











# CONTEXT

### Climate Vulnerability in Bangladesh

Bangladesh ranks as the world's seventh most climate-vulnerable country (Germanwatch, 2021). Rising seas alone could submerge 11 percent of its land and displace 15 million people by 2050 (World Bank, 2021). These risks already drive migration, alter livelihoods, and increase child and forced labour. Climate shocks such as heatwaves, cold spells, heavy rains, and flash floods are becoming more frequent and severe (IPCC, 2022).

#### **National Commitments**

The state has embedded environmental protection in Article 18.A of the Constitution and submitted ambitious pledges under the Paris Agreement, aiming to cut emissions by 5 percent unconditionally and 10 percent with international support (Government of Bangladesh, 2021). Climate Prosperity Plan (2022–2041) charts a path toward low-carbon growth, renewable energy, and green trade (Planning Commission, 2022).

### **Global Alignment and Rights**

Globally, Bangladesh positions itself within major frameworks including the Sustainable Development Goals, the Paris Agreement, and the European Green Deal. It supports international standards such as the UN Guiding Principles on Business and Human Rights, the OECD Guidelines, and the EU's due diligence laws. Bangladesh has also joined the global recognition of a healthy environment as a basic human right (UNGA Resolution 76/300, 2022). While commitments are strong, progress remains uneven, particularly in enforcing standards and ensuring workers benefit from the green transition.

#### Pressure on the RMG Sector

The ready-made garment industry, which accounts for over 84 percent of export earnings and employs 3.6 million people—most of them women—faces mounting pressure to reduce its 15.4 percent share of national emissions (BGMEA, 2023). With LDC graduation ahead and aspirations for EU GSP+ access, stronger environmental and social compliance is essential. Research shows that tackling worker heat stress alone could help boost export earnings to USD 122 billion by 2030 and above USD 1 trillion by 2050 (ILO, 2022). Yet workers remain sidelined, with limited access to skills, voice, and representation in the transition (ETI, 2023).

### **Government's Focus**

The new interim Government's focus on "Zero Poverty, Zero Unemployment, Zero Carbon Emissions" reflects its bold ambition — further reinforced by the inclusion of proenvironment leaders in both the cabinet and reform bodies like the Labour Reform Commission

# **PROGRAMME**

The Ethical Trading Initiative (ETI) Bangladesh, in partnership with Ethical Trade Norway (ETN) and the Ethical Trading Initiative (ETI), implemented a project titled "Decent Work, Gender Equality and Climate Resilience – Building a Future for Bangladesh RMG Workers." This project was supported by the Norwegian Agency for Development Cooperation (NORAD). One component of the project involved piloting a Green Social Dialogue (GSD) initiative in Bangladesh's RMG sector. The pilot aimed to engage workers, management, and worker representatives to address climate risks through social dialogue mechanisms. The project aimed to strengthen workers' ability to identify and prioritize climate-related issues in their workplaces, utilizing a bottom-up approach.

The programme, launched in June 2022, began with a call for nominations of factories from ETN and ETI member brands. Nine brands expressed interest; of them factory nominations (10 factories) from 6 were selected on first come basis. Factories with TU and functional social dialogue mechanism were prioritised. Baseline assessment was conducted in all 10 nominated factories, and five factories were shortlisted for interventions. In June 2024, an endline assessment was conducted to evaluate the outcomes of the intervention in the 5 shortlisted factories.



# INTERVENTION



5

Brands involved

10500+

Workforce

### **PROGRAMME FOCUS**

Worker-led climate action

Emphasizing human elements than infrastructure development

Mainstreaming environmental issues in the existing social dialogue mechanism

### PROGRAMME OUTLINE

### **ASSESSMENT**

- •Baseline evaluation
- Endline evaluation

### CAPACITY BUILDING

- 3-day (24 hours)
  Training for
  Management &
  Worker
  Representatives
  (Participation
  Committee /
  Trade Union)
- 3-day (24 hours)
   Training for HR,
   Admin, safety
   committee,
   technical and
   maintenance
   person
- •3-half day (12 hours) training for general workers
- 2-day (16 hours) training for factory-based resource person

### ADVISORY SUPPORT

- Develop worker led factory-based climate action plan
- •Support Climate Champions to roll out training programs for general workers
- Facilitate dialogue between worker representatives and management and implementation of climate action plan

### AWARENESS RAISING

- Dissemination of IEC materials (message board, songs, audiovisual) in factories
- Celebration of special days (world environment day)

# LEARNING CONSOLIDATION

- Learning webinar for local and international stakeholders
- •Case study and learning document development
- Working group with industry representatives

# **ACHIEVEMENTS**



Project **trained 383** (45% women) from management, worker representative (PC, TU, SC, EMS) and general workers



**100 resource person** (45% women) developed for continuing flipchart-based orientation



8534 workers (58% women) oriented through resource person



More than **10500** workforces reached through awareness campaign (IEC materials and Environment Day Celebration)



A multi-stakeholder **working group of 15 members** was established, with representation from factories, brands, CSOs, and federations.



**Improved** knowledge, changed attitude and practice among workers regarding environmental issues



**Five Climate Action Plans** developed and implemented, with ongoing progress reviews and sustainability plan development by factories



**2 Factories** initiated detailed environmental data analysis (including energy saving through solar panel, water saving through awareness raising etc.)



2 global learning webinars and 2 multistakeholder in-person events organized, 2 case studies and 3 learning documents developed.

# **CLIMATE ACTION PLAN**

### **Climate Action Plan**

- Factories initiated the process with identifying issues and drafting plans with inclusion of worker representatives, technical person, and senior management
- · Factory management reviewed the draft
- · Finalization of the plan with feedbacks
- · Dissemination of the Action Plan with relevant workforces

### **Follow Up Progress & Assessment**

- · Advisory support by the programme team
- · Follow up meeting with factories
- · Routine progress learning by the programme
- · Assessment of the progress during endline

### **Sustainability Plan by Factories**

- Collaborative reflection on progress of plans
- · Feedback and discussion by programme and factories
- · Development of sustainability plan to continue the initiative beyond the programme

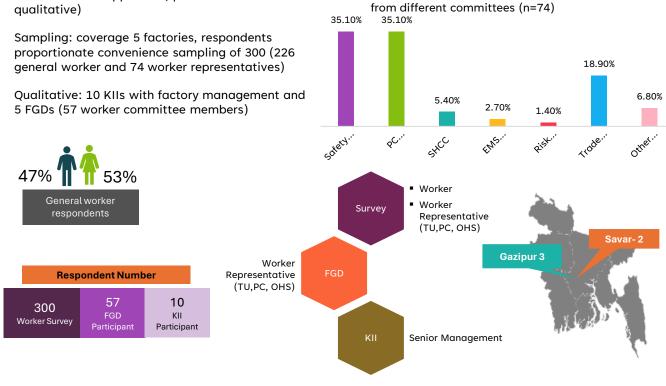
### **Key Performance Indicators from Five Factories**

Thematic Area	Key Performance Indicators (KPI)	# of Factories
Waste Management	Formation of committee	1
	Reduce 1-2% production waste	4
	Reducing generator smoke	2
	Reusing polybag	1
	Reduce rejection ration	1
	Reuse waste water from ETP	3
Energy Conservation	Installation of solar panel and reduce electricity consumption	3
	Reduce water consumption (dyeing and common places) 2-15%	4
	Convert to single switch electric connection	1
	Conserve electricity by using energy efficient motor	1
	Installation of LED lights	2
	Conserve energy by turning off air conditioner	1
Environmental issues into	Include at least one agenda in TU and PC meeting	5
Social Dialogue	Discuss environmental issues in Safety committee, EMS committee	4
Awareness raising	Orient 100% workforce on environmental issues	5
	Using of PA system and display IEC materials	3
	Tree plantation	3
	Include GSD training content into routine training module and induction training	2
	Annually celebrate World Environment Day	1

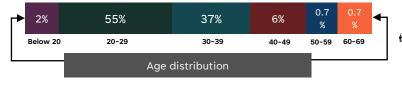
# **ENDLINE STUDY**

## Methodology

- Mixed-method approach (quantitative and qualitative)
- general worker and 74 worker representatives)
- 5 FGDs (57 worker committee members)



# Socio-demographic Profile

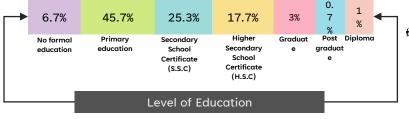


The largest age group among respondents in the survey falls between 20 to 29 years old (55%)

Percentages of worker representatives in the survey



☐ The mean RMG working experience of the worker respondents' is 7.9 years (male 8.4 years, female 7.5 years)



The highest level of education for 33.3% of male worker respondents and 56.6% of female worker respondents is at the primary level.

# A COMPARISON BETWEEN BASELINE & ENDLINE FINDINGS

The baseline study was conducted from 10 factories in 2022. The endline study was conducted from 5 factories in 2024

## **Climate Change**

### Knowledge

Awareness on Effects of Climate Change: workers with at least one correct answer increased from 25.9% (baseline) to 79% (endline)

**Committee Members' Awareness:** Qualitative study showed improved basic awareness on climate and environmental issues to identify and address environmental agendas in the committee meetings.

Primary Knowledge Source for climate change and environment: shifted from TV/radio/ newspaper (28.7%) to factory internal sources (45.2%) in the endline

### Attitude

**Attitude Towards Role on Climate Mitigation:** Increased from **40.8**% of workers to **83.3**% of workers. (tree plantation, water saving, waste reduction, energy conservation)

**Sense of Responsibility of Workers:** Being responsible to address issues increased from **8.2**% workers to **41**% in endline.

**Increased Engagement and Interest on Energy Saving:** Worker have shown engagement and curiosity by asking questions and seeking clarification from committee members on issues related to water and electricity conservation

### **Practice**

**Personal Mitigation Efforts: 68.7**% of workers reported they are taking steps to mitigate climate change effects in their personal life. (tree plantation, energy conservation, awareness)

**Climate Agenda:** Endline study found PC and TU of 4 factories have incorporated at least one climate-related issues in their agenda after the intervention.

"As a resource person, I take pride in contributing to our planet's resilience through this programme. It's rewarding to see workers actively taking responsibility for water conservation, energy efficiency, and waste management after training. They now turn off faucets during handwashing and breaks, switch off machines, lights, and fans when not in use, and diligently separate waste."

-A women Welfare Officer at the factory

### **Waste Management**

### Knowledge

**Knowledge of Waste Materials**: Increased from 93.8% to 97% workers with at least one correct answer

**Waste Segregation Knowledge**: Increased from 82.1% to 98.7% workers with at least one correct answer

**Correct Waste Handling Knowledge**: Increased from 38.1% to 90% workers (at least one correct answer)

**PPE usage knowledge for waste recycling**: Increased from 34.3% to 56.3% workers

### Attitude

**Collaborative waste management efforts**: bins, reuse, recycling adopted Increased worker adherence to waste protocols after training

### **3R Practice**



- \* All five factories have adopted either worker-led or machine-led waste reduction practices.
- \* Worker
  Engagement: The baseline showed workers were not involved in waste reduction discussions. By the endline, they were actively participating and promoting it through awareness-raising activities.
- \* 52% of workers said raising awareness is the most effective way to reduce factory waste.



# Reuse

- Qualitative findings showed four factories have ongoing reuse practices, such as reusing polythene, paper, bobbins, and jhuts.
- Out of the five factories, two have developed coherent systems for reusing waste materials like polythene.
  - Worker Engagement: 59.5% of worker respondents stated that cloths (jhut) are the most reused item in the factory.



# **Recycle**

- Workers stated the top two most recycled items in the factories are cloths (50.5%) and thread (38.8%).
  - Recycling in all five factories is handled by third-party vendors outside the factories.
- \* Worker
  involvement in
  recycling is minimal
  to non-existent in
  all five factories.

### **Water Resource Management**

### Knowledge

**Knowledge on reducing household water consumption:** workers with at least one right responses Increased from **69.7**% to **99.7**%

**Knowledge on reducing water consumption in factory:** Increased from **68.8%** to **98%** workers in endline

### **Attitude**

Raising Water Resource Management: Workers' Engagement in Water Management Increased from 12.8% to 50.3% by Endline

**Prioritized Committee Agenda and Strategies:** Committees prioritize water conservation by suggesting small measures, such as using automatic taps, and discussing larger initiatives, like ETP waste water purification, in meetings.

### Practice

Water Efficient Taps Installation: 2 factories

Awareness Raising Through Message Board: 5 Factories

Committee Agenda Inclusion: 5 factories

Initiative for Reusing Wastewater: 2 Factories

Recycled Water Usage (ETP): 3 Factories

Mass Awareness for Water Saving: 1 Factory

# **Energy Efficiency**

### Knowledge

Workers with at least one correct answer on energy saving increased from **61.7%** at baseline to **99.3%** at endline.

Workers who could suggest measures for energy savings for the increased from **56.9**% to **92.3**% in endline

### **Attitude**

**Workers' engagement in energy conservation in factory:** Increased from **21%** to **58.7%** workers

Increased acknowledgement of worker's role in energy saving: increased from 56.9% to 92.3% workers

**82.2**% of workers demonstrated an attitude change by recognizing turning off machines, lights, and fans as an effective energy-saving strategy.

### **Practice**

Installation of Solar Panels: 3 Factories

**Using Energy Saving Appliances: 3** Factories

Using PA System for Awareness Raising: 3 Factories

Turing Off Energy Appliances When Not in Use: 5 Factories

Using Different Switches for Different Lines: 2 Factories

Meeting with workers about Energy Saving: 3 Factories



### **Understanding of Social Dialogue**

More workers became aware of their factory's worker committees—rising from **86.9% workers** in the baseline to **97.3%** in the endline. PC, TU, Safety Committee, and SHCC are the most well-known worker committees in the factory.

Workers interaction with committee members increased from 50.9% to 87.7% workers.

Worker representatives communicate with workers through meetings, personal interactions, training sessions, and PA system announcements.

Workers' interaction with representatives shifted from regular conversation (64.8% Baseline) to identifying and solving workplace issues (60.5% Endline), including environmental concerns.

Dialogue between workers and representatives help workers raise concerns—such as environmental issues—and support representatives in setting agendas and identifying ongoing problems in the factory.

# Address Environmental & Climate Issues in the Social Dialogue Mechanism

Role in raising worker awareness of environmental issues

Workers identified the SC (52%), PC (36%), and TU (16%) as the most active in promoting awareness about energy saving and sustainable waste management. Worker representatives stated meetings are the most effective method for raising awareness.

Workers raising environmental concerns to factory personnels

Workers mostly share concerns on climate, energy, waste, and water with co-workers (37.9%), followed by the SC (24.9%), PC (24.4%), and TU (12.3%). Common issues raised include water wastage from broken taps and unnecessary electricity use.

Responsible committees for environmental issues

60% of workers believe committees should address climate change. 97.3% of worker reps believe climate and environmental issues should be part of committee meetings. Committees in four factories have incorporated environmental agendas.

Workers' perception on management's role

Workers perceive management's role in addressing environmental issues primarily as facilitating discussions in meetings (47%) and raising awareness (45%). Qualitative findings showed management is actively investing in initiatives to address these environmental challenges.



# Economic Viability of Green Initiatives Case

- One pilot factory set action plan KPI on reducing electricity consumption by 7% in a year, from 650,000 kWh to 604,500 kWh.
- They installed a 40kw solar panel setup on their factory rooftop.
- The solar panel is functional in their grid since August 2023.
- Their total installation cost took around BDT 20 Million (GBP 12,400).
- Their average save BDT 38,110 per month.
- Estimated return on investment in 4.3 years (without considering maintenance cost).
- Solar panel is contributing up to 9% of renewable energy in their energy grid.

Electricity consumption data after installing solar panel						
Month	Total KwH used	REB kwH used	Solar Energy Used	% of green energy	Taka saved (BDT)	
Aug-23	56,494	53,547	2,947	5.2%	BDT 38,016	
Sep-23	42,049	38,154	3,895	9.3%	BDT 50,246	
Oct-23	54,240	51,002	3,238	6.0%	BDT 41,770	
Nov-23	42,359	39,146	3,213	7.6%	BDT 41,448	
Dec-23	38,822	36,421	2,401	6.2%	BDT 30,973	
Jan-24	33,069	30,760	2,309	7.0%	BDT 29,786	
Feb-24	35,254	32,159	3,095	8.8%	BDT 39,926	
Mar-24	46,645	42,889	3,756	8.1%	BDT 48,452	
Apr-24	49,215	46,183	3,032	6.2%	BDT 39,113	
May-24	63,941	60,864	3,077	4.8%	BDT 39,693	
Jun-24	47,870	44,890	2,980	6.2%	BDT 38,442	
Jul-24	64,435	62,205	2,230	3.5%	BDT 28,767	
Aug-24	61,242	58,372	2,870	4.7%	BDT 37,023	
Sep-24	42,470	39,240	3,230	7.6%	BDT 41,667	
Oct-24	57,374	54,594	2,780	4.8%	BDT 35,862	
Nov-24	62,726	59,376	3,350	5.3%	BDT 43,215	
Dec-24	51,796	49,112	2,684	5.2%	BDT 34,624	
Jan-25	54,647	52,270	2,388	4.4%	BDT 30,805	
Feb-25	57,870	55,171	2,700	4.7%	BDT 34,830	
Mar-25	54,234	51,323	2,911	5.4%	BDT 37,552	
Total	1,016,752	957,678	59,086	5.8%	762,209	

### Solar energy and REB consumption %

\*\*Soft REB energy\*\* \*\*Soft green energy\*\*

\*\*Soft REB energy\*\*\*

\*\*Soft REB energy\*\*

\*\*Soft REB



# **LEARNING**

### Setting Feasible and Realistic KPIs

 Involving technical personnel and management in KPI setting helped identify gaps and set realistic targets for the action plan, such as reducing production waste and increasing solar energy contributions.

### Encouraging Environmental Agendas in Meetings

 Worker representatives, with factory management's support, began including environmental issues in committee meetings and their climate action plans, leading to proactive discussions on environmental concerns.

### Involving Senior Management and Brand Representatives in Follow-Up

 Engaging senior management and brand representatives in follow-up sessions helped integrate training into factory routines, accelerating implementation and progress on green initiatives.

### Routine Discussions with Worker Representatives

 Regular discussions with worker representatives helped understand worker perceptions, address barriers, and clarify technical aspects, ensuring management could take necessary actions.

### Strengthening Capacity for Climate Action

 Tailored training and advisory support enabled factories to assess their realities and implement effective climate action plans.

### Creating a Sense of Ownership

 Involving worker representatives and general workers in action plan development and KPI setting enhanced their commitment and sense of ownership over green investments and environmental changes in the factory.

### Incorporating Awareness into Factory Operations

 Awareness activities, like IEC materials and worker orientation, were integrated into the factory's operational plan, ensuring consistent delivery of environmental messages to the workforce.

### Endorsing Thematic Areas through Senior Management

• Senior management's active involvement in environmental initiatives created urgency and priority, aligning factory personnel's efforts towards the programme's goals.

### **CHALLENGES & RECOMMENDATION**

While workers recognize climate change and environmental risks as concerns, these are often seen as future challenges rather than immediate necessities. Although they understand the importance of green initiatives, challenges which have immediate implications daily survival (i.e. low wages) takes precedence.

Many environmental practices—such as green energy, recycling and energy conservation—require additional investment, which is difficult for the factories to raise. This is especially true as they operate in an environment where FoB price is reducing and cost of production is increasing.

Integrating a robust Environmental and Social Management System (ESMS) can enhance effectiveness and sustainability.

There is a clear knowledge gap between technical staff and general workers, highlighting the need for simple, practical training content. Separate sessions for technical staff would allow for deeper discussions on complex topics.

Holding training sessions outside the factory will minimize distractions and enhance participant focus.

### **Recommendations for Factories**

- •Establish Environmental Management System (EMS) Committees to structure environmental management, enabling worker representatives to review policies, address challenges, and support the green transition.
- Develop a Green Transition Strategy with clear goals, indicators, budgets, and monitoring mechanisms, considering in worker input and evidence-based analysis.
- •Implement a Waste Reduction Policy to promote sustainable waste management, including ecofriendly practices, backed by continuous research.
- •Conduct Training & Awareness Initiatives through workshops and campaigns to embed sustainability values in managers, supervisors, and workers.
- •Ensure worker representation and inclusivity in the green transition and empower workforces as active stakeholders.
- Appoint Climate Champion to lead eco-friendly initiatives, provide training, and advocate sustainable practices within the factory and community.
- •Conducting a technical gap analysis could help identify environmental challenges and areas for improvement.

### **Recommendations for Brands**

- •Develop a Sustainability Strategy to drive a holistic green transition and set clear goals, budgets, and monitoring mechanisms. The strategy should be developed based on dialogue and input form right holders and relevant stakeholders
- •Conduct Workshops & Training to raise industry-wide awareness, align stakeholders with brand sustainability policies, and promote shared objectives.
- Provide Technical Guidance to factories to close knowledge gaps, identify cost-saving opportunities, and support factories in developing sustainable business models.
- •Offer Financial & Technical Support to expand a skilled workforce through training programs and behavior change campaigns.
- •Ensure Long-Term Commitment & Premium Pricing to incentivize green practices with premium pricing and accessible financing for sustainability investments.
- •Establish a Common Framework for Green Standards to align environmental benchmarks and create a uniform, cost-effective certification system.



ETI Bangladesh is actively advancing initiatives in Just Transition and Environmental Sustainability, with opportunities for collaboration among JETI member brands. Key focus areas include the second phase of the Green Social Dialogue Programme, transitioning to renewable energy, and research on best practices for green transition in the RMG sector. To learn more or get involved, contact us.

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