ethical considerations
10	07. Result and findings
	7.1. Participants' demographic information
	7.2. Participants' occupation and livelihood
	7.3. Key result area-wise findings
	7.4. Cross-cutting issues: gender, disability, and safeguarding
30	08. Identified gaps and lessons learned from the existing project components and interventions
33	09. Success story 01
35	10. Success story 02
37	11. Photo gallery
38	References



List of Abbreviation

BBS - Bangladesh Bureau of Statistics

BCCSAP - Bangladesh Climate Change Strategy and Action Plan

BMZ- Federal Ministry for Economic Cooperation and Development

BMZ-PT - Federal Ministry for Economic Cooperation and Development (BMZ) and implemented through specific "PT" (Public-Private) or partner-focused programs

CCA - Climate Change Adaptation

CSIRF - Center for Sustainable Innovation and Resilient Futures

CPP - Cyclone Preparedness Program

DIU - Daffodil International University

DiDRR - Disability Inclusive Disaster Risk Reduction

ESDM - Environmental Science and Disaster Management

FGD - Focus Group Discussion

IDI - In-depth Interview

KII - Key Informant Interview

MI - Malteser International

NAP - National Adaptation Plan

OECD-DAC - Organization for Economic Co-operation and Development - Development Assistance Committee

PHALS - Program for Helpless And Lagged Society

SDGs - Sustainable Development Goals

SRG - Self Reliant Group



EXECUTIVE SUMMARY

The BMZ-PT Project, titled “Resilience strengthening of vulnerable populations in Northern, Western and Eastern Bangladesh through a network approach of 5 partner organizations’ project,” was implemented by PHALS with the support of Malteser International (MI) from November 2022 to December 2025 in the climate-vulnerable coastal unions of Khuruskul and Chowfaldandi in Cox’s Bazar. The project aimed to enhance disaster resilience, climate change adaptation, economic empowerment, and social inclusion among marginalized groups, particularly women, persons with disabilities, ethnic minorities, and landless households. These communities face recurrent cyclones, flooding, salinity intrusion, and chronic livelihood insecurity, which are further compounded by social exclusion and limited institutional access. This endline evaluation was conducted by the Center for Sustainable Innovation and Resilient Futures (CSIRF), Daffodil International University, using a mixed-methods approach that combined quantitative household surveys with qualitative focus group discussions, key informant interviews, in-depth interviews, and field observations. The evaluation assessed the project’s relevance, effectiveness, efficiency, impact, and sustainability in line with OECD-DAC criteria and provides an evidence-based assessment of project achievements, challenges, and lessons learned. Findings indicate that the project achieved substantial success in strengthening community resilience and economic self-reliance. A central achievement was the establishment and institutionalization of Self-Reliant Groups (SRGs), which did not exist at baseline but were fully operational across both unions at endline. Through SRGs, participants primarily women transitioned from individual dependency to collective action, enabling regular savings, access to low-interest loans, livelihood planning, and peer support. These groups also became important platforms for confidence-building, solidarity, and engagement with local institutions. The project led to a marked transformation in livelihoods and income security. Participants moved away from unpaid domestic work and irregular day labor toward structured, skill-based income-generating activities such as tailoring, embroidery, block-batik, weaving, and handicrafts. At endline, all participants reported earning an income, with average monthly earnings increasing significantly and some women earning up to BDT 9,000 per month. Household incomes rose substantially, savings behavior improved, and reliance on exploitative informal lending declined. These economic gains contributed to improved food security, educational access for children, and greater household stability. Gender equality and social inclusion emerged as strong outcomes of the project. Women, including women with disabilities and members of the Rakhine ethnic minority, reported increased agency in household decision-making and greater participation in community governance. The integration of SRG members into local disaster management committees and engagement with Union Parishads strengthened inclusive leadership and shifted traditional power dynamics. Marginalized groups who were previously excluded from public

decision-making gained confidence to articulate their needs and advocate for community safety and development priorities. The project also significantly enhanced disaster risk reduction and climate change adaptation capacities. Communities demonstrated improved awareness of early warning systems, evacuation procedures, and inclusive disaster preparedness practices that prioritized vulnerable populations such as persons with disabilities and the elderly. Participants reported a shift from fear-driven responses to organized and informed action during climate-induced hazards. However, the evaluation identified persistent gaps in disaster management infrastructure, particularly the shortage of cyclone shelters and safe evacuation facilities, which remain a critical risk to long-term resilience. In terms of sustainability, the evaluation finds that strong community ownership, functional SRGs, and improved institutional linkages provide a solid foundation for continuity beyond the project period. In addition, the BMZ-PT project has successfully empowered SRG members by enhancing their market access through tailored entrepreneurship training and establishing strong buyer-producer linkages. The creation of online marketing platforms and participation in annual product fairs has significantly expanded their reach. With these achievements, the project has laid a strong foundation for sustainable growth, ensuring long-term financial stability for the communities. The future holds even greater potential as SRGs continue to thrive and scale their businesses. Overall, the BMZ-PT Project has made a significant contribution to strengthening the resilience, economic independence, and social inclusion of vulnerable coastal communities in Cox's Bazar. By combining livelihood diversification, inclusive governance, and community-based disaster risk reduction, the project demonstrates a scalable and context-appropriate model for climate-resilient development in Bangladesh. Future phases should build on these successes by prioritizing market integration, disaster-resilient infrastructure, and cross-sectoral coordination to ensure lasting impact.

01 | BACKGROUND

Climate change vulnerability is increasing globally, with developing and underdeveloped countries disproportionately affected. Bangladesh is among the most climate-vulnerable nations due to limited economic, social, technological, and institutional capacity. Climate change amplifies existing risk factors, particularly for resource-poor households facing livelihood insecurity. Coastal regions are especially exposed, where climatic hazards intersect with social, economic, and environmental stresses. Adaptation efforts are further constrained by overreliance on technological solutions, limited attention to socio-cultural contexts, exclusion of informal communities, and weak institutional coordination. In coastal Bangladesh, vulnerable groups—including persons with disabilities, ethnic minorities, widowed or divorced women, landless households, fisherfolk, and climate refugees—face severe livelihood risks. Anthropogenic pressures such as overexploitation of biodiversity, fisheries depletion, shrimp farming, and agricultural intensification have degraded coastal ecosystems and reduced their resilience. Climate change further limits ecosystem recovery, undermining human well-being and livelihoods. Sudden-onset disasters, such as cyclones and storm surges, cause immediate losses, while slow-onset hazards, including salinity intrusion and inundation, generate long-term socio-economic impacts. The 2007 cyclone caused substantial damage to mangroves and livelihoods, with recovery still incomplete. Increasing cyclone frequency, storm surges, and salinity intrusion continue to threaten agriculture, fisheries, and food security. Adaptive capacity varies according to livelihood sensitivity, socio-economic conditions, and access to assets. Climate refugees and ethnic minorities are particularly constrained by weak coastal governance, inadequate resource-sharing mechanisms, and limited institutional capacity. In Cox’s Bazar, climate change adaptation is especially complex due to dynamic geography, climate variability, and multi-stakeholder involvement, underscoring the need to understand local impacts, adaptation practices, and implementation barriers. This endline study focuses on vulnerable communities in Khuruskul and Chowfaldandi unions of Sadar Upazila, Cox’s Bazar district. It aims to assess community-level vulnerabilities to climate change and natural disasters, examine adaptation strategies, and evaluate resilience and capacity-building efforts. Emphasis is placed on community-based adaptation measures, including resilient infrastructure, early warning systems, disaster risk reduction, and climate-smart livelihoods, assessing their effectiveness, scalability, and social acceptance. The study is conducted within the framework of the BMZ-PT project, implemented by PHALS in partnership with Malteser International and local organizations, and aligned with SDGs 1, 5, 10, 12, 13, and 17, with the goal of strengthening inclusive climate resilience and reducing vulnerability to future climate shocks.

02 | UNDERSTANDING OF THE EVALUATION OF THE PROJECT AND ITS SCOPE

The BMZ-PT Project—Resilience Strengthening of Vulnerable Populations in Northern, Western, and Eastern Bangladesh through a Network Approach of Five Partner Organizations—is a collaborative initiative led by PHALS in partnership with Malteser International (MI). The project aims to reduce climate-related vulnerabilities among marginalized communities, particularly in Khuruskul and Chowfaldandi of Cox’s Bazar, by strengthening climate resilience and promoting inclusive disaster risk reduction (DRR) and climate change adaptation (CCA), with a focused emphasis on persons with disabilities and other disadvantaged groups.

2.1. UNDERSTANDING THE EVALUATION

This assignment involved an endline evaluation of the BMZ-PT project, focusing on assessing the effectiveness, efficiency, relevance, impact, and sustainability of project interventions. The evaluation examined progress toward stated objectives, overall performance, and the potential for long-term sustainability and scalability. Specifically, it assessed:

- A. Effectiveness: Achievement** of project objectives in enhancing climate resilience among vulnerable groups;
- B. Efficiency:** Use of resources, including time, funding, and expertise;
- C. Relevance:** Alignment of interventions with local needs and climate-related challenges;
- D. Impact:** Measurable changes in livelihoods and resilience attributable to the project; and
- E. Sustainability:** Likelihood of sustaining outcomes and scaling interventions beyond the project period.

2.2. SCOPE OF THE EVALUATION

The evaluation covered the full project cycle from November 2022 to December 2025, including project design, implementation processes, outputs, outcomes, and impacts. Field-level assessment was conducted in Khuruskul and Chowfaldandi areas of Cox's Bazar, which are highly exposed to climate-induced hazards.

2.3. GEOGRAPHIC AND CONTEXTUAL FOCUS

The evaluation covered Khuruskul and Chowfaldandi unions of Cox's Bazar, a highly climate-vulnerable coastal area dependent on agriculture and fisheries. Recurrent cyclones, salinity intrusion, and sea-level rise have disrupted livelihoods and deepened poverty, with women, children, and persons with disabilities facing disproportionate social and economic exclusion. Around 30% of the population lives below the poverty line amid food insecurity and limited access to basic services, highlighting the urgent need for inclusive, community-based resilience interventions.

2.4. KEY AREAS OF EVALUATION

The evaluation assessed project interventions across the following key result areas:

- A. Partnerships for Climate Resilience:** Effectiveness of collaboration with universities, government agencies, research institutions, and local organizations in enhancing access to climate information, technologies, and capacity-building resources.
- B. Alternative Livelihoods:** Impact of livelihood diversification initiatives on household income, adaptive capacity, and socio-economic stability.
- C. Gender and Inclusion:** Promotion of women's participation, particularly women with disabilities, in community-level decision-making related to DRR and CCA.
- D. Community-Based Disaster Risk Reduction:** Strengthening of local preparedness through volunteer training, disaster management committees, and localized risk reduction measures.
- E. Sustainability of Interventions:** Prospects for sustaining project outcomes through local capacity development and potential scaling in future phases.

Overall, the evaluation generated critical insights into project achievements, challenges, and lessons learned. It provided evidence-based recommendations to improve future project design and implementation, enhance sustainability, and scale successful interventions.

03 | OBJECTIVE OF THE EVALUATION OF THE BMZ-PT PROJECT

The objective of the endline evaluation was to assess the effectiveness, efficiency, relevance, impact, and sustainability of the BMZ-PT Project. Conducted between 1 November and 15 December 2025, the evaluation reviewed project interventions implemented from November 2022 to December 2025 to determine the extent to which stated objectives were achieved and to generate evidence-based insights for future programming. Specifically, the evaluation aimed to:

- A. Assess effectiveness** in enhancing climate resilience, adaptive capacity, and inclusive disaster risk reduction among marginalized and vulnerable populations, including persons with disabilities.
- B. Evaluate efficiency** in the use of financial, human, and time resources, as well as coordination among implementing partners and local institutions.

- C. Examine relevance by assessing alignment between project interventions, local needs, socio-economic conditions, gender considerations, and climate risks in the project areas.
- D. Assess impact by identifying tangible and longer-term changes in livelihoods, disaster preparedness, community resilience, and participation of women and persons with disabilities in decision-making processes.
- E. Analyze sustainability by evaluating local ownership, institutional capacity, partnership continuity, and the potential for scaling up successful interventions beyond the project period.

04 | SCOPE AND EXPECTED OUTCOMES OF THE EVALUATION

The BMZ-PT Project was implemented to strengthen the resilience of marginalized and vulnerable populations in Khuruskul and Chowfaldandi areas of Cox's Bazar through climate resilience, alternative livelihoods, and inclusive disaster risk reduction strategies. This evaluation assessed the project's progress, effectiveness, and prospects for long-term sustainability. The scope and expected outcomes of the evaluation were structured in line with the project's objectives and thematic priorities.

4.1. SCOPE OF THE EVALUATION

The evaluation covered the full project period from November 2022 to December 2025 and was conducted between 1 November and 20 December 2025. It examined project design, implementation processes, outputs, outcomes, and early impacts, including both direct and indirect effects on target populations. The assessment also reviewed the effectiveness of partnerships and collaborative approaches adopted during project implementation.

4.1.1. Geographic Scope

The evaluation focused on Khuruskul and Chowfaldandi unions of Cox's Bazar, a climate-vulnerable coastal region frequently affected by cyclones, flooding, and salinity intrusion. The beneficiary population included women, persons with disabilities, and other marginalized groups who are disproportionately exposed to climate-related risks.

4.1.2. Thematic Scope:

The evaluation examined project performance across five key themes: (A) climate resilience and disaster risk reduction, including preparedness, resilient livelihoods, alternative incomes, and disability-inclusive DRR; (B) partnerships and collaborative networks, focusing on knowledge exchange, capacity building, and access to adaptive technologies; (C) gender and social inclusion, particularly the participation of women with disabilities and other marginalized groups in decision-making; (D) sustainability of interventions, assessing local ownership, institutional capacity, and scalability; and (E) impact on vulnerable populations, evaluating changes in resilience, socio-economic conditions, access to DRR services, and social participation.

4.2. EXPECTED OUTCOMES OF THE EVALUATION

The evaluation was expected to generate evidence-based findings to support learning, accountability, and future decision-making. Key expected outcomes included:

4.2.1. Impact Assessment:

- A. Evidence of changes in climate resilience, disaster preparedness, adaptive capacity, and livelihood security among target populations.
- B. Identification of socio-economic improvements resulting from alternative livelihood and climate-resilient practices.

4.2.2. Effectiveness and Efficiency Assessment:

- A. Assessment of resource utilization, cost-effectiveness, and timeliness of implementation.
- B. Evaluation of the contribution and performance of partnerships in achieving project outcomes.

4.2.3. Gender and Inclusion Outcomes:

- A. Analysis of women's empowerment and participation, with particular attention to women with disabilities.
- B. Assessment of the inclusion and engagement of marginalized groups in project activities.

4.2.4. Sustainability and Long-Term Impact:

- A. Insights into the likelihood of sustaining project benefits through local institutions and community ownership.
- B. Practical recommendations for scaling up successful interventions in other climate-vulnerable regions of Bangladesh.

05 | Literature review

Bangladesh is among the most climate-vulnerable countries globally due to its geographic exposure, high population density, and reliance on climate-sensitive sectors such as agriculture and fisheries. This vulnerability is intensified by socio-economic constraints, including poverty, limited resources, and weak infrastructure. Climate-induced hazards—floods, cyclones, storm surges, and sea-level rise—have severely disrupted livelihoods, particularly in coastal regions such as Cox's Bazar, where extreme weather, poor infrastructure, and limited access to healthcare and education compound risks (MoEF, 2009; World Bank, 2013). Climate impacts are unevenly distributed, disproportionately affecting marginalized groups such as women, persons with disabilities, ethnic minorities, and the elderly. The Bangladesh Climate Change Strategy and Action Plan (BCCSAP) identifies cyclonic activity, sea-level rise, and erratic rainfall as major threats to agriculture, water security, and living conditions, while limited adaptive capacity among vulnerable populations underscores the need for community-level resilience building (MoEF, 2009; Amin, 2017). Disaster risk reduction (DRR) is a core element of Bangladesh's climate resilience framework and is increasingly integrated with climate change adaptation (CCA). The Cyclone Preparedness Program (CPP) has significantly reduced mortality through early warnings, cyclone shelters, and volunteer engagement (Akhter, Rahman, & Hossain, 2020). However, many DRR initiatives insufficiently address the needs of marginalized groups; women and persons with disabilities are often excluded from early warning dissemination and emergency response, limiting overall effectiveness (Choudhury, 2017). Inclusive DRR approaches are therefore essential for equitable preparedness and response. Climate change adaptation strategies in Bangladesh emphasize agricultural resilience, water management, and climate-resilient infrastructure, including climate-smart agriculture and resilient housing (Begum, Khan, & Ali, 2015). Nevertheless, adaptation efforts frequently neglect gender and disability considerations. Akter and Khatun (2019) demonstrate that adaptation strategies lacking inclusivity are less effective, as women, smallholder farmers, and persons with disabilities face financial, institutional, and technological barriers. Meaningful participation of women, particularly women with disabilities, is critical for successful adaptation outcomes (Akter & Khatun, 2019). Livelihood diversification is widely recognized as a key resilience strategy, reducing dependence on climate-sensitive income sources. Alternative livelihoods such as small enterprises, handicrafts, and renewable energy-based activities have improved income stability and adaptive capacity in Bangladesh (Hossain, Sarker, & Hasan, 2018). However, access to training, finance, and markets remains uneven, with marginalized groups facing systemic barriers that limit the effectiveness of diversification efforts (Hossain, Sarker, & Hasan, 2018). Gender and social inclusion are central to climate resilience. Women—especially those with disabilities—experience heightened vulnerability due to limited

access to resources, education, and decision-making power, and because of their roles in agriculture, water collection, and household management (UN Women, 2018). Exclusion from adaptation planning and disaster management further exacerbates these risks. Gender-sensitive interventions, including targeted capacity building, access to finance, and leadership opportunities, have been shown to strengthen community resilience and promote equitable outcomes (Miller et al., 2017). The literature also highlights compounded vulnerabilities among ethnic minorities and persons with disabilities, who often lack access to disaster information, relief, and recovery support, constraining their adaptive capacity (Alam & Disha, 2019). Inclusive resilience programs that explicitly address these needs enhance both equity and effectiveness (Bisht & Sah, 2016). Additionally, collaborative partnerships among local governments, NGOs, international agencies, and academic institutions have strengthened resilience efforts in Bangladesh by improving coordination, knowledge exchange, and institutional capacity (Islam, Hossain, & Roy, 2020). Overall, the literature emphasizes that effective climate resilience in Bangladesh requires an integrated approach combining DRR, climate adaptation, livelihood diversification, gender-sensitive strategies, and inclusive governance. Despite notable progress, persistent gaps in the meaningful inclusion of women, persons with disabilities, and ethnic minorities remain, and addressing these gaps is essential for equitable and sustainable resilience outcomes.

06 | Methodology

To achieve the above study objectives, it was essential to adopt a transparent and effective methodology. To this end, the research team carefully followed a systematic and time-bound approach (see Figure 1 below) to prioritize tasks and address relevant issues in a step-by-step manner:

6.1. CONSULTATION MEETING

An initial consultation with PHALS was held to finalize research objectives, questions, and KPIs, align expectations, refine methodology, identify challenges, and establish communication protocols, ensuring context-specific and practical findings.

6.2. LITERATURE REVIEW STRATEGY

A rigorous review of peer-reviewed studies, reports, policies, and program documents was conducted, with emphasis on Bangladesh-specific sources. Key references included BCCSAP (2009; updated 2022), Bangladesh Climate Change Trust Act (2010), National Adaptation Plan (2023–2050), Disaster Management Act (2012), National Disaster Management Policy (2015), Standing Orders on Disaster (2019), Sendai Framework Plan of Action (2015–2030), National Strategy on Internal Displacement (2021), National Plan for Disaster Management (2021–2025), and the Climate Change and Gender Action Plan (2013).

6.3. STUDY DESIGN

A multi-participatory mixed-methods design was adopted to capture both qualitative insights and quantitative evidence on climate impacts and resilience. The approach ensured inclusivity, contextual relevance, and validity through stakeholder participation and triangulation, enabling assessment of community organizing, advocacy, livelihoods, localization, and emergency preparedness over time.

6.3.1. Conceptual Framework of the Study

The conceptual framework for this endline study was based on the following key elements:

A. Climate Change and Disaster Risk: This component examined climate change-induced hazards such as floods, droughts, and storms, and their effects on disaster frequency, intensity, and distribution, along with associated social, economic, and environmental impacts.

B. Local Community Understanding and Awareness: This component assessed community knowledge and awareness of climate change and disaster risks, considering socio-economic factors, education, cultural beliefs, awareness initiatives, and the role of indigenous knowledge in shaping adaptation responses.



Figure 6.1. Study roadmap

C. Climate Resilience Livelihood Options: The framework evaluated traditional and innovative livelihood options, including sustainable agriculture, income diversification, renewable energy use, and conservation-based livelihoods, and their implications for food security, poverty reduction, and environmental sustainability.

D. Knowledge and Practice of Climate-Smart Livelihoods: This component analyzed community knowledge and adoption of climate-smart practices, examining influencing factors such as access to information, resources, institutional support, and the role of capacity-building and training programs.

E. Current Practices of Climate Change Adaptation: The framework reviewed existing individual and collective adaptation strategies, including ecosystem-based and nature-based solutions, and assessed their effectiveness in reducing vulnerability and enhancing resilience.

F. Social Networks and Collaboration: This component explored the role of social networks, community organizations, and institutions in supporting adaptation and disaster risk reduction through trust, information sharing, collective decision-making, and multi-stakeholder collaboration.

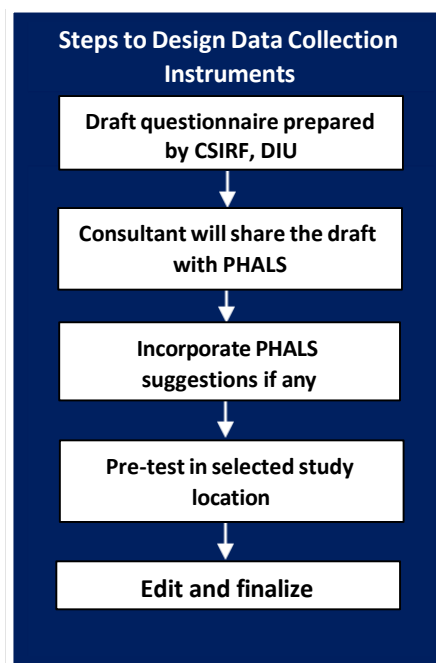
G. Challenges and Implications: The framework identified key challenges such as resource limitations, infrastructure gaps, governance constraints, and socio-economic inequalities, and examined their implications for resilience, livelihoods, and sustainable development.

By considering these interconnected dimensions, the conceptual framework adopted a holistic approach integrating risk assessment, livelihood diversification, capacity building, institutional support, and gender and social inclusion to strengthen long-term community resilience to climate change.

6.4. DATA COLLECTION INSTRUMENT

To meet the requirements of the study, following data collection instruments were developed and applied based on local context and situation established practices, behavior and the opinions of domain experts:

- A. **Survey Questionnaire:** The survey questionnaire allowed the quantitative data from the sample of vulnerable households, providing standardized responses and enabling statistical analysis.
- B. **Focus Group Discussion (FGD):** FGDs were valuable for capturing qualitative data in a group setting, exploring shared experiences, perceptions, and community dynamics related to climate change impacts and project interventions.
- C. **Key Informant Interview (KII):** KIIs gathered insights from individuals with expertise or key roles in the project or community, providing context-specific information, validation, and insights into the study objective.
- D. **In-depth Interview (IDI):** IDIs enabled in-depth exploration of individual experiences, perspectives, and challenges faced by vulnerable households, offering rich qualitative data that contributes to a nuanced understanding of climate change impacts and project effectiveness at an individual level.
- E. **Success Story:** 1 Success stories were captured as case-study.



6.4.1. Study Participants

Table 6.1. Study participants

Method/ Tools	Stakeholder/ Participants of the Study
Questionnaire Survey	Climate refugee and ethnic minority and local surrounding vulnerable community – men, women, people with disability, transgender, old aged people, and youth (male and female)
FGD, P-FIM (People First Impact Method)	Vulnerable men and women
	Women group
	Children and youth group
	Disaster Management Committee (WDMC)
	Community people
Group Discussion	Staffs of implementing partners
	Project staffs
KII	GoB representative
	Local Leaders, producers, traders, local market or business authority of business sectors
	Head Teacher
	Department of Disaster Management (DDM)
Success Stories	2 Successes stories were captured as case-study

6.4.2. Study Participants, Sample Size and Sampling Procedure

The study was conducted in Khuruskul Union and Chowfaldandi Union under Sadar Upazila of Cox's Bazar district. These two unions represent the geographic areas where project interventions were implemented. This study engaged a representative sample of the total 210 target participants who were directly served by the project.

6.4.3. Quantitative Sample Size Determination

To determine an appropriate and statistically reliable sample from the target population of 210 individuals, the quantitative sample size was determined using Yamane's Formula (1967), also known as the finite population sample size formula (see the following formula 1). This formula is appropriate for studies where the total population size is known and relatively small. It is widely applied in social science research, development studies, and community-based evaluations because it provides a statistically valid sample size when the population proportion is unknown and when a specific margin of error is required.

$$n = \frac{N}{1 + N * e^2} \dots \dots \dots (1)$$

Here, **n** is the sample size, **N** = 210 (total beneficiary population) and **e** = 0.05 (desired margin of error, 5%). So, the sample size was:

$$n_i = \frac{210}{1+210*(0.05)^2} = 137$$

The quantitative survey will therefore include a sample of 138 participants, proportionately

$n_i = \frac{N_i}{N} \times n$ selected from Khuruskul and Chowfaldandi unions to ensure adequate representation the target

diverse group (see the table below).

Table 6.2. Union and group wise sample size

N (Total)	Union	N (Union)	Group	N (Group)	Sample Size	
					n _{union}	n _{group}
210	Chowfaldandi	110	Golap	25	72	16
			Jaba	25		16
			Padda	30		20
			Shapla	30		20
	Khuruskul	100	Bokul	25	66	16
			Jui	25		17
			Beli	25		16
			Sheuli	25		17
Total sample size (Quantitative)=						138

6.4.4. Qualitative Sample Size

For qualitative data, the sample size was determined based on the emerging findings. Data collection was continued until new knowledge was no longer obtained. If no new knowledge was obtained from repeated KII/FGD/IDI, data collection was ceased, as the objectives were considered to have been achieved. However, our primary target was to cover 3 FGDs in each study locations, 10 IDIs, 5 KIIs, and 2 success stories with the participations of diverse stakeholders.

6.5. DATA COLLECTORS TRAINING

Sufficient data collectors (having prior experience of data collection) and supervising officers/moderators (academic and administrative) were trained by the domain experts prior to data collection. Training included lectures on understanding the contents of data collection instruments and mock role-practicing exercises were conducted between the trainees to gain practice in asking questions. Finally, based on the performances, multiple groups were formed where each group was consisted of one moderator and sufficient data collectors.

6.6. DATA COLLECTION & QUALITY CONTROL MECHANISM

The CSIRF–DIU Team Lead conducted field visits to monitor data collection and ensure adherence to standard quality control procedures. The team maintained continuous coordination with field supervisors and test administrators to facilitate smooth and efficient field operations, while technical guidance on concepts and operational challenges was provided by PHALS. Random field monitoring was carried out by consultant team members to oversee study activities and ensure data quality. Specialists conducted additional random field visits to verify findings against ground realities. A dedicated quality control and project management expert oversaw overall output quality, including reporting. Data collection quality was also monitored through regular mobile communication with investigators and supervisors. CSIRF–DIU facilitated field activities by providing official letters and identity cards. To ensure a quality study the following steps will be followed:

- A. Interviewers and Supervisors Manual: A detailed manual explaining questionnaire items and sample selection was provided to interviewers.
- B. Assignment Sheets: Interviewers and supervisors received clear task-specific assignment sheets.
- C. Field Monitoring and Supervision: Supervisors ensured interview quality and conducted re-interviews, when necessary, while consultants and management staff carried out random field monitoring visits.

6.7. DATA ANALYSIS, DATA SYNCHRONIZATION & TRIANGULATION

Preliminary data analysis was conducted continuously during fieldwork, with regular review and validation in consultation with the PHALS team. Subsequently, appropriate quantitative and qualitative analysis techniques were applied in line with the study objectives. Quantitative analysis included descriptive and inferential statistics using IBM SPSS Statistics 26 and Python, while qualitative data were analyzed through coding, categorization, and thematic analysis using NVivo 12, led by a data science expert. The analysis process was characterized by: (a) A grounded and inductive approach informed by field observations, while remaining aligned with the study objectives outlined in the ToR; (b) A systematic treatment of all units of analysis; and (c) A participatory and transparent process with preservation of raw data. Apart from that TRIANGULATION (e.g. methodological, Data/Source, etc.) was the main stepping-stones was used by the CSIRF-DIU team. Strengths, limitations, opportunities, and constraints of both field and secondary data were critically examined and addressed in consultation with PHALS. The use of multiple indicators and mixed methods enhanced data verification and strengthened the validity of the evaluation findings through triangulation.

6.8. COMPLIANCE WITH POLICIES AND ENSURING QUALITY

The evaluation adhered to all relevant organizational, national, and international policies to ensure rigor, transparency, and credibility. It followed the standards and ethical guidelines of PHALS and Malteser International (MI), with a strong emphasis on accountability and quality assurance. The evaluation aligned with OECD-DAC criteria (relevance, effectiveness, efficiency, impact, and sustainability), applied standard operating procedures for data collection, and implemented strict data quality control measures, including cross-checking, source verification, and balanced representation of vulnerable groups.

6.9. GENDER CONSIDERATION IN THE STUDY

Gender equality and social inclusion were fully integrated into the evaluation, with particular attention to women and women with disabilities. Gender-sensitive methodologies ensured equitable participation in surveys, interviews, and FGDs. Data were disaggregated by gender to assess differential impacts, decision-making roles, and participation in disaster risk reduction and climate resilience activities. The evaluation also identified barriers to women’s participation and assessed how the project addressed challenges related to social norms, access to resources, and empowerment.

6.10. CHILD AND MOST AT RISK ADULT SAFEGUARDING

Safeguarding of children and vulnerable adults was a core priority of the evaluation. The assessment reviewed compliance with child protection and adult safeguarding policies, including protection of persons with disabilities and the elderly. It examined the effectiveness of safeguarding protocols, staff training, and the availability and accessibility of feedback and complaints mechanisms to ensure prompt reporting and response to any safeguarding concerns.

6.11. OVERALL ETHICAL CONSIDERATIONS

The evaluation upheld high ethical standards, guided by principles of informed consent, confidentiality and anonymity, and do no harm. Participation was voluntary, with clear communication of evaluation purposes and rights. The process respected local cultural norms and social sensitivities related to gender, age, and disability. Transparency and accountability were ensured through clear data use practices, unbiased analysis, and responsible reporting of findings.

07 | RESULTS AND FINDINGS

7.1. PARTICIPANTS’ DEMOGRAPHIC INFORMATION

7.1.1. Participant Profile

This endline survey reached 155 participants out of a total 210 project beneficiaries, representing approximately 74% coverage. Participants were drawn from two unions—Chowfaldandi (88 participants) and Khuruskul (67 participants)—and organized into eight groups. In Chowfaldandi, participants were organized into four groups: Golap, Jaba, Padda, and Shapla. Each group initially consisted of 25 to 30 members, totaling 110 participants at the project level. At endline, 88 participants from Chowfaldandi were surveyed. Group-wise, the endline sample included 25 participants from Golap, 22 from Jaba, 21 from Padda, and 20 from Shapla. On the other hand, in Khuruskul Union, participants were also organized into four groups: Bokul, Jui, Beli, and Sheuli, with each group comprising 25 members, resulting in a total of 100 participants. The endline survey reached 67 participants from Khuruskul. Among them, 18 participants were surveyed from Bokul, 13 from Jui, 19 from Beli, and 17 from Sheuli. Although the coverage rate in Khuruskul is slightly lower than in Chowfaldandi, participation remained balanced across all groups. Here, table 7.1 presents the distribution of participants covered under the endline survey.

Table 7.1 Participants reached by endline survey

Total Project Participants (N)	Project Locations (2 Unions)	Participants by Project Locations	Group	Participants by Groups	Sample By Groups	
					n _{union}	n _{group}
210	Chowfaldandi	110	Golap	25	88	25
			Jaba	25		22
			Padda	30		21
			Shapla	30		20
	Khuruskul	100	Bokul	25	67	18

		Jui	25		13
		Beli	25		19
		Sheuli	25		17
Total participants reached by the endline survey					155

7.1.2. Age Distribution

The age distribution indicates that most participants are within the economically productive age range (Figure 7.1). More than 82% of respondents were aged 18–44 years, suggesting strong potential for sustained livelihood engagement. The largest age group was 25–34 years (32.26%, $n = 50$), followed by 18–24 years and 35–44 years, each accounting for 26.5% ($n = 41$). Participants aged 45–54 years represented 12.9% ($n = 20$) of the sample. A smaller proportion were aged 55 years and above (3.2%, $n = 5$). The representation of younger women (18–24 years) alongside older age groups indicates growing acceptance of women’s economic participation across generations.

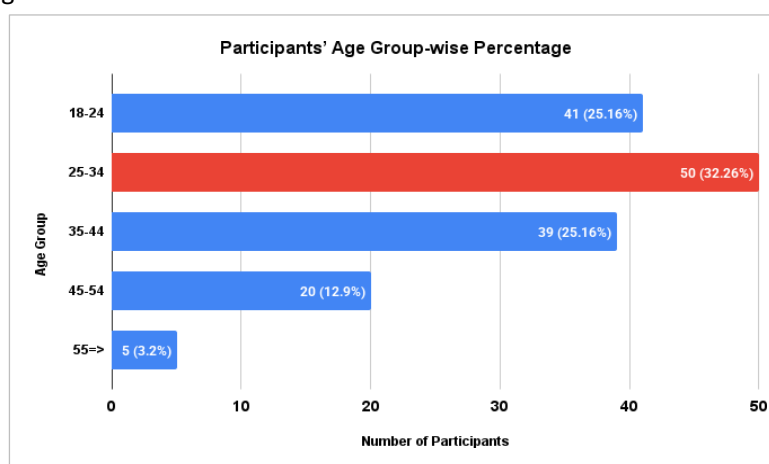


Figure 7.1 Participants’ age group wise percentage

7.1.3. Ethnic group

The ethnic composition of the 155 respondents shows that the majority belonged to the Bengali ethnic group (86.5%, $n = 134$), as presented in Figure 7.2. The Rakhine ethnic group constituted 12.9% ($n = 20$) of the sample, indicating meaningful representation of this ethnic minority. A very small proportion of respondents (0.64%, $n = 1$) reported belonging to other ethnic groups.

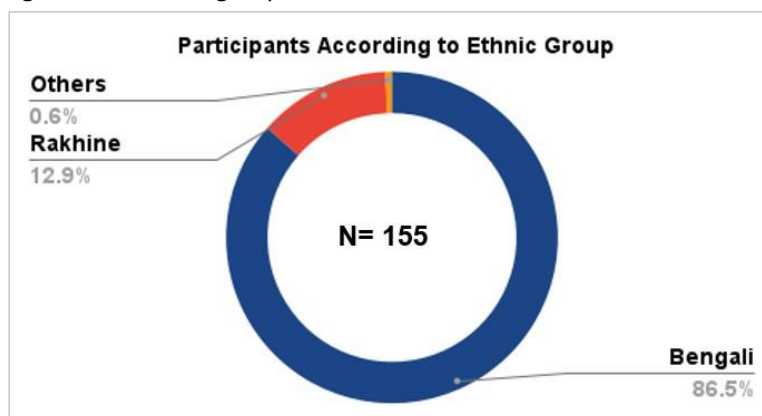


Figure 7.2 Participants according to ethnic group

7.1.4. Participants by Religion

The religious composition of the 155 respondents shows that the majority of participants identified as Muslim. Specifically, 87.1% (n = 135) of the respondents reported Islam as their religion. Participants identifying as Buddhist constituted 12.9% (n = 20) of the total sample. No respondents reported affiliation with other religions (see Table 7.2).

Table 7.2 Participants according to religion

Religion	Frequency (N=155)	%
Islam	135	87.1%
Buddhist	20	12.9%

7.1.5. Marital Status

The majority of participants (~80%) are married, while ~20% are unmarried. In Chowfaldandi Union, 42.6% (n = 66) of respondents were married, while 14.67% (n = 22) reported being unmarried. In comparison, Khuruskul Union also showed a higher proportion of married respondents, accounting for 36.8% (n = 57) of the total sample, whereas 6.45% (n = 10) were unmarried (see Table 7.3).

Table 7.3 Participants' area wise- marital status

Union	Marital Status	Frequency (N=155)	%
Chowfaldandi	Unmarried	22	14.67%
	Married	66	42.6%
Khuruskul	Unmarried	10	6.45%
	Married	57	36.8%

7.1.6. Educational Attainment

Educational attainment varied between Chowfaldandi and Khuruskul unions, reflecting differences in literacy levels and potential livelihood resilience (Figure 7.3). In Chowfaldandi Union, 32 participants (20.65%) reported having no formal schooling, indicating notable educational deprivation. Primary education was completed by 34 participants (21.94%), while 22 participants (14.19%) attained secondary education. No participants reported post-secondary education in this union. In contrast, Khuruskul Union demonstrated comparatively better educational outcomes. Only 11 participants (7.1%) had no schooling, a substantially lower proportion than in Chowfaldandi. Primary education was completed by 32 participants (20.65%), and 23 participants (14.84%) attained secondary education. Additionally, one participant (0.65%) reported post-secondary education, indicating slightly higher educational attainment in Khuruskul.

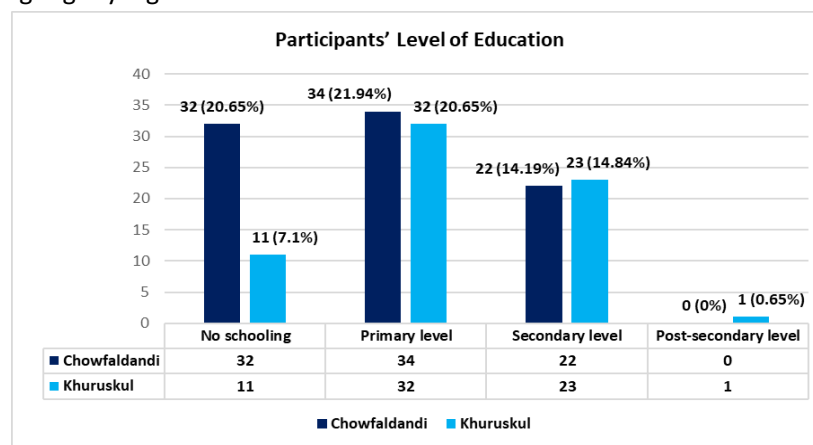


Figure 7.3 Participants' level of education

7.1.7. Types of the Participants

The study participants were categorized into six types, as shown in Table 7.4, across Khuruskul and Chowfaldandi unions. The largest group comprised helpless individuals or family members of helpless persons (n = 78), with 36 from Khuruskul and 42 from Chowfaldandi. This was followed by widows (n = 31), nearly evenly distributed between Khuruskul (n = 15) and Chowfaldandi (n = 16). Family members of persons with disabilities accounted for 16 participants, with higher representation in Chowfaldandi (n = 11) than Khuruskul (n = 5). Divorced participants totaled 12, equally distributed between the two unions (n = 6 each). Smaller groups included family members of widows (n = 9) and others (n = 9), both slightly higher in Chowfaldandi. Overall, the distribution reflects the program's focus on socially vulnerable groups across both unions.

Table 7.4 Participants by types

Type	Khuruskul	Chowfaldandi	Total	%
Widow	15	16	31	20%
Helpless/ Family member of helpless	36	42	78	50.32%
Family member of the person with disability	5	11	16	10.32%
Divorced	6	6	12	7.74%
Family member of widow	2	7	9	5.80%
Others	3	6	9	5.80%

7.2. PARTICIPANTS' OCCUPATION AND LIVELIHOOD

7.2.1. Self-Reliant Status of Participants

Table 7.5 shows a marked change in participants' self-reliant status between the baseline and endline assessments in Khuruskul and Chowfaldandi unions. At baseline, self-reliance was low: 8.9% in Khuruskul and 5.6% in Chowfaldandi, with an overall average of 7.25%. Consequently, the majority of participants were dependent (91.01% in Khuruskul and 94.4% in Chowfaldandi; overall 92.7%). By endline, a substantial improvement was observed, with 100% of participants in both unions identified as self-reliant and no remaining dependency, indicating a significant positive shift attributable to the program interventions.

Table 7.5 Self-reliant status of participants

Self-Reliant Status	Baseline			Endline		
	Khuruskul	Chowfaldandi	Avg.	Khuruskul	Chowfaldandi	Avg.
Yes (self-reliant)	8.9%	5.6%	7.25%	100%	100%	100%
No (Dependent)	91.01%	94.4%	92.7%	0	0	0

A key contributor to this outcome was the formation of Self-Reliant Groups (SRGs) in both unions. FGD participants reported notable changes in community dynamics. One participant from Khuruskul stated, *"Before we were alone... now we are like a family. Ten people together do work, this is the biggest power,"* highlighting increased solidarity and collective problem-solving. Similarly, a participant from Chowfaldandi noted, *"We used to stay behind the doors, especially the Rakhine families and those with physical hardships. Now, through this group, we sit at the same table as the Chairman's people to talk about our safety during cyclones,"* reflecting enhanced inclusion of marginalized groups, including ethnic minorities, in local decision-making processes.

7.2.2. Occupation of Participants

Figure 7.4 compares participants' occupational status at baseline and endline across Khuruskul and Chowfaldandi, showing a significant shift in livelihood engagement. At baseline, most participants were engaged in domestic chores (57.5%), followed by day labor (18.6%) and small business activities (9.4%), while 14.4% were involved in other irregular occupations, indicating limited income opportunities. By endline, a

complete transformation was observed, with no participants engaged solely in domestic chores. All participants were involved in skill-based, income-generating activities, primarily handicrafts (26.5%), block- batik (23.2%), embroidery (23.87%), and tailoring (20%). Additionally, 6.45% engaged in weaving, exclusively in Chowfaldandi. Overall, the findings demonstrate a clear transition from unpaid domestic work and irregular labor to structured, skill-based livelihoods.

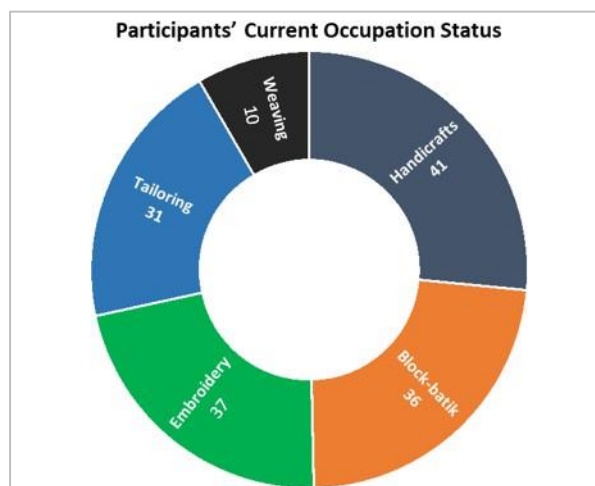


Figure 7.4 Participants' current occupation status

7.2.3. Participants' Monthly Income (IGA)

Table 7.6 indicates a marked improvement in participants' (IGA) monthly income between baseline and endline in Chowfaldandi and Khuruskul (72.36% & 52.93%, respectively). At baseline, most participants had no income (65.67% and 62.96%, respectively), with average earnings of BDT 4,370 in Chowfaldandi and BDT 4,175 in Khuruskul among earners. By endline, 100% of participants reported monthly income, with averages rising to BDT 7,532 and BDT 6,385, respectively in Chowfaldandi & Khuruskul, indicating complete elimination of zero-income households and substantial income growth.

Table 7.6 Participants' monthly income (IGA)

Project Location	Earning Status	Baseline		Endline		Income Increased (%)
		N (%)	Avg. Income (Month)	N (%)	Avg. Income (Month)	
Chowfaldandi	Individuals with 0 Earnings	65.67%	-	0	-	72.36%
	Individuals with Earnings	34.33%	4370 BDT	100%	7532 BDT	
Khuruskul	Individuals with 0 Earnings	62.96%	-	0	-	52.93%
	Individuals with Earnings	37.04%	4175 BDT	100%	6385 BDT	

Qualitative evidence from FGDs and KIIs supports these findings, highlighting economic empowerment through project-supported skills such as tailoring, block-batik, and embroidery. A participant from Khuruskul stated, *"Before, I had to wait for my husband even for my child's education... now I earn my own money and help my husband too."* Others described increased household earnings—often reaching up to BDT 9,000 per month—and reduced reliance on seasonal labor. One participant noted, *"Now I earn my own money, I don't have to wait for my husband, and I can contribute to my children's schooling. Before, we didn't even know how to make ends meet during the off-season."* Increased income also enabled reinvestment, as a participant from Chowfaldandi explained, *"The extra income has helped me invest in my business. I now have a little extra to buy raw materials in bulk and sell my products to larger markets."* Together, these testimonies demonstrate a clear shift from dependency to financial agency among women and vulnerable groups.

7.2.4. Participants' Household Size and Monthly Income

Table 7.8 compares household size and average monthly income at baseline and endline in Khuruskul and Chowfaldandi, showing substantial economic improvement. In Khuruskul, the average household size declined from 5.6 to 4.97, and average monthly household income increased from BDT 8,152 to BDT 18,195—an increase of BDT 10,043 (123.2%). In Chowfaldandi, the average household size rose slightly from 4.95 to 5.2, and average monthly household income increased from BDT 8,278 to BDT 13,755—an increase of BDT 5,477 (66.2%).

Table 7.8 Participants' household size and monthly income

Project Location	Baseline			Endline			Income Increased (%)
	Households (N)	Avg. Size	Avg. Income (Month)	Households (N)	Avg. Size	Avg. Income (Month)	
Khuruskul	67	5.6	8152	67	4.97	18195	123.2%
Chowfaldandi	108	4.95	8278	88	5.2	13755	66.2%

FGD findings reveal that most participants were women heading households or managing family resources, often supporting large families. A participant from Chowfaldandi shared, *"I have three children and my elderly parents to care for. Before the training, I could barely provide for them, but now I have a way to contribute financially."* In Khuruskul, where household sizes typically ranged from four to six members, women described heavy financial pressure prior to the intervention. One participant noted, *"Before, it was just me and my husband trying to make ends meet with his seasonal work. Now, my income has helped us support our parents, children, and even pay for some of our neighbors' needs when they're struggling."* Participants consistently linked income growth to project-supported training in tailoring, block-batik, and embroidery. Before joining SRGs, many households relied on irregular or seasonal income. One participant explained, *"Before the training, we depended on my husband's work as a fisherman, but it was never enough. There were times when we would go without food for days."* After training, many reported monthly earnings of up to BDT 9,000. A participant from Chowfaldandi stated, *"Now I earn my own money, which is around 8,000 BDT a month. I no longer have to wait for my husband to bring in money. This has given me so much freedom."* Improved income also translated into better living standards and reinvestment opportunities. A participant from Khuruskul shared, *"Now that I'm earning, I can afford to buy food without worrying. I also help my children with their education. It's a huge relief knowing that I'm contributing."* Another from Chowfaldandi added, *"Before, I would sell my products at a low price because I couldn't afford to buy enough material. Now, I buy in bulk, and I'm able to sell my products for a higher price and keep more for myself."* Overall, quantitative and qualitative findings demonstrate that the BMZ-PT project enabled a clear transition from income insecurity and dependency to improved household earnings, financial independence, and enhanced quality of life, underscoring the transformative impact of vocational training and community-based empowerment.

7.2.5. Savings Status of Participants (IGA)

Table 7.9 shows a significant improvement in participants' (IGA) savings status between baseline and endline across Khuruskul and Chowfaldandi unions. At baseline, savings were minimal, with only 1% of participants in Khuruskul and 4% in Chowfaldandi reporting any savings, indicating high financial vulnerability. By endline, savings behavior improved markedly: all participants in Khuruskul and Chowfaldandi reported having savings.

Table 7.9 Saving status of the participants

Savings Status	Baseline		Endline	
	Khuruskul	Chowfaldandi	Khuruskul	Chowfaldandi
Yes	1%	4%	100%	100%

No	99%	96%	0%	0%
----	-----	-----	----	----

7.2.5. Monthly Savings of Participants (IGA)

Figure 7.5 presents participants' monthly savings amounts at endline, showing that most saved less than or equal BDT 500 (n = 111), followed by BDT 500–1,000 (n = 32). Smaller proportions saved BDT 1,000–1,500 (n = 2), BDT 1,500–2,000 (n = 4), BDT 2,000 or more (n=6). Despite concentration in lower brackets, the average monthly saving was BDT 715, indicating meaningful household-level savings and improved financial discipline. Similar evidence found from PHALS, according to them the total SRG wise beneficiaries' savings is 7000300 BDT as of December, 2025 (Golap=62500, Jaba=69500, Padda=105400, Shapla=43250, Bokul=108150, Jui=97000, Beli=101100, and Sheuli=113400).

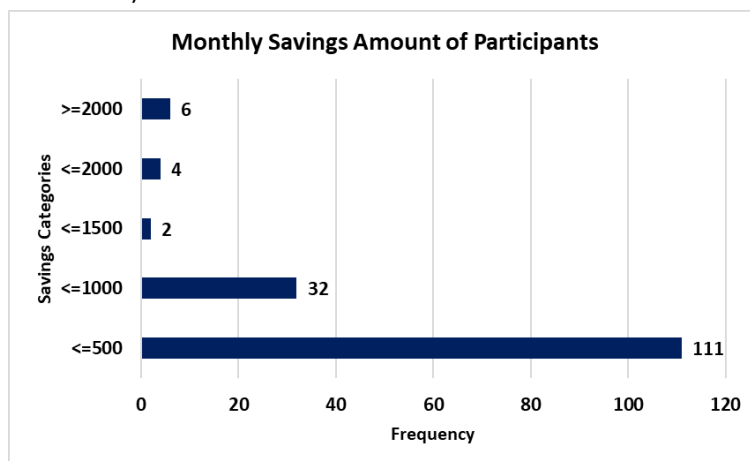


Figure 7.5 Monthly savings amount of participants

Before the project, savings were largely absent due to irregular income and survival pressures. A participant from Khuruskul stated, “Before, we never thought about savings. We would barely manage to buy food, and saving was just not possible. Whatever little we had would go to immediate needs.” Following the introduction of Self-Reliant Groups (SRGs) and financial training, participants reported regular saving for the first time. A woman from Chowfaldandi shared, “Before, we never saved. Now, we have a group savings system, and I contribute regularly. It gives me peace of mind knowing that I have some savings to fall back on.” SRGs played a central role by providing structured, collective savings and mutual support. A local government official noted, “The SRGs have created a safety net for many households. Instead of relying on high-interest loans from local moneylenders, participants now have a safe space to save and borrow money within the group.” One participant from Khuruskul added, “Our SRG meetings are not just about saving money; it’s about planning for the future. We discuss how to use our savings wisely, and sometimes we even lend to each other if someone faces an emergency.” Participants emphasized improved household stability and autonomy. A woman from Chowfaldandi said, “Before, I had to depend on my husband’s income, which was never enough. Now, with the savings I’ve built, I can buy things I need for my family, and I don’t have to wait for anyone to provide for us.” Similarly, a participant from Khuruskul noted, “The savings have helped us during the rainy season when work is hard to find. I know that I can take from the savings to buy food or pay for my children’s school fees.” Savings were also reinvested in livelihoods. One participant explained, “I used part of my savings to buy materials in bulk for my tailoring business. This way, I can make more items and sell them at a higher price.” Financial literacy further shifted behavior toward long-term planning, as a woman from Chowfaldandi stated, “Before, I didn’t know how to manage my money. Now, I save for long-term goals like my children’s education and our future security.” Despite progress, challenges remain. One participant acknowledged, “It’s hard sometimes not

to dip into the savings when something urgent comes up. But we're learning to be disciplined." Others highlighted the need for formal mechanisms, noting, "It would be helpful if we had a community bank or financial services that could help us grow our savings more effectively." Overall, the BMZ-PT project fostered a shift from immediate consumption to regular saving, financial planning, and reinvestment through SRGs and financial training. These changes strengthened household stability, enhanced women's financial agency, and built economic resilience, while underscoring the importance of continued institutional support and access to formal financial services for long-term sustainability.

7.2.5. Loan Status of Participants

Figure 7.6 compares participants' loan status at baseline and endline across Khuruskul and Chowfaldandi unions. At baseline, loan dependency was notable: 26.9% of participants in Khuruskul and 38% in Chowfaldandi reported having loans. By endline, loan dependency declined in both unions, with 19.4% of participants in Khuruskul and 34.1% in Chowfaldandi reporting loans. Among those with loans at endline, the average outstanding amount was BDT 82,461 in Khuruskul and BDT 35,200 in Chowfaldandi, indicating differences in borrowing needs and financial exposure. Despite improvements, still a portion of participants remained trapped in prolonged debt cycles, often taking new loans before fully repaying existing ones.

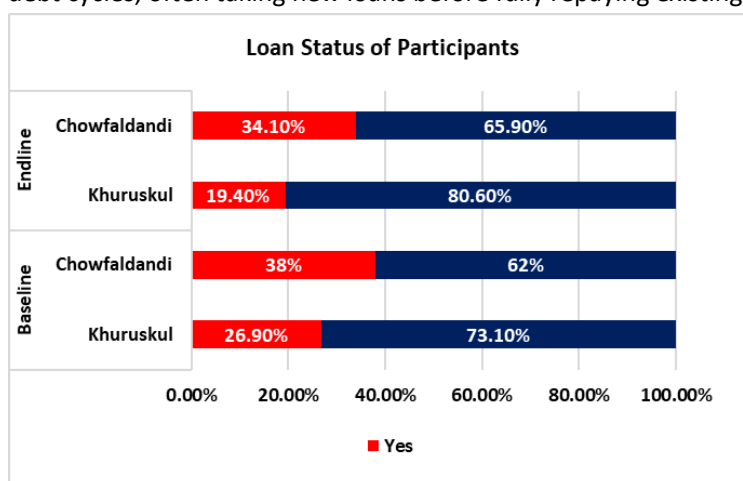


Figure 7.6 Loan status of the participants

Qualitative findings reveal that prior to the project, participants relied heavily on informal, high-interest loans. A participant from Khuruskul shared, "We had no choice but to borrow from local moneylenders, even though the interest rates were high. If we couldn't repay, they would take our land or property." In Chowfaldandi, another participant noted, "I used to borrow from friends and relatives, but they were never reliable... sometimes at the cost of food for my family." With the formation of Self-Reliant Groups (SRGs), access to credit became more structured and supportive. A local community representative stated, "The SRGs have introduced a much-needed safety net... participants now have the ability to access low-interest loans from within their own group." Participants echoed this shift. One woman from Khuruskul said, "Before, we could never get loans without paying exorbitant rates. Now, in our SRG, we support each other." SRG loans were mainly used for small businesses, raw materials, or emergencies. A participant from Chowfaldandi explained, "I took a loan to buy fabric for my tailoring business... I was able to repay the loan and still save some money." Repayment was generally manageable due to collective support, as one participant from Khuruskul shared, "If someone is struggling, the group supports them until they can pay back the loan." However, limitations remain. Some participants noted restricted loan sizes: "The amount we can borrow from the group is limited," while others expressed the need for formal banking support: "I wish there were a formal bank that could give us loans for

business growth.” Overall, the BMZ-PT project significantly reduced reliance on exploitative lending by enabling access to low-interest, community-based credit through SRGs. While this approach improved financial security and empowerment, the findings highlight the need to link SRGs with formal financial institutions to support larger-scale business expansion and ensure long-term financial sustainability.

7.2.6. Existence of Self-Reliant Groups (SRGs)

Table 7.10 highlights a significant change in the existence of Self-Reliant Groups (SRGs) in Khuruskul and Chowfaldandi. At baseline, no SRGs existed in either union, indicating a major gap in community-based empowerment and collective support. By endline, 100% of participants in both areas reported the presence and active operation of SRGs, confirming their successful establishment and institutionalization during the project period.

Table 7.10 Existence of SRGs

Existence of SRGs	Baseline		Endline	
	Khuruskul	Chowfaldandi	Khuruskul	Chowfaldandi
Yes	0 %	0%	100%	100%
No	100%	100%	0 %	0%

7.3. KEY RESULT AREA–WISE FINDINGS

7.3.1. Institutional Linkages and Networking

This subsection presents findings on institutional linkages and networking established under the project, assessed across relevance, effectiveness, efficiency, and impact in line with the OECD-DAC evaluation framework.

A. Relevance

The relevance of the project’s linkage activities was rated very positively by participants. The activities were perceived as well aligned with individual needs, with a mean score of 4.23 on a five-point scale. Participants also strongly agreed that the selected linkages matched local area needs, as reflected by a higher mean score of 4.41 (Figure 7.7).

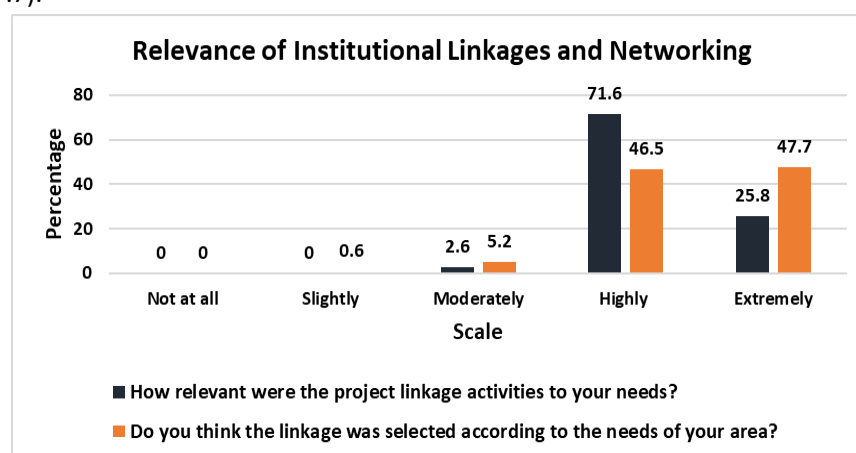


Figure 7.7 Relevance of institutional linkages and networking

B. Effectiveness

Participants perceived the project as effective in delivering information, advice, and services through institutional linkages, with a mean score of 4.20. The linkage mechanism was also considered helpful in facilitating communication with government offices, markets, and other organizations, reflected by a mean score of 4.13 (Figure 7.8).

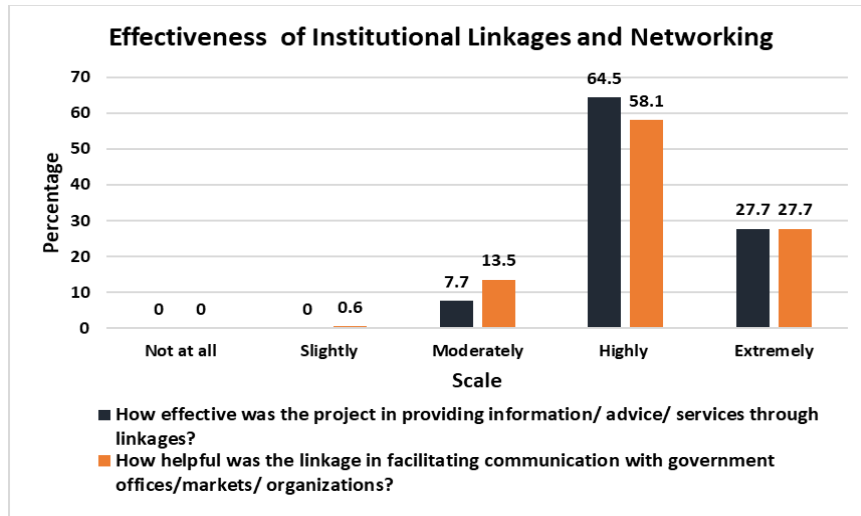


Figure 7.8. Effectiveness of institutional linkages and networking

C. Efficiency

Efficiency-related aspects of the linkage activities also received strongly favorable ratings. Participants rated the timing, location, and management of linkage activities as highly appropriate, with a mean score of 4.32. This suggests that logistical arrangements were well aligned with participants' availability and accessibility needs. Ease of participation was rated even higher, with a mean score of 4.39, indicating that participants faced minimal barriers in engaging with linkage activities (Figure 7.9)

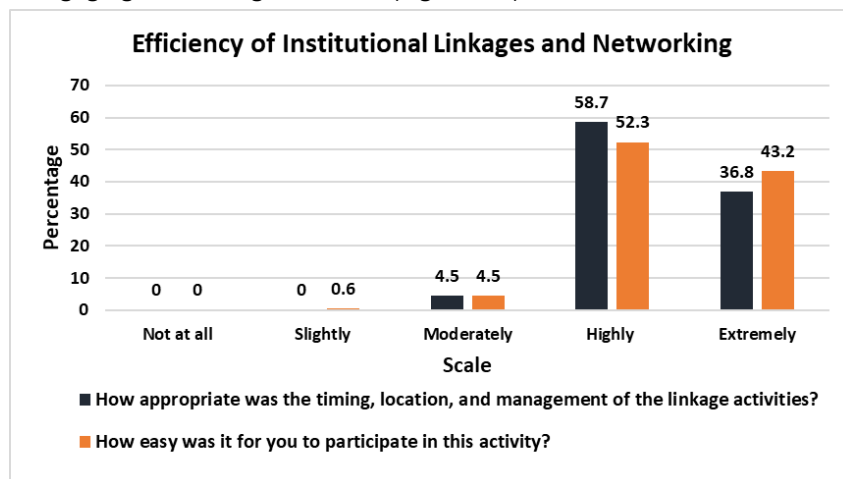


Figure 7.9 Efficiency of institutional linkages and networking

D. Impact

Participants reported notable positive changes resulting from the linkage interventions. The perceived impact on income, knowledge, and decision-making capacity achieved a mean score of 4.24, indicating meaningful improvements in personal and economic empowerment. Additionally, participants expressed a high level of confidence in their ability to independently use institutional linkages in the future, with a mean score of 4.31 (Figure 7.10).

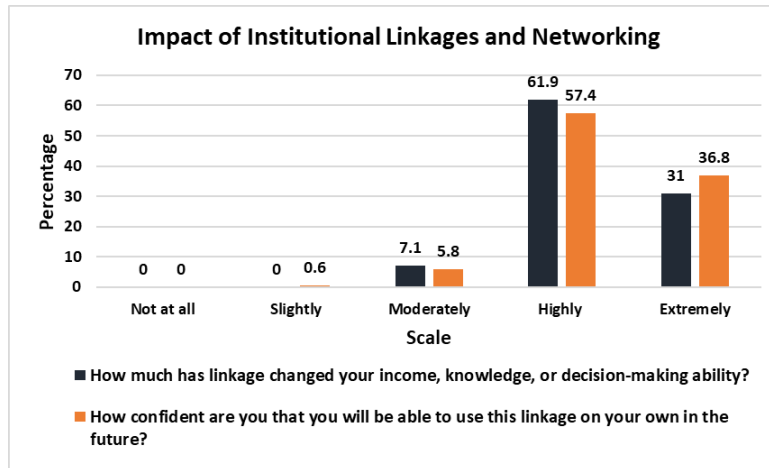


Figure 7.10 Impact of institutional linkages and networking

Based on FGDs, IDIs, and KIIs, the institutional linkages and networking under the BMZ-PT project provided critical qualitative evidence of strengthened connections between community groups, local government, and key stakeholders, contributing to resilience and sustainability. Before the intervention, participants from Khuruskul and Chowfaldandi Unions—particularly women and marginalized ethnic groups such as the Rakhine—reported limited interaction with local authorities and exclusion from decision-making. As one participant from Khuruskul stated, *“Before, we never spoke to the Chairman or the Union Parishad. We didn’t know how to reach out for help.”* The project shifted this dynamic by establishing strong linkages between Self-Reliant Groups (SRGs) and institutions such as the Union Parishad and Union Disaster Management Committee (UDMC). A woman from Chowfaldandi noted, *“Now, we have regular meetings with the Chairman and local authorities. They listen to our concerns. We even brought up the need for shelters during cyclones, and the Chairman took action.”* SRGs emerged as an effective platform for inclusive participation, increasing confidence among women, ethnic minorities, and PwDs. A Rakhine participant shared, *“Before, we were just staying behind the doors. Now, through this group, we sit at the same table as the Chairman’s people to talk about our safety during cyclones.”* This inclusion was also recognized by local authorities, as reflected in a KII: *“The SRGs have provided an entry point for marginalized groups to voice their concerns... It’s a game-changer for inclusive governance.”* Integration of SRG members into UDMCs strengthened inclusive disaster preparedness. A participant from Khuruskul stated, *“We now have a direct line to the Union Parishad and can discuss how to prepare for disasters. Before, we had no idea who to turn to for help.”* A woman from Chowfaldandi added, *“We used to be afraid of cyclones, but now we know the signals and who to help first, like the disabled and the elderly.”* Institutionalization of these linkages was identified as key to sustainability. As noted in a KII, *“The project’s success lies not just in providing immediate support, but in the long-term institutionalization of SRGs.”* Collaboration with external actors further strengthened capacities, as one participant observed, *“They didn’t just give us skills; they also gave us the connections to other organizations that can support our work.”* Overall, the institutional linkages and networking established by the BMZ-PT project transformed SRGs from aid recipients into active contributors to local governance and disaster management. As one KII participant concluded, *“These groups are no longer just recipients of aid—they are now key players in the development and disaster management processes. That’s the true strength of this project.”*

7.3.2. Inclusive Livelihood Development and Market Access

This subsection presents findings related to inclusive livelihood development and market access, assessed using the OECD-DAC criteria of relevance, effectiveness, efficiency, and impact. The analysis is based on participants' perceptions measured through a five-point Likert scale.

A. Relevance

Participants reported a strong alignment between the livelihood training provided and their existing abilities or professional background, with a mean score of 4.19. The absence of low ratings and the concentration of responses toward higher values indicate that the training content was largely appropriate for participants' skill levels and livelihood aspirations. Similarly, the support provided in the form of equipment or start-up assistance was perceived as highly relevant to household needs, achieving a mean score of 4.30 (see Figure 7.11).

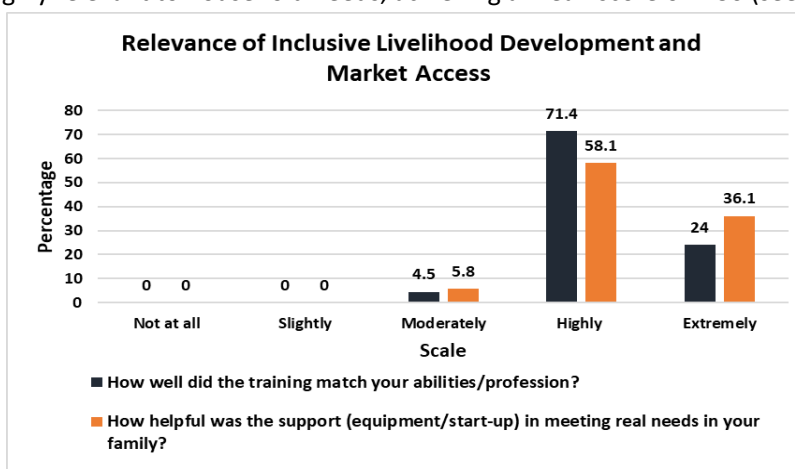


Figure 7.11 Relevance of inclusive livelihood development and market access

B. Effectiveness

Participants reported positive outcomes in terms of skill acquisition following training, with a mean score of 4.20. This suggests that the training sessions were effective in enhancing participants' technical and practical competencies. The perceived impact of livelihood support on income generation was even stronger, reflected by a mean score of 4.37. This indicates that livelihood inputs translated into tangible economic gains for most participants. In addition, market linkage support was rated as effective in improving business performance and production capacity, with a mean score of 4.21 (see Figure 7.12).

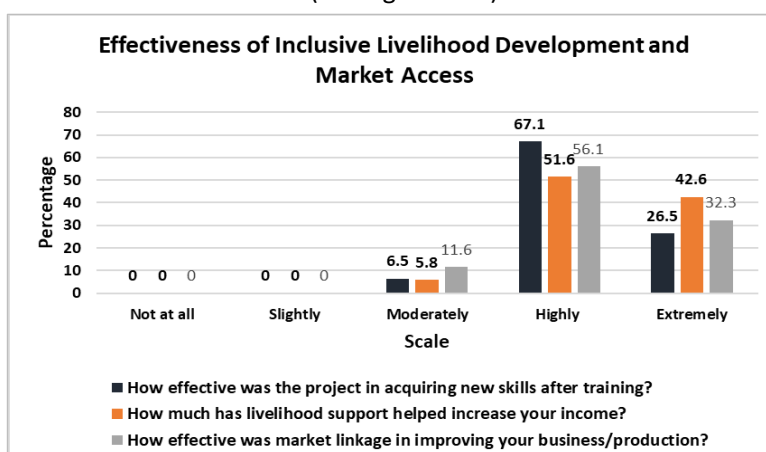


Figure 7.12. Effectiveness of inclusive livelihood development and market access

C. Efficiency

Efficiency-related indicators received very high ratings from participants. Timeliness in receiving training, equipment, or start-up support recorded a mean score of 4.45, indicating that project inputs were delivered at appropriate times to maximize their usefulness. Ease of accessing livelihood support was also rated highly, with a mean score of 4.41 (see Figure 7.13).

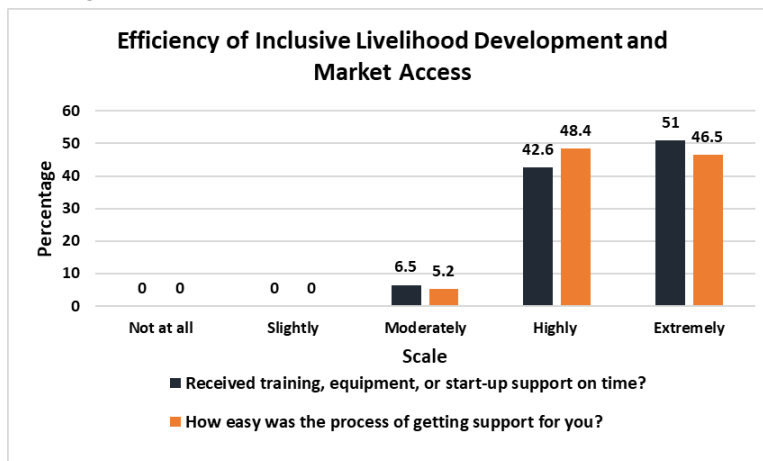


Figure 7.13. Efficiency of inclusive livelihood development and market access

D. Impact

Participants reported meaningful improvements in their household financial situation as a result of the project, with a mean score of 4.20. Although a small number of lower ratings were observed, the overall response pattern indicates a substantial positive shift in economic stability. Furthermore, participants perceived improvements in the market positioning of their products, with a mean score of 4.19 (see Figure 7.14).

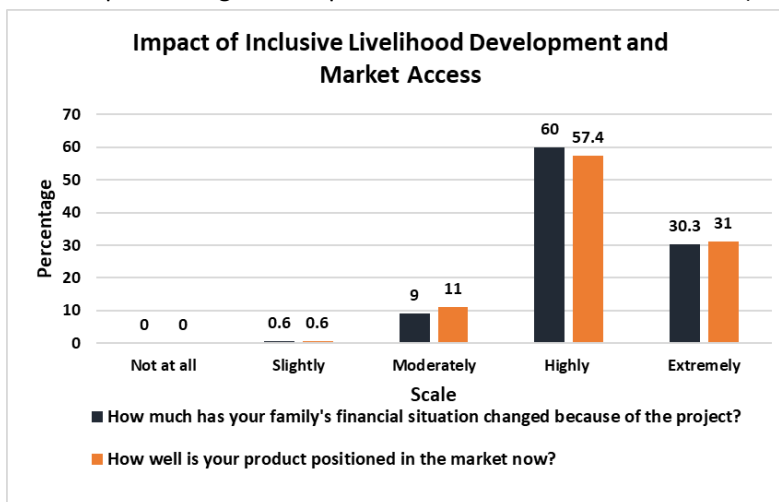


Figure 7.14. Impact of inclusive livelihood development and market access

Prior to the project, participants faced significant barriers to accessing stable and reliable income sources. Women, in particular, had limited economic opportunities due to traditional gender roles. As one participant from Chowfaldandi Union stated, *"We had no way to earn consistently. My husband would sometimes work as a day laborer, but it was never enough. I stayed at home and felt like I wasn't contributing."* The introduction of Self-Reliant Groups (SRGs) and vocational training marked a major shift. Women gained practical income-generating skills, enabling them to contribute financially. A participant from Khuruskul Union shared, *"Before,*

I didn't know anything about tailoring. But now, I make clothes and sell them at local markets. My earnings have changed my family's life." Training in tailoring and block-batik created new livelihood opportunities and challenged traditional gender norms. The project also promoted gender and social inclusion, particularly for marginalized groups such as the Rakhine community. One female participant noted, *"We were excluded from the community activities before, but now we sit together and make decisions. Our community is now united, and we support each other."* This reflects increased confidence, participation, and collective empowerment. Despite these gains, FGDs revealed persistent challenges in accessing larger and more profitable markets. A participant from Chowfaldandi explained, *"I make beautiful dresses, but selling them here doesn't earn me much. We don't have direct access to city markets where people might pay more."* A KII with an Upazila Social Services Officer highlighted this gap: *"The biggest challenge for these artisans is the 'last mile' linkage to high-value urban markets. They have the skills, but they need better infrastructure and access to buyers who can pay fair prices for their products."* Participants suggested collective solutions to address these barriers. One participant from Khuruskul Union stated, *"If we had a place where we could bring our products together, like a market hub, we could sell them as a group and get better prices."* Others emphasized the need for formal business linkages. A woman from Chowfaldandi shared, *"If we could connect with shops or fashion houses in the city, we would have more opportunities to grow our businesses. We need help to find these connections."* Overall, the BMZ-PT project has made notable progress in creating inclusive livelihood opportunities through skills training in tailoring, block-batik, and embroidery. However, limited market access and business scaling remain key constraints. As one participant summarized, *"We have the skills, now we need the connections to make our work known and valued by others."* Addressing these gaps is essential to ensure long-term sustainability and financial independence for marginalized populations.

7.3.3. Access to Government Services and Advocacy

This subsection presents findings on participants' access to government services and advocacy support, analyzed using the OECD-DAC criteria of relevance, effectiveness, efficiency, and impact. The analysis is based on participants' self-reported responses measured on a five-point Likert scale.

A. Relevance

Participants indicated that government service and referral assistance provided through the project was highly necessary for their households, with a mean score of 4.20. The absence of low ratings and the clustering of responses toward higher values reflect the critical role such assistance played in addressing household-level service access gaps. Additionally, participants rated the selection of government services targeted by the project as appropriate and well-aligned with their needs, achieving a mean score of 4.26 (see Figure 7.15).

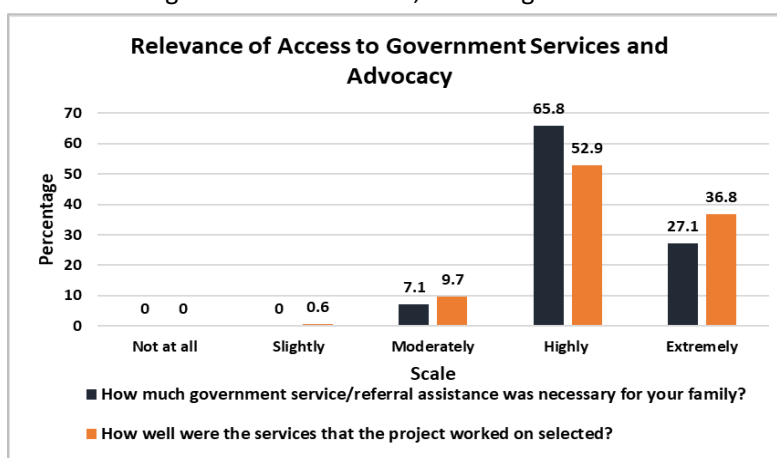


Figure 7.15. Relevance of access to government services and advocacy

B. Effectiveness

Participants reported that the project was effective in facilitating access to government services, with a mean score of 4.15. While responses showed moderate variability, the overall trend remained positive, indicating that most participants experienced tangible improvements in service access. Furthermore, respondents noted an increase in their confidence to communicate with government departments, reflected by a mean score of 4.10 (see Figure 7.16).

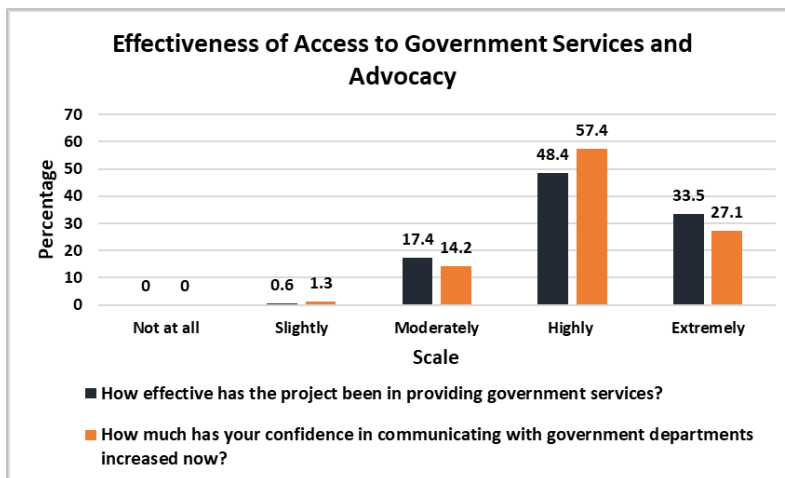


Figure 7.16 Effectiveness of access to government services and advocacy

C. Efficiency

Participants evaluated the speed and convenience of the referral and connection process positively, with a mean score of 4.12. This indicates that the referral mechanisms functioned smoothly and did not impose excessive delays. Perceptions of feasibility in accessing services without additional time, cost, or administrative burden were particularly strong, achieving a mean score of 4.38 (see Figure 7.17).

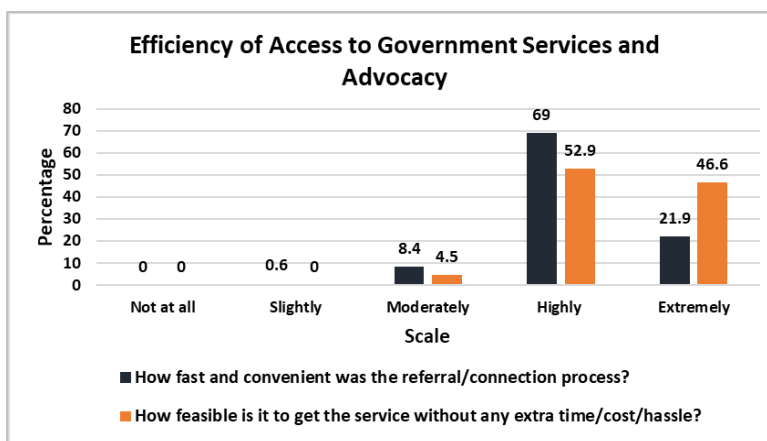


Figure 7.17 Efficiency of access to government services and advocacy

D. Impact

Participants reported meaningful changes in their lives as a result of receiving government referrals and services, with a mean score of 4.21. This indicates that facilitated access to services translated into tangible improvements in well-being and social inclusion. In addition, participants expressed strong confidence in their ability to independently access government services in the future, reflected by a mean score of 4.26 (see Figure 7.18).

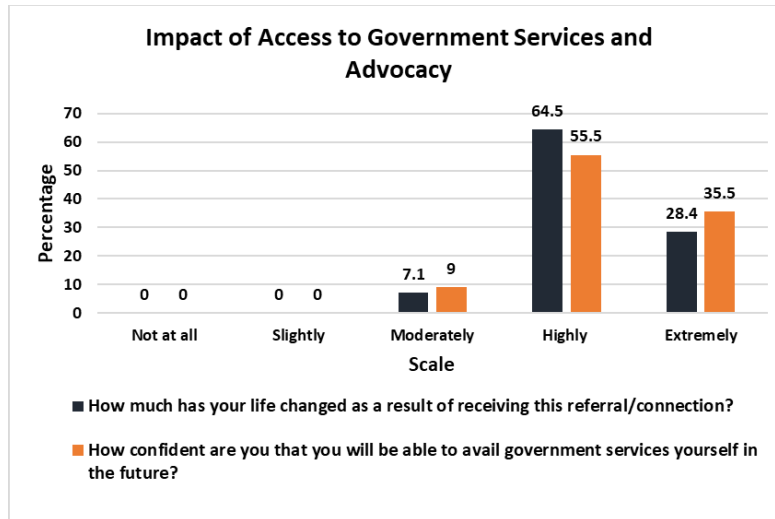


Figure 7.18. Impact of access to government services and advocacy

Before the BMZ-PT project, participants from Khuruskul and Chowfaldandi Unions reported limited access to government services, with women, ethnic minorities, and persons with disabilities (PWDs) being particularly disadvantaged. Essential services such as healthcare, education, and disaster relief were often perceived as inaccessible. As one participant from Chowfaldandi Union stated, “We used to hear about government programs, but we had no way to access them. It felt like those services were for other people, not for us.” This sense of exclusion was especially common among ethnic minorities, including the Rakhine community. The project improved access by strengthening linkages between Self-Reliant Groups (SRGs) and local government institutions. Regular interaction with authorities enabled participants to raise concerns directly. A participant from Khuruskul Union noted, “Now we know how to ask for help from the Union Parishad. We have direct communication with the Chairman and local officials. We even spoke to them about our need for disaster shelters, and they responded.” This reflects a clear shift from isolation to engagement. In Chowfaldandi, improved access was particularly evident during disasters. A woman from the Rakhine community shared, “Before the project, we never knew how to ask for support during a disaster. Now, the Union Parishad knows us, and they help us when we need it most.” A community leader emphasized this role, stating, “The SRGs have acted as bridges between the community and the Union Parishad. These groups have given marginalized populations a voice, and we’ve been able to respond to their needs in a more organized way.” The project also strengthened advocacy skills, especially among women, through participation in Union Disaster Management Committees (UDMCs) and local meetings. A woman from Chowfaldandi explained, “Before, we were too afraid to speak to the Chairman or the local authorities. Now, we know how to ask for what we need, like better safety measures during storms. We even helped organize evacuation plans for the elderly and the disabled.” Increased confidence was also noted in Khuruskul, where a participant stated, “We can now go to the Union Parishad without fear... We never did this before.” This change was recognized by local authorities. A Union Parishad member noted, “Women in these communities are no longer passive recipients of aid. They have become active participants in governance and decision-making.” Despite these gains, challenges remain. Participants highlighted bureaucratic barriers, particularly documentation requirements. One participant from Chowfaldandi stated, “We sometimes face delays in getting our names registered for government programs. There’s a lot of paperwork.” A local authority acknowledged this, noting the need to simplify processes. Participants also expressed the need for further training in navigating formal procedures. As one participant from Khuruskul shared, “We know how to talk to the local officials now, but we need more training on how to fill out forms and apply for services.” Overall, the BMZ-PT project significantly improved access to government services and advocacy capacity among marginalized communities by institutionalizing SRG–government

linkages. While notable progress has been achieved, continued capacity-building and administrative support are necessary to fully overcome remaining barriers and sustain inclusive access to public services.

7.3.4. Disaster Risk Reduction and Climate Adaptation Capacity

This subsection presents findings on disaster risk reduction (DRR) and climate change adaptation (CCA) capacity, assessed using the OECD-DAC criteria of relevance, effectiveness, efficiency, and impact. The analysis is based on participants' responses measured on a five-point Likert scale.

A. Relevance

At baseline, 100% of surveyed participants reported no prior DRR/CCA training or structured preparedness practices where disaster risks were perceived as unavoidable rather than manageable. By endline, following participation in project-supported DRR/CCA training, respondents rated the relevance of the training to local disaster risks very highly (mean = 4.42) and to household-level preparedness needs positively (mean = 4.18). This reflects a strong alignment between training content and participants' real-life risk contexts (see Figure 7.19).

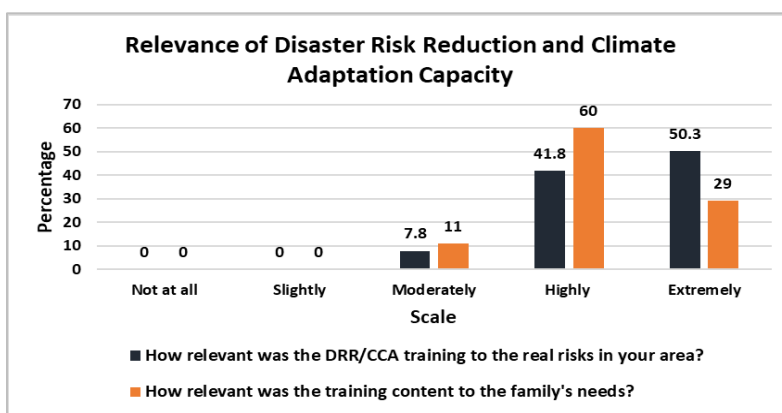


Figure 7.19 Relevance of disaster risk reduction and climate adaptation capacity

B. Effectiveness

At baseline, no organized or community-based DRR/CCA training mechanisms were identified, and 0% of participants reported access to structured preparedness support or community planning systems. At endline, participants reported notable improvements in their knowledge of disaster preparedness, reflected by a mean score of 4.08. Despite a small number of lower ratings, the overall response pattern suggests a meaningful increase in awareness and understanding of disaster risks and response measures. The ability to apply learned techniques during actual disaster events received a slightly lower but still positive mean score of 3.91. The wider variation in responses indicates differences in exposure to disaster events or opportunities to practice these skills during the project period (see Figure 7.20).

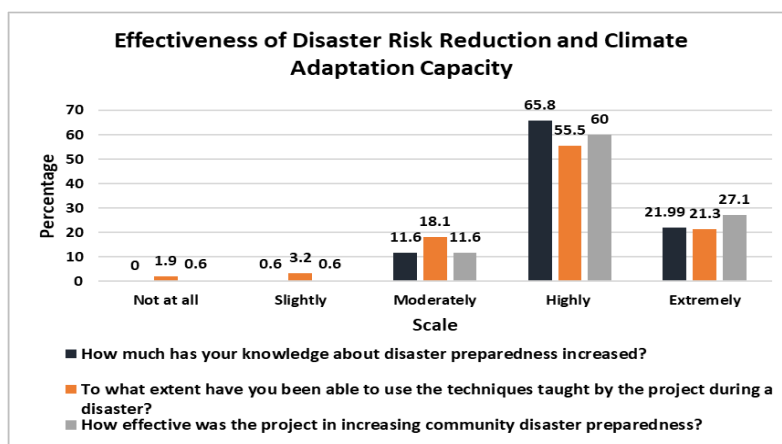


Figure 7.20. Effectiveness of disaster risk reduction and climate adaptation capacity

C. Efficiency

At baseline, no organized or community-based DRR/CCA training mechanisms were identified, and 0% of participants reported access to structured preparedness support or community planning systems. At endline, participants positively assessed the timing, accessibility, and management of DRR/CCA training activities (mean = 4.26, SD = 0.70). Perceived reduction in disaster-related damage risk (mean = 3.94, SD = 0.67) reflects improved efficiency relative to baseline conditions, while recognizing the influence of broader environmental and structural factors (see Figure 7.21).

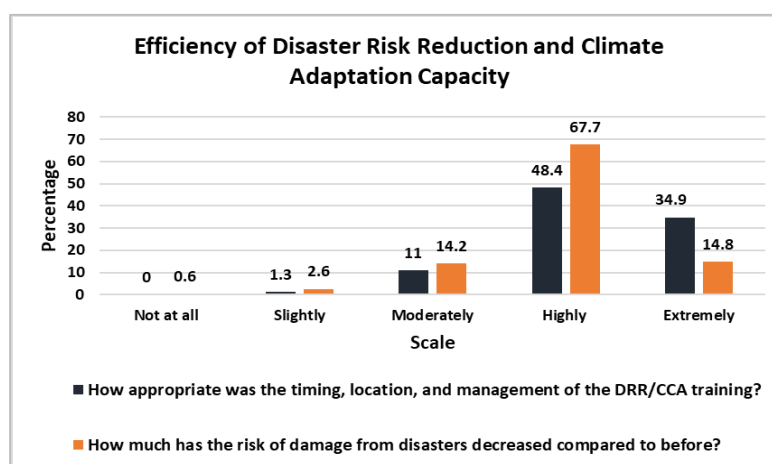


Figure 7.21. Efficiency of disaster risk reduction and climate adaptation capacity

D. Impact

Baseline data indicated high levels of fear, uncertainty, and low confidence, particularly among women, persons with disabilities, and ethnic minority groups, with households reporting limited ability to cope during disasters. At endline, participants reported increased household safety during disasters (mean = 4.04, SD = 0.67) and strong confidence in the long-term usefulness of DRR/CCA skills (mean = 4.23, SD = 0.63). This demonstrates a significant positive impact, reflecting a transition from baseline vulnerability to enhanced resilience and adaptive capacity (see Figure 7.22).

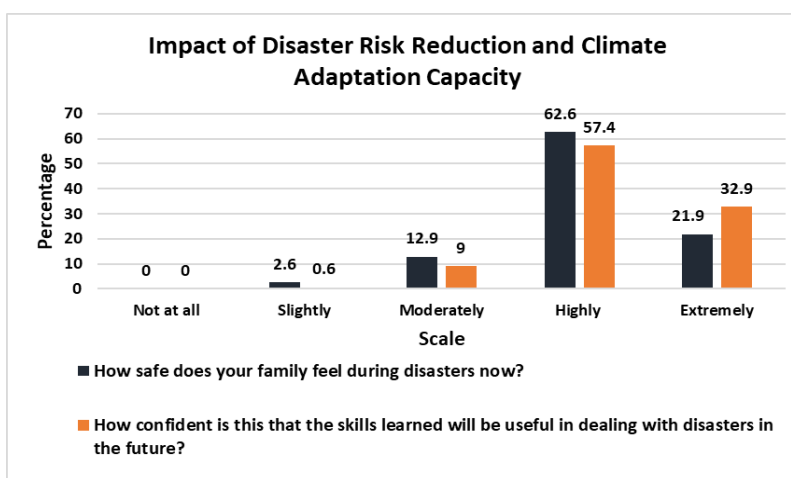


Figure 7.22. Impact of disaster risk reduction and climate adaptation capacity

Before the BMZ-PT project, communities in Khuruskul and Chowfaldandi Unions were highly vulnerable to cyclones, floods, and storm surges due to limited awareness and preparedness. Participants frequently expressed fear and uncertainty about how to respond to disasters. As one participant from Khuruskul Union stated, “We used to be afraid of cyclones because we didn’t know what to do or where to go. We had no early warning system and no plan to protect ourselves.” This vulnerability was particularly acute among marginalized groups. The project addressed these gaps by integrating disaster risk reduction (DRR) and climate change adaptation (CCA) into community development through training, awareness campaigns, and community-based preparedness planning. Participants reported a clear shift from fear to informed preparedness. A woman from Chowfaldandi Union shared, “We used to be afraid of cyclones, but now we know the signals and who to help first, like the disabled and the elderly.” Active involvement of Self-Reliant Group (SRG) members in disaster preparedness planning was a key outcome. A participant from Chowfaldandi noted, “We now have clear evacuation plans, and we know who to help first when a disaster strikes... This knowledge has made a huge difference in our safety.” This proactive engagement strengthened community capacity to respond to and recover from disasters while prioritizing vulnerable individuals. The project also improved understanding of climate change and its long-term impacts on livelihoods. A participant from Khuruskul reflected, “Before, we didn’t understand what climate change was... Now, we understand that it’s a long-term change, and we know how to protect ourselves and our homes.” A community leader further emphasized, “The project has successfully integrated climate adaptation into daily practices.” Women and marginalized groups became more empowered and actively involved in climate resilience efforts. A woman from Chowfaldandi stated, “Now, we speak up about how to protect our land, our crops, and our families from the changing climate.” Similarly, a Rakhine participant noted, “We never felt included before. But now, we are part of the discussions on how to adapt to climate change.” Overall, the BMZ-PT project significantly strengthened disaster risk reduction and climate adaptation capacities in vulnerable communities through knowledge-building, preparedness planning, and inclusive participation. While infrastructure and resource constraints remain, the project has laid a strong foundation for long-term resilience by empowering communities—particularly women and ethnic minorities—to actively engage in disaster preparedness and climate adaptation.

7.4. CROSS-CUTTING ISSUES: GENDER, DISABILITY, AND SAFEGUARDING

7.4.1. Women’s Influence in Household Decision-Making

The study examined women’s participation and influence in household decision-making to assess changes in empowerment and agency (Figures 7.23 and 7.24). Results show that 92.9% of respondents reported women’s

active involvement in family decision-making, while only 7.1% indicated no involvement, reflecting a substantial improvement in women's agency. This progress is likely linked to the project's integrated livelihood, income-generation, and awareness-building interventions, which enhanced women's confidence and bargaining power within households. In terms of influence, most respondents perceived women's role in decision-making as strong: 58.4% rated it as high and 9.1% as very high, while 28.6% reported moderate influence. Only 3.9% indicated lower influence, and none reported very low influence, suggesting meaningful and sustained empowerment beyond participation alone.

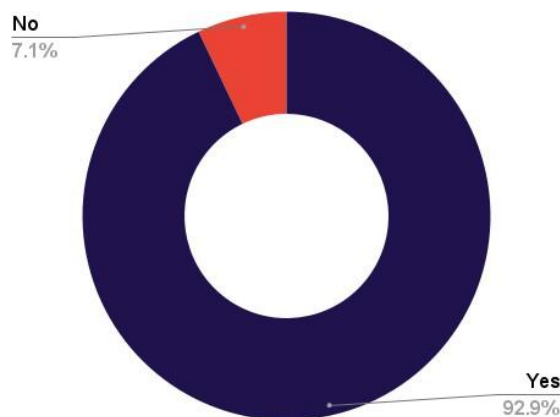


Figure 7.23 Status of the women in decision-making in the family

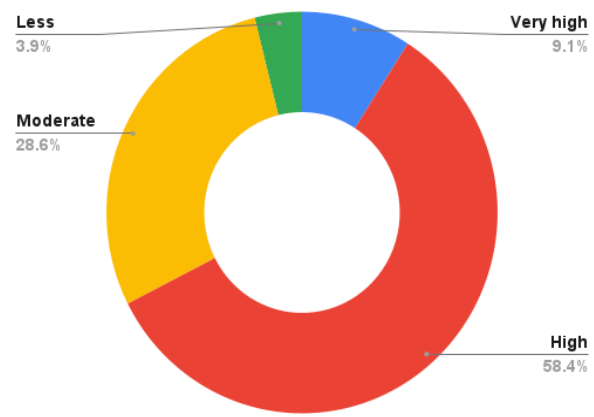


Figure 7.24 How much has the role of women in decision-making increased?

7.4.2. Women's Leadership and Participation

The study assessed changes in women's leadership and participation compared to the pre-project situation. Endline findings show substantial improvement in women's household decision-making, with 92.9% of respondents reporting active female participation (Figure 7.25). Additionally, 67.5% rated women's influence as high to very high, indicating meaningful rather than symbolic engagement. Perceptions of leadership also improved markedly, with 95.5% of participants stating that project activities strengthened women's leadership and participation compared to the past, while only 4.5% reported no noticeable change (Figure 7.26).



Figure 7.25 Have project activities strengthened women's leadership and participation compared to the past?

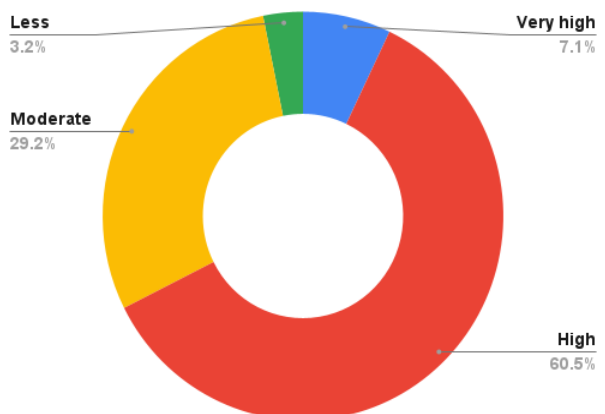


Figure 7.26 How strong has women's leadership and participation been in project activities?

Before the BMZ-PT project, household decision-making in Khuruskul and Chowfaldandi Unions was largely male-dominated, with women having limited influence over financial, education, and health-related decisions. As one participant from Chowfaldandi recalled, “I had to depend on my husband even for my child’s education... I could not make any decisions about the household’s finances.” Following the formation of Self-Reliant Groups (SRGs) and skills training, women gained financial independence and greater influence within their households. A woman from Khuruskul stated, “Now I contribute to the household income, and I help decide what to spend on... now I feel like my voice matters.” A local leader also noted, “The SRGs have given women a voice in their households... they are making important financial decisions.” The project further strengthened women’s leadership in community governance. Through SRGs, women assumed leadership roles and engaged directly with local authorities. One participant from Chowfaldandi shared, “Now, we are leading our groups and making decisions together. We even meet with the Chairman to discuss important matters.” A local teacher observed that women now actively participate in governance and demand their rights, reflecting a shift in power dynamics. Women’s leadership was particularly visible in disaster risk reduction and climate adaptation. A participant from Khuruskul noted, “We used to wait for help; now, we take the lead in protecting our families.” Similarly, women in Chowfaldandi reported leading disaster preparedness meetings and ensuring inclusion of the elderly and PwDs. The project also promoted disability inclusion. A woman with a disability from Khuruskul stated, “Before the project, I felt invisible. Now, I am part of the group, and I have a say in the decisions that affect me.” Despite these advances, challenges such as persistent gender norms and socio-cultural barriers remain. As one participant noted, “Sometimes, men still don’t listen to us at home.” Overall, the BMZ-PT project significantly enhanced women’s household influence, leadership, and inclusion of marginalized groups through SRGs and skills training, while highlighting the need for continued efforts to address remaining structural and cultural barriers.

08 | IDENTIFIED GAPS AND LESSONS LEARNED FROM THE EXISTING PROJECT COMPONENTS AND INTERVENTIONS

The endline evaluation of the BMZ-PT project not only assessed the effectiveness and impact of the interventions but also identified key gaps and lessons learned that can inform future phases of the project. These insights provide valuable guidance for improving the sustainability and scalability of the interventions, ensuring that future efforts better align with the needs of vulnerable communities and further enhance their resilience.

- A. Way to Regional and Urban Market Access for Livelihoods:** The endline evaluation finds that Self-Reliant Groups (SRGs) have achieved good access and performance, supported by improved entrepreneurial skills and structured marketing initiatives under the project. SRG members are able to sell their products locally with greater confidence, visibility, and organization, indicating positive outcomes at the community and union levels. At the same time, the evaluation identifies a remaining gap in accessing larger regional and urban markets, where demand, pricing, and income potential are comparatively higher. While PHALS has taken commendable steps such as entrepreneurship and marketing linkage training, buyer mapping, producer buyer meetings, participation in fairs, MoU signing, and the introduction of online marketing platforms market engagement beyond the local level remains limited in scale and consistency. Overall, the interventions have laid a strong foundation for local market integration, but further support is required to overcome challenges related to product aggregation, logistics, branding, quality standardization, and

sustained linkages with urban buyers. Lesson Learned: Livelihood interventions benefit from a phased market strategy strengthening local markets first, followed by targeted investments to expand into regional and urban markets. Future programming should build on the existing local market success by institutionalizing aggregation mechanisms and forging long-term partnerships with regional and urban market actors.

- B. Disaster Management Infrastructure Deficiencies:** While the project succeeded in raising awareness about disaster preparedness and providing training, gaps were identified in the physical infrastructure required to support community resilience during climate-induced events. The lack of sufficient shelters and evacuation centers was a recurring issue. Many participants shared concerns about the absence of proper facilities for evacuations, especially for the elderly, children, and persons with disabilities. Lesson Learned: Disaster management efforts should go beyond awareness and training to include investments in physical infrastructure. Future phases of the project should focus on the construction of more inclusive, accessible, and adequately equipped shelters, ensuring that they can accommodate all community members during disasters. Furthermore, these shelters should be designed to be resilient to climate-induced hazards like floods and cyclones.
- C. Bureaucratic Barriers to Accessing Government Services:** Another gap identified was the difficulty participants faced in accessing government services and programs. Despite the project's efforts to empower marginalized groups, bureaucratic barriers and the complexity of government procedures posed significant challenges. Participants reported that they often lacked the guidance needed to navigate the paperwork and requirements for accessing essential services, such as social welfare benefits or disaster relief. Lesson Learned: Simplifying the bureaucratic processes and providing direct support to marginalized groups in navigating government services is crucial for ensuring that they can access the support they need. Future interventions should include training and guidance on how to access these services, along with dedicated support staff or community liaisons who can assist with paperwork and application processes.
- D. Gender and Disability-Inclusive Disaster Risk Reduction (DiDRR):** The project made significant strides in integrating women and persons with disabilities into disaster risk reduction and climate adaptation strategies. However, gaps remained in fully addressing the specific needs of persons with disabilities, particularly in terms of accessibility and representation in local governance. Some participants noted that while disaster risk reduction training had been beneficial, persons with disabilities still faced significant barriers in fully participating in evacuation plans and community decision-making processes. Lesson Learned: Future phases of the project must ensure that disaster risk reduction and climate adaptation strategies are fully inclusive, addressing the specific needs of persons with disabilities. This includes making evacuation plans more accessible and ensuring that all community members, regardless of physical ability, are actively involved in decision-making processes. Additionally, further training and capacity-building programs should be designed to empower persons with disabilities to take leadership roles in disaster preparedness efforts.
- E. Financial Sustainability and Long-Term Impact:** The evaluation also identified a gap in the long-term sustainability of financial resources and interventions. While the SRGs helped participants achieve short-term financial independence, there were concerns about the sustainability of these savings groups without continued external support. The groups relied on project funding and facilitation, and there was a risk that they might lose their momentum once the project concludes. Lesson Learned: To ensure the long-term sustainability of financial interventions, it is essential to introduce mechanisms that support the financial independence of SRGs. This could include training on financial management, access to microfinance options, and the establishment of a revolving fund that can be self-sustained beyond the project period.

Additionally, creating strong connections between SRGs and local financial institutions would help participants access ongoing financial services.

- F. Cross-Sectoral Integration:** The project worked across multiple sectors, economic empowerment, disaster risk reduction, climate adaptation, and social inclusion but there was a gap in fully integrating these sectors into a unified approach. While these interventions were valuable in their own right, the lack of a cross-sectoral approach sometimes led to fragmented outcomes. For example, while the SRGs empowered women economically, the lack of a more holistic approach to integrating market access, climate adaptation, and financial sustainability led to gaps in maximizing the overall impact. Lesson Learned: Future interventions should adopt a more integrated, cross-sectoral approach to address the interlinkages between climate adaptation, economic empowerment, social inclusion, and disaster preparedness. This holistic approach would ensure that all aspects of resilience are strengthened simultaneously, leading to more sustainable and impactful outcomes.

8.1. RECOMMENDATIONS FOR FUTURE PHASES

Based on the gaps and lessons learned, the following recommendations are made for future phases of the BMZ-PT project:

- A. Formalizing Market Linkages: Establish regional market hubs to aggregate products from SRGs and provide a platform for selling them directly to urban buyers.
- B. Strengthening Disaster Management Infrastructure: Invest in the construction of shelters and evacuation centers to ensure that all community members, particularly vulnerable groups, have access to safe spaces during disasters.
- C. Scaling Up Gender and Disability Inclusion: Continue to prioritize inclusive participation of women and persons with disabilities, particularly in disaster risk management and decision-making processes.
- D. Simplifying Bureaucratic Processes: Provide guidance and support to marginalized groups in navigating government programs, simplifying the bureaucratic processes for accessing services.
- E. Enhancing Cross-Sectoral Integration: Future interventions should adopt an integrated, cross-sectoral approach that simultaneously addresses economic empowerment, disaster risk reduction, and climate change adaptation.

09 | SUCCESS STORY 01: FROM POWERLESSNESS TO POSSIBILITY

ROKHSANA AKTER'S JOURNEY TO INDEPENDENCE



Rokhsana Akter's life was once defined by dependency, insecurity, and vulnerability. Living in the climate-exposed coastal area of Khurushkul, Cox's Bazar, her family relied entirely on her husband's irregular income. With no personal savings, no vocational skills, and limited access to social support, Rokhsana struggled to meet even the most basic needs of her household. Frequent cyclones and floods further intensified her hardship, leaving her family constantly at risk.

"I only wanted enough food for my family," Rokhsana recalls—a simple dream that reflected the daily reality of survival faced by many women in vulnerable coastal communities.

Beyond financial insecurity, Rokhsana experienced social and psychological marginalization. She had little voice in household or community decisions and no opportunity to contribute economically. Like many women, her potential remained untapped, constrained by poverty, gender norms, and climate vulnerability.

The Turning Point

Rokhsana's transformation began when she was selected to join a Self-Reliant Group (SRG), Shiuli Shanirvor Dol, under the Resilience Strengthening of Vulnerable Populations (BMZ-PT) Project, implemented by PHALS with technical support from Malteser International. The SRG became her platform

for empowerment—offering skills, confidence, and collective strength. Through the project, Rokhsana received six months of vocational training in tailoring, cloth cutting, and craft production. These skills enabled her to generate income independently for the first time. “I can speak. I can lead. I can even talk to government officials now,” she shared, reflecting on her growing confidence. In parallel, Rokhsana participated in disaster risk reduction and preparedness training, including fire safety, first aid, and emergency response. In a disaster-prone region, this knowledge gave her a sense of control and security she had never experienced before. Equally important was the SRG savings system. By saving small amounts regularly, Rokhsana built her first financial safety net. “For the first time, I began to imagine a life where I had a say,” she said.

From Dependence to Entrepreneurship

Rokhsana’s defining moment came when she used her own savings to purchase production materials. Holding fabric bought with her earnings, she realized she had crossed a threshold—from dependence to independence. That moment marked the beginning of her entrepreneurial journey. Today, Rokhsana is the owner of Afzora Fashion Gallery, a growing tailoring and craft enterprise. Her income has increased three to four times, enabling her to ensure better nutrition and private schooling for her children. She confidently manages her accounts, reinvests in her business, and plans for future expansion. “My invisibility is gone. I feel confident. I can negotiate, I can lead,” she says proudly. Rokhsana’s transformation extends beyond economic gains. Once silent and uncertain, she is now a respected voice in her family and community. Community members seek her advice, and she actively encourages other women to pursue independence through skills and savings.

Building Resilience and Inspiring Others

Rokhsana is now better prepared to face climate-related disasters. She practices emergency readiness, applies first-aid and fire-safety skills, and shares disaster preparedness knowledge with her neighbors. No longer passive in the face of risk, she has become an advocate for community resilience. Looking ahead, Rokhsana plans to expand her business across multiple trades, participate independently in fairs and markets, and strengthen her professional networks. Supported by her SRG, she aims to grow Afzora Fashion Gallery into a sustainable enterprise and continue collective decision-making with other women. “You didn’t just train me—you gave me the power to stand on my own,” Rokhsana says with gratitude. Her journey demonstrates the transformative impact of integrated livelihood development, disaster preparedness, and women’s empowerment. Rokhsana’s story stands as a powerful example of how, with the right support, women can break free from dependency and become agents of change in their communities.

10| SUCCESS STORY 02: FROM CULTURAL MARGINALIZATION TO ECONOMIC EMPOWERMENT

ANKYA'S JOURNEY OF SELF-RELIANCE



Anky, a 56-year-old woman from the Rakhain minority community in Chowfaldandi, Cox's Bazar, spent over two decades living in economic hardship and social isolation. After being abandoned by her husband, she was left to raise her children alone with no stable income, assets, or formal skills. Her household depended on irregular seasonal labor, earning approximately BDT 12,000 per month, leaving the family highly vulnerable to financial shocks. Living in a cyclone- and flood-prone coastal area further intensified Anky's insecurity. Climate-induced disasters repeatedly threatened her livelihood, reinforcing a cycle of poverty and dependence. Although she possessed traditional weaving skills passed down through generations, these remained confined to household use, offering no sustainable income. "For twenty-five years, I felt like a shadow in my own life," Anky recalls, reflecting her long struggle for dignity and independence. Beyond economic hardship, Anky faced social marginalization as a minority woman. She lacked confidence, had little voice in community matters, and remained excluded from decision-making processes.

The Turning Point

Anky's life began to change when she was selected to join Shapla Swanirvor Dol, a Self-Reliance Group (SRG) under the Resilience Strengthening of Vulnerable Populations (BMZ-PT) Project, implemented by PHALS with technical support from Malteser International. The SRG became her foundation for empowerment and collective growth. Through the project, Anky received six months of vocational

training in modern tailoring and garment production, building on her traditional weaving skills. This enabled her to combine Rakhain cultural motifs with contemporary designs and access local markets. “The first time I earned my own money, I saw my children’s future,” she shared. She also participated in disaster risk reduction and climate resilience training, including first aid and emergency preparedness. For the first time, Ankya felt prepared to protect her family and livelihood from recurring climate threats. Equally important was the SRG savings system. By saving small amounts regularly, Ankya built her first financial safety net. Leadership and confidence-building sessions further strengthened her ability to speak, negotiate, and participate actively in group decisions. “This project didn’t just give me a machine; it gave me back my identity,” she said.

From Dependence to Entrepreneurship

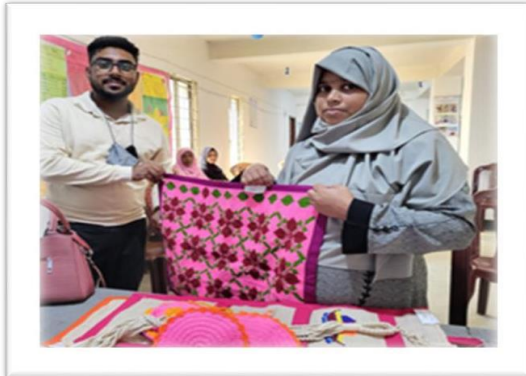
A major milestone came when Ankya received a professional weaving machine, installed in her home. This asset transformed her living space into a small production hub. She began producing garments that blended traditional Rakhain designs with modern tailoring and started selling them at local fairs and markets. For the first time, Ankya negotiated directly with buyers and managed her own income. Her household earnings stabilized, allowing improved nutrition, education, and financial planning for her family. “Every thread I weave is a testament to my strength and my future,” she proudly states.

Building Resilience and Inspiring Others

Today, Ankya is a respected SRG member and emerging community leader. She actively shares disaster preparedness knowledge with neighbors, particularly other Rakhain women, strengthening community resilience. Once isolated and dependent, she is now confident, economically active, and socially recognized.

Looking ahead, Ankya plans to expand her enterprise and support other vulnerable women in transforming traditional skills into sustainable livelihoods. “I want to see every helpless woman stand on her own two feet,” she says. Ankya’s journey demonstrates how integrated support—combining skills development, financial inclusion, and resilience-building—can transform vulnerable women into agents of change. Her story stands as a clear example of cultural heritage becoming a pathway to economic empowerment and long-term resilience.

11 | Photo Gallery



Project Participant Showcasing Her Handmade Product



Meeting Between the Research Team and the Project Implementing Partner (PHALS)



The Research Team Conducting a KII with Study Participant



Field Visit by the Research Team for Data Collection



The Research Team Conducting a FGD with Study Participants (Location: Khurushkul)



The Research Team Conducting a FGD with Study Participants (Location: Khurushkul)

REFERENCES

- Akhter, S., Rahman, M., & Hossain, G. (2020). Community-based disaster risk reduction in Bangladesh: A case study of Cyclone Preparedness Program (CPP). *Disaster Management Review*, 12(3), 220-230.
- Akter, S., & Khatun, R. (2019). Integrating gender and inclusion in climate adaptation programs: Challenges and opportunities in Bangladesh. *Gender and Climate Change Journal*, 8(2), 135-150.
- Alam, K., & Disha, D. (2019). Climate change and marginalized communities in Bangladesh: The vulnerability of women and persons with disabilities. *Journal of Climate Change and Resilience*, 18(4), 254-265.
- Amin, R. (2017). Impact of climate change on coastal communities in Bangladesh. *Environmental Sustainability Studies*, 4(1), 58-75.
- Bangladesh Bureau of Statistics (BBS). (2020). Poverty mapping in Bangladesh. Bangladesh Bureau of Statistics.
- Bangladesh Bureau of Statistics. (2020). Poverty mapping in Bangladesh. Bangladesh Bureau of Statistics.
- Begum, R., Khan, M., & Ali, K. (2015). Climate change adaptation strategies in Bangladesh: A review of policy and practices. *Climate Policy Journal*, 6(3), 98-112.
- Berrang-Ford, L., Boulanger, D., & Tyndall, J. (2014). Climate change and resilience-building: A case study in Bangladesh. *Environmental Development Studies*, 10(1), 100-114.
- Bisht, P., & Sah, P. (2016). Incorporating marginalized communities into climate change adaptation efforts in South Asia. *International Journal of Environmental Policy and Governance*, 17(2), 210-222.
- Choudhury, A. (2017). Gender and disaster risk reduction in Bangladesh: A review of current approaches and challenges. *Journal of Gender Studies*, 16(2), 233-247.
- Miller, F., et al. (2017). Women's leadership in climate resilience programs: Lessons from Bangladesh. *Women in Development and Gender Studies*, 9(4), 123-137.
- MoEF. (2009). Bangladesh Climate Change Strategy and Action Plan. Ministry of Environment and Forests, Government of Bangladesh.
- Rahman, M., & Noor, M. (2020). Partnerships for climate resilience in Bangladesh: A network approach to disaster risk reduction. *Climate Change and Sustainability Journal*, 6(1), 45-61.
- Sharma, S., Sarker, M., & Hasan, R. (2016). Promoting alternative livelihoods in the face of climate change: A study of the coastal regions of Bangladesh. *Journal of Sustainable Development*, 9(1), 67-79.
- UN Women. (2018). Climate change and gender: Addressing the needs of women in Bangladesh. UN Women Publications.
- World Bank. (2013). Bangladesh: Climate Change and Sustainable Development. World Bank.
- World Health Organization (WHO). (2011). World report on disability. WHO Press.



Center for Sustainable Innovation and Resilient Futures (CSIRF)

Daffodil International University

Address: Daffodil Smart City (DSC), Birulia, Savar, Dhaka-1216

Tel: +8801731585287

E-mail: khalid.esdm@diu.edu.bd

