



Until we are all equal

SCOPING STUDY ON UNDERSTANDING SRHR, WASH, AND LIVELIHOODS SITUATIONS AND PATHWAYS FORWARD IN CLIMATE-VULNERABLE LOCATIONS OF SOUTHWEST BANGLADESH



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Disclaimer

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List of acronyms

BDT: Bangladeshi Taka

CCA: Climate Change Adaptation

CEFM: Child, Early, and Forced Marriage

DRR: Disaster Risk Reduction

EWS: Early Warning System

FGD: Focus Group Discussion

GBV: Gender-Based Violence

HH: Household(s)

IDI: In-depth Interview(s)

IPCC: Intergovernmental Panel on Climate Change

KII: Key Informant Interview(s)

MHM: Menstrual Hygiene Management

MHPSS: Mental Health and Psychosocial Support

NGO: Non-government Organisation

PIO: Project Implementation Officer

PwD: Person(s) with Disability

RWH: Rainwater Harvesting

SRHR: Sexual and Reproductive Health and Rights

WASH: Water, Sanitation, and Hygiene

YEE: Youth Economic Empowerment



Executive Summary

Bangladesh's southwest coastal districts of **Khulna** and **Satkhira** are experiencing intensifying, overlapping climate shocks driven by cyclones, floods, riverbank erosion, and salinity intrusion. This scoping study examines how these climate stressors are reshaping Sexual and Reproductive Health and Rights (SRHR), Water, Sanitation and Hygiene (WASH), livelihoods, and gender-based vulnerabilities, with a particular focus on adolescents, young people, women, and marginalized groups. The study draws on a **mixed-methods** approach, including a household survey of **1,260 household respondents** across **four highly climate-vulnerable upazilas**, complemented by FGDs, KIIs, and IDIs to capture lived experiences and systemic gaps.

The findings reveal that climate shocks are no longer episodic but **chronic and cumulative**. More than **97% of households** have experienced climate hazards multiple times in the past five years, with cyclones and floods dominating the risk landscape. These recurrent shocks disrupt essential services, undermine livelihoods, and generate layered vulnerabilities. **Healthcare access breaks down during and after climate events**, disproportionately affecting children, elderly persons, women, girls, and persons with disabilities. Feelings of insecurity are near-universal during displacement, while incidents of discrimination, harassment, and violence increase in crisis settings, reflecting weak protection systems.

Climate change is severely **constraining SRHR outcomes**, particularly for

adolescent girls and young women. During disasters, access to SRHR services collapses almost entirely, driven by damaged facilities, transport disruptions, economic barriers, and information gaps. Menstrual hygiene management becomes unsafe, family planning services are largely inaccessible, and untreated reproductive health conditions rise, especially in high-salinity areas. Climate stress also has a strong **mental health dimension**, with high levels of anxiety, depression, and fear of displacement undermining young people's agency and decision-making. Livelihood disruptions further compound SRHR risks, contributing to increased pressure for child, early, and forced marriage, especially following income loss and displacement.

The **WASH situation is equally fragile**. Communities depend on multiple, climate-sensitive water sources, reflecting coping rather than resilience. **Women face acute water shortages during disasters**, unsafe sanitation conditions, and heightened exposure to harassment due to poor facility design and distance. Salinity intrusion and flooding **significantly degrade water quality**, increase waterborne diseases, and raise household water costs. While private sector actors play a visible role in potable water provision, their services are uneven, often unaffordable, and rarely climate-resilient, leaving low-income households to absorb rising costs during crises.

Livelihoods across the study areas are under **sustained pressure from salinity, flooding, and cyclones**, with women and youth experiencing the highest disruption. Income loss, increased production costs, and forced livelihood shifts are common.

While there is strong interest among youth - especially young women - in **digital and green skills**, participation remains constrained by cost, limited access to training, social norms, and weak market linkages. Private sector partnerships are seen as critical for scaling climate-resilient livelihoods, but current engagement remains limited in finance, technology transfer, and structured market access.

Overall, the study highlights that sector-specific interventions are insufficient in isolation. Climate change is producing **interlinked SRHR, WASH, livelihood, and protection crises** that require **integrated, gender-responsive, and youth-centered** responses. Communities consistently emphasize the need for climate-resilient infrastructure, mobile and decentralized services, strengthened local systems, and meaningful participation of women and young people. The findings provide a strong empirical basis for designing **forward-looking, integrated climate-resilient programmes** that move beyond emergency response toward sustained resilience and rights-based development in Bangladesh's coastal regions.

Recommendations for SRHR programming

- Establish **emergency-ready SRHR service packages** in cyclone shelters and community clinics, including menstrual hygiene supplies, contraceptives, and safe delivery kits.
- Train and equip **union-level health workers and youth volunteers** to deliver adolescent-friendly SRHR information and referrals during normal times and emergencies.
- Set up **girls' and women's safe spaces**

in disaster-prone areas, linked with helplines and referral pathways.

- Incorporate menstrual health and SRHR into school disaster preparedness drills, ensuring access to products and private WASH facilities.

Recommendations for WASH programming:

- Expand **rainwater harvesting systems at schools and community hubs**, with youth- and women-led maintenance committees for sustainability.
- Support women entrepreneurs to operate **community-level water enterprise** solutions, linking them with financing opportunities and training.
- Establish gender-balanced water user groups to manage pond recharge systems and tube wells, with **clear roles for adolescent/youth leaders**.
- Provide low-cost, reusable sanitary products through **community- and school-based social enterprises run by girls' groups**.

Recommendations for Livelihoods programming:

- Introduce training on **eco-aquaculture practices, climate-smart agriculture, and saline-tolerant crops** through youth-led learning hubs.
- Partner with private sector actors to link coastal youth and women producers to **supply chains for green products**.
- Promote **environment-friendly and nature-based solutions** to tackle the adverse effects of climate change.
- There is a huge potential for **partnership with the private sector**; i.e., agribusiness, supply chain, green products, etc. to promote and bolster indigenous livelihoods and localized initiatives.

Table of contents

Name of the Chapter	Page No.
Chapter 1: Introduction	Page 1 to 3
Chapter 2: Methodology	Page 4 to 5
Chapter 3: Findings and analysis	Page 6 to 30
Chapter 4: Conclusion	Page 31



Chapter 1: Introduction

1.1 Background and rationale

Bangladesh is widely recognized as one of the most climate-vulnerable countries in the world, ranking seventh in the 2021 Global Climate Risk Index. Its coastal districts, such as Khulna and Satkhira, face acute challenges from rising sea levels, salinity intrusion, and increasingly frequent and severe extreme weather events, including cyclones, tidal surges, floods, and heatwaves [1], [2]. Salinity intrusion has been linked to increased pregnancy complications, while climate-induced displacement and service disruptions heighten the risks of early marriage, gender-based violence, and adolescent pregnancies [3].

Bangladesh remains one of the most climate-vulnerable nations globally, ranking 7th in the Global Climate Risk Index 2021 [4]. Its low-lying geography, dense population, and dependence on climate-sensitive sectors make it highly susceptible to cyclones, floods, droughts, and salinity intrusion. Between 2000 and 2019, the country experienced 185 extreme weather events, resulting in significant human and economic losses [5].



Climate change and its impacts have created multi-faceted vulnerabilities for girls and youth in Southwest Bangladesh. © Plan International Bangladesh

* Photos used in this report are not of the study participants.



In Satkhira's Shyamnagar Upazila, recent field studies have documented the ways salinity intrusion disrupts menstrual hygiene management and adversely affects women's reproductive health, particularly among those with limited access to safe water and sanitation facilities [6]. Another multi-upazila investigation in Satkhira found strong correlations between salinity exposure and adverse reproductive health outcomes, based on a combination of water quality testing, household surveys, and qualitative interviews [7].

Extreme weather events such as cyclones and prolonged flooding directly damage or destroy health facilities, disrupt supply chains for essential medicines, and interrupt the availability of skilled birth attendants [8]. After Cyclone Amphan in 2020, more than 1,200 health facilities in coastal districts were reported damaged, significantly reducing the capacity to provide antenatal and postnatal care [9]. In the aftermath of such disasters, the prioritization of emergency relief often sidelines SRHR services, compounding risks for pregnant women, new mothers, and adolescents, especially in remote char and island communities. Disrupted road networks and damaged transport infrastructure further limit timely referrals to higher-level care, heightening the likelihood of preventable maternal and neonatal deaths [10].

Climate change is severely impacting livelihoods in coastal regions, with agriculture and fishing remaining the primary sources of income for many families. Saltwater intrusion and changing weather patterns disrupt traditional agricultural practices and fishing activities

undermining food security and household incomes [11]. To address these challenges, targeted youth economic empowerment (YEE) programs that promote digital skills, green job opportunities, and entrepreneurship are critical. Likewise, programs that empower women and youth, integrate climate resilience into livelihood planning, and expand access to financial and technical resources are essential for building sustainable, inclusive, and adaptive economies in climate-vulnerable communities [12].

Gender-responsive climate adaptation strategies are essential to address the unique vulnerabilities of women and girls in climate-vulnerable areas [13]. In this study, gender-transformative refers to approaches that go beyond simply accommodating gender differences, aiming instead to challenge and shift unequal gender norms, redistribute power, and strengthen women's agency and leadership in decision-making across sectors. Youth-led social enterprises focusing on salinity management, waste management, and improving SRHR access are emerging as key drivers of change in coastal Bangladesh, demonstrating the potential for inclusive, multi-sector solutions that are both socially and environmentally resilient [14]. In ecologically sensitive areas such as the Sundarbans, community-led and nature-based adaptation measures - including mangrove restoration, embankment greening, and ecosystem-based fisheries management - offer multiple benefits: they reduce disaster risks, safeguard biodiversity, and sustain livelihoods while ensuring that women's perspectives are embedded in planning and implementation [15].

1.2 Scope and objectives of the study

The overall objective of the study is to understand the impact of climate change and its secondary effect, salinity, on Sexual and Reproductive Health and Rights (SRHR), livelihoods, water, sanitation, and hygiene (WASH), and gender-based violence, particularly affecting women and girls living in the most vulnerable coastal areas of Khulna and Satkhira. Additionally, the study aims to obtain a comprehensive report encompassing a detailed set of recommendations and activities to guide PIB in designing and implementing future projects in these thematic areas.



Plan International Bangladesh is working to promote safe SRHR practices. © Plan International Bangladesh

The study sought to fulfill three specific objectives:

Objective 1

Assess the current status of SRHR, WASH, and livelihoods in climate-vulnerable communities of Khulna and Satkhira

Objective 2

Identify barriers, coping strategies, and systemic gaps affecting adolescents, youth, women, and marginalized groups.

Objective 3

Recommend forward-looking policy and programmatic pathways for integrated, climate-resilient development



A group of community volunteers in action. © Plan International Bangladesh



Chapter 2: Methodology

Quick view box: Our methodology at a glance	
Particulars	Details and specifics
Study design	Mixed-method approach combining quantitative (survey) and qualitative (FGDs, KIs, IDIs) techniques, ensuring robust triangulation of findings.
Coverage	Koyra and Dacope upazilas in Khulna , and Shyamnagar and Assasuni upazilas in Satkhira — purposively selected based on their high rankings in the INFORM Sub-national Risk Index and Climate Vulnerability Index , reflecting salinity, flooding, and cyclone exposure.
Sampling	Quantitative component: Household survey with 1,260 household respondents , capturing access to SRHR, WASH, and livelihood services, vulnerabilities, and coping mechanisms.
	Qualitative component: • 18 FGDs (8-10 participants each) with adolescent girls, boys, women, youth, and persons with disabilities. • 27 KIs with local government officials, service providers, NGO staff, and community leaders. • 6 IDIs with women, adolescent girls, and persons with disabilities to document lived experiences under climate stress.
Analytical lens	Guided by a rights-based, gender-responsive, resilience-building perspective to surface inequalities and opportunities for integrated interventions.

2 districts
4 upazilas
1,260 households
660 female and 600 male respondents
Women and youth being the majority of the respondents

Who exactly did we talk to?

Gender of the Respondents	Total	
	Count	Col %
Male	600	47.6
Female	660	52.4
N	1,260	100.0

Age group of the survey respondents	Total	
	Count	Col %
14-17 years	258	100.0
18-24 years	443	100.0
25-34 years	279	100.0
35-44 years	116	100.0
45-54 years	90	100.0
55+ years	74	100.0
N	1,260	100.0

Primary Source of Drinking Water	Total	
	Count	Col %
Pipe water (municipal)	254	20.2
Tube well	761	60.4
Pond water	378	30.0
River/stream water	129	10.2
Rainwater	657	52.1
Bottled water	448	35.6
N	1,260	100.0

Respondent Category	Total	
	Count	Col %
Farmers	127	10.1
Fishers	62	4.9
Adolescent Girls	158	12.5
Adolescent Boys	126	10.0
Youth Girls	170	13.5
Youth Boys	173	13.7
Pregnant Women	45	3.6
Lactating Mother	148	11.7
Marginalized Communities	133	10.6
Person with Disabilities	118	9.4
N	1,260	100.0

Religion	Total	
	Count	Col %
Muslim	981	77.9
Hindu	268	21.3
Munda	10	0.8
Muchi	1	0.1
N	1,260	100.0



Plan International Bangladesh has been working to equip girls and youth in climate-vulnerable regions of Bangladesh to become change agents in their communities. © Plan International Bangladesh



Chapter 3: Findings and Analysis

3.1 Climate Change Context and Vulnerabilities

Across the southwest coastal belt, climate variability - manifested through salinity intrusion, recurrent cyclones, tidal flooding, and prolonged dry seasons - has re-shaped the everyday lives of women and girls. The quantitative data show that more than **78% of surveyed households** reported **at least one climate-induced disruption in the past 12 months**, while two-thirds identified women and adolescent girls as the most affected household members.

3.1.1 Climate-induced vulnerabilities of women and girls in coastal Khulna and Satkhira

There are similarities and dissimilarities in the type and magnitude of vulnerabilities across upazilas and districts.

Satkhira District

Satkhira's dual hazard profile - cyclone exposure from the Bay of Bengal and chronic salinity from tidal backflow - makes it one of the most climate-stressed districts in Bangladesh.

Assasuni Upazila: Women's vulnerabilities stem from both physiological and structural conditions. Access to maternal health services is curtailed when embankments collapse or health centers are inundated. A female participant noted that during Baishakh–Chaitra *'families walk long distances for water and pregnant women suffer most.'*

Plan International Bangladesh is working to equip youth community volunteers to facilitate household sessions on climate change and DRR issues. © Plan International Bangladesh

- **Shyamnagar Upazila:** Here, water scarcity is central to vulnerability. Women and girls spend 1 to 2 hours daily fetching water, often missing school or work. The physical strain, coupled with unsafe water use, leads to skin disease and urinary infections.

Khulna District

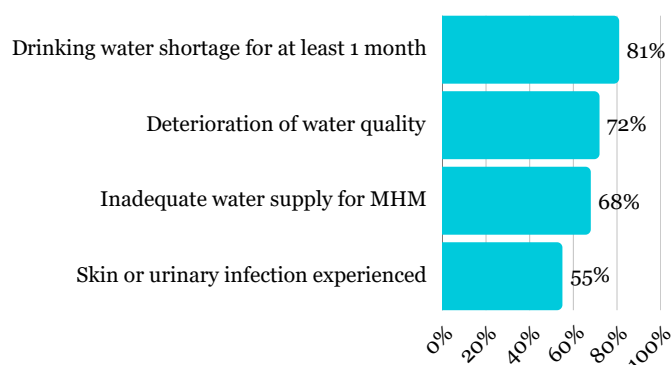
In Khulna, cyclone frequency and salinity overlap with rising temperature stress.

- **Dacope Upazila:** A local NGO-official shared that climate change *‘changed everything - what once fed a family can no longer grow.’* Women, previously engaged in paddy farming, now shift to home gardening and aquaculture. Yet these adaptations expose them to market and climatic volatility. A women from a household facing water scarcity shared, *‘We spend nearly two hours a day just collecting water... it affects our health and the children’s education.’*
- **Koyra Upazila:** Repeated tidal surges and damaged embankments have led to saline groundwater and contamination of pond systems. The local Project Implementation Officer (PIO) notes that women *‘can’t find proper water for their hygiene practice as the water is saline.’*

3.1.2 Effects of salinity, cyclones, floods and extreme temperature extremes on hygiene and sanitation

Climate hazards directly undermine hygiene and sanitation systems, creating a crisis with pronounced gender dimensions. The respondents implied that climate-driven WASH crises are deepening gender inequity.

Figure: Climate crisis giving rise to water-related crisis for hygiene and sanitation



Satkhira District

- **Shyamnagar Upazila:** Salinity and irregular rainfall make pond water undrinkable in summer. *‘In summer, we wait an hour just to get a bucket of water... sometimes we skip meals to buy drinking water’*, shared a female FGD participant. Households resort to unsafe reuse of water, reducing bathing frequency and washing clothes less often. Women explicitly connected these practices with itching, rashes, and chronic fatigue.
- **Assasuni Upazila:** Here, WASH stress is equally acute. A male FGD participant reported, *‘Our cows and goats use the same pond we collect water from.’*

Khulna District

- **Dacope Upazila:** The local PIO described that when tidal surges occur, *‘saline water enters the area and submerges the water sources’*, leaving communities dependent on contaminated ponds. The PIO’s voice echoes with a FGD participant, *‘We bathe less and sometimes skip washing clothes. Skin diseases and stomach problems are common.’*
- **Koyra Upazila:** Saline contamination of shallow aquifers and poor sanitation infrastructure interact to create cyclical public-health risks.

3.1.3 Successful climate resilience strategies and lessons for scale-up

Across coastal Khulna and Satkhira, evidence points to widespread adoption of climate-resilience measures, albeit with significant spatial and thematic disparities. **Four strategies** dominate the adaptation landscape: early warning systems (EWS), rainwater harvesting (RWH), cyclone-shelter construction, and salinity-tolerant agriculture.

Among surveyed households, **60% reported benefiting from early warning systems**. Coverage exceeds 80% in certain unions of Koyra and Shyamnagar but falls below 30% in several interior pockets, suggesting that while reach is extensive, equity remains a challenge. Similarly, **56% of households reported using rainwater harvesting systems** - a figure that drops sharply in areas lacking NGO facilitation or maintenance support. The construction or upgrading of cyclone shelters covers 45% of households.

Meanwhile, 38% of households have showed positive attitude towards shifting to saline-tolerant crops, predominantly in Satkhira's Assasuni and Khulna's Dacope upazilas, where salinity intrusion has rendered traditional practice unviable.

3.1.4 Community-led and gender-responsive strategies: Pathways for scale

The data indicate that *who delivers* resilience interventions is just as important as *what is delivered*. An overwhelming **59.9% of households identified local NGOs as the primary actors** implementing adaptation projects, while only **18.7%** named government agencies.

This distribution demonstrates that much of the resilience-building effort is locally led, resting on non-state and community-based institutions.

However, the numbers also reveal gaps in gender responsiveness. While the coverage of EWS (60%) and shelters (45%) indicates that women are protected during emergencies, the dataset shows that only **26%** of households reported receiving **livelihood-diversification** support, and a mere **15.5%** benefited from **mobile health or SRHR-related camps**. These figures quantify what qualitative accounts have suggested: that adaptation initiatives safeguard survival but insufficiently address women's bodily and economic well-being.

3.1.5 Indigenous knowledge and local wisdom: Integration gaps and potential

The findings offer a revealing snapshot of how indigenous knowledge (IK) is being treated within formal adaptation systems:

- Only 19.7% reported women being formally acknowledged as indigenous knowledge leaders.
- Just 14.2% observed co-design of adaptation technologies that blend IK with modern science.
- A minimal 3.8% noted any inclusion of IK in school curricula.
- Barely 2.3% reported documentation or archiving of IK practices for future use.

"The local people have some unique solutions to many problems. But we're not duly capturing and analysing them."
– A local NGO official, KII, Assasuni, Satkhira

3.2 Sexual and Reproductive Health and Rights (SRHR)

During cyclones and floods, SRHR service accessibility collapses almost entirely.

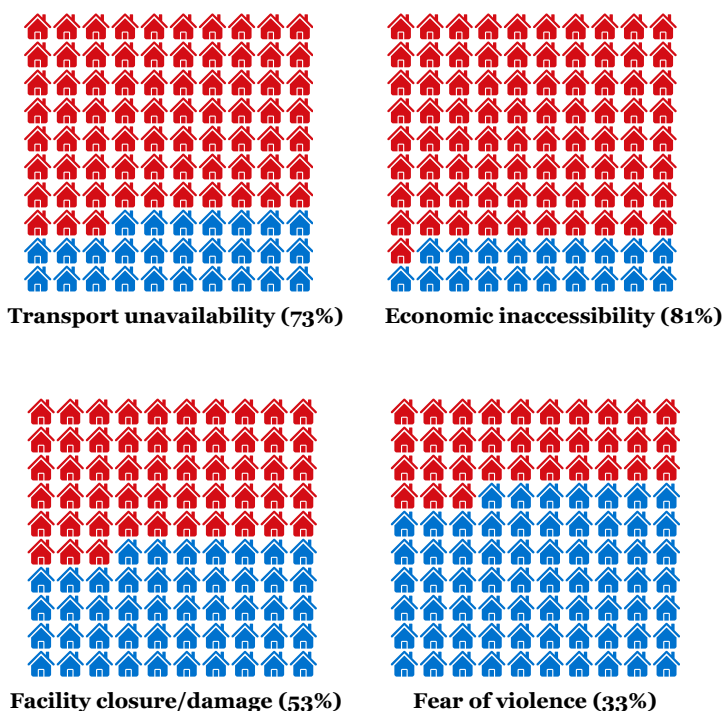
Only 2.5% of households (n=1,260) **report having full access to SRHR services**, while 58% of women report having no access at all. In practical terms, adolescents and young women needing family planning and/or contraception support, antenatal care, emergency management of menstrual problems, psychosocial support, etc. are unable to reach facilities precisely when risks escalate. This service collapse is compounded by the fragility of the health infrastructure: 25.6% say facilities are frequently damaged or unavailable during disasters, and 55.6% say this happens occasionally.

3.2.1 Climate-exacerbated SRHR vulnerabilities among CAY and marginalised groups

The data reveals a layered SRHR vulnerability profile shaped by climate-induced disruptions, service barriers, and limited SRHR knowledge among adolescents and young people. Across all four geographic areas, access to essential SRHR services becomes significantly constrained **during and after** cyclones and floods, with **38.7% of households reporting trouble accessing any form of healthcare**. This challenge is geographically uneven: **Assashuni** (57%) and **Shyamnagar** (40%) emerge as the most crisis-affected, while Koyra (20%) and Dacope (29%) report comparatively lower, but still notable, levels of disruption.

Climate shocks disproportionately harm groups with existing SRHR vulnerabilities

Among households that faced service disruptions (n=487), the most affected groups were children (75%), elderly persons (73%), women (54%), girls (47%), and PwD (45%). For adolescent girls and young women, this translates into delayed or foregone access to contraception, menstrual hygiene supplies, and treatment for reproductive tract infections - often exacerbated by salinity. Notably, **31% of households report untreated salinity-related illnesses**, including reproductive health complications, with a sharper burden in Assashuni (45%) and Shyamnagar (34%). **The underlying barriers are structural:**



This intersection between gendered mobility constraints and climate stress directly undermines adolescents' and young women's health-seeking behavior.

Menstrual hygiene management becomes severely compromised during climatic events

Access to menstrual hygiene products collapses during disasters. Despite a mix of available products - sanitary pads (57%), menstrual cloths (68%), menstrual cups (9%) - **26% of women report no product available at all during emergencies**. The severity is reflected in coping mechanisms: 94% reuse old clothes, and 22% resort to using sand husks, ash, or dried leaves, practices that pose significant risks of infection and discomfort. A female FGD participant in Shyamnagar shared, *'We use old clothes and unsafe methods during menstruation, especially during disasters.'*

A substantial **69% of women and girls report difficulty maintaining menstrual hygiene during extreme weather**, with sharp geographic contrasts. Koyra (96%) and Dacope (78%) report far higher difficulty than Assashuni (65%) and especially Shyamnagar (37%), suggesting differential access to safe spaces, water sources, and storage options for menstrual materials.

SRHR knowledge gaps persist across all segments of young people

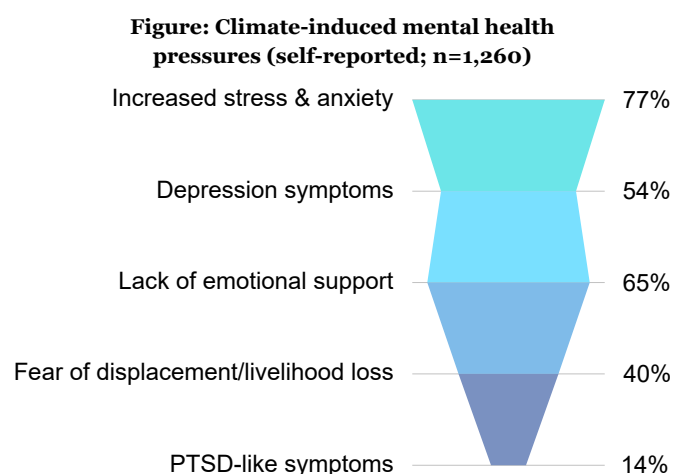
SRHR information access is critically low: **79% respondent (n=1,260) have never received any SRHR information**, with the knowledge deficit more pronounced among males (82%) than females (75%). Inter-district variation is stark - Koyra (92%) and Dacope (90%) under Khulna display near-universal information gaps. Adolescents and young people growing up without foundational SRHR knowledge lack the ability to make informed decisions regarding menstrual hygiene, making them highly vulnerable during crises.

Family planning and contraception become nearly inaccessible after disasters

An overwhelming **83% of female respondents (n=660) report difficulty accessing family planning or contraceptive services following cyclones and floods**. This environment heightens the risk of unintended pregnancies among adolescents, unmet contraceptive needs, and increased pressure on already fragile health systems. For unmarried adolescent girls - who often face stigma in accessing SRHR services even in normal times - the compounded effect of climate disruption makes access nearly impossible. During the KIIs with government officials from Khulna, one relevant respondent shared, *'Local clinics lack trained female doctors and emergency delivery support.'*

Climate-induced mental health pressures undermine adolescents' SRHR agency

The SRHR challenges are not restricted to physical access alone. Climate stress has a marked psychological dimension:

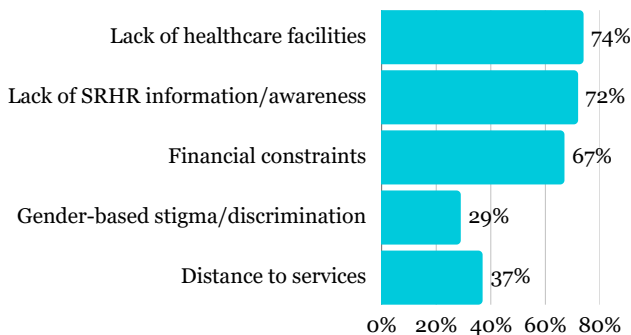


"We live with constant worry – when will the next cyclone come..."
– Adolescent girl FGD participant, Koyra

3.2.2 Barriers to accessing SRHR services during and after climate-related crises

Female respondents (n=660) identified a combination of structural, economic, information-related, and gendered barriers that prevent access to SRHR services during disasters:

Figure: Multiple barriers converge to restrict SRHR access during shocks and emergencies



The evidence clearly shows that climate-related disasters lead to systemic breakdowns in SRH service availability and access.

“Government clinics are often non-functional during emergencies, and many women cannot access timely care.”

– An NGO official, KII, Dacope

More than a third (37%) of female reported that distance becomes a major barrier during or after climate disasters

Things to note!

Disruptions to SRHR access during climate shocks occur across three interconnected level:

At the supply side, damaged or closed facilities (74%), staff redeployment to emergency response, and stockouts of essential SRH commodities – including contraceptives – undermine service availability at precisely the moment needs intensify.

These failures are compounded by an **information collapse**: nearly three-quarters (72%) of respondents report lacking clear information during crises, as emergency messaging rarely incorporates SRH guidance. For adolescents, mobility restrictions further limit their ability to seek clarification or alternative support.

At the household level, financial constraints (67%), restrictive gender norms, and heightened stigma further constrain care-seeking, meaning that partial facility functionality does not translate into real access.



A peer leader conducting community session in SRHR issues.
© Plan International Bangladesh

3.2.3 Engaging men and boys in advancing SRHR outcomes in climate-stressed contexts

The data shows that communities hold generally positive but still divided views on the role of men and boys in SRHR, particularly in the context of climate change. While a majority recognize the value of their involvement, a substantial minority remain unconvinced or uncertain, indicating persistent gender norms and knowledge gaps that influence who is “seen” as responsible for SRHR.

Majority support involving men and boys in SRHR education

Overall, **64.5% of respondents believe men and boys should be involved in SRHR education**, including within climate change contexts. Notably, the support is balanced across genders: 63.7% of males 65.3% of females. This data suggests that men themselves are not resistant to involvement; rather, they may lack structured opportunities or SRHR literacy to engage meaningfully.

Male engagement is perceived as contributing to improved attitudes

More than half (55.4%) of the respondents believe that involving men and boys in SRHR programming would improve attitudes toward women and girls. Again, this view is nearly identical across genders: 55.2% of males and 55.6% of females. This convergence is significant: it suggests that men recognize their influence over SRHR outcomes.

Climate change may be opening new conversations on male engagement

Climate-induced disruptions - such as facility breakdowns, unsafe mobility for girls, and household stress - often force families to renegotiate responsibilities around water collection, health-seeking, and protection. In this context, male involvement in SRHR education becomes more visible and practical. The relatively high proportion of respondents supporting male engagement suggests the community recognizes that:

- Men control household resources during crises.
- Men often make decisions on when/where to seek care.
- Adolescents rely on male guardians for safe movement during emergencies.

In other words, climate risks may be pushing families to acknowledge that women and girls lose autonomy during emergencies - and it is important for men and boys to play their part in alleviating this problem. **The community voices during the FGDs reflected the need for:**

- SRHR education that includes men and boys as active participants.
- Clear demonstration of how male engagement improves SRHR outcomes.
- Community dialogues challenging the perception that SRHR is exclusively women’s responsibility.
- Climate-adapted programs that promote shared responsibilities and gender-equitable decision-making.

“Involving men and boys in development programs is critical to changing attitudes toward women and girls, especially regarding their health and safety”

– A government official, KII, Koyra

3.2.4 Livelihood disruptions, climate stress, and their influence on reproductive health decisions

The data reveals a strong and consistent association between climate-induced livelihood disruptions and shifts in reproductive health decisions - particularly increased early marriage and reduced access to family planning.

Climate shocks are perceived to accelerate CEFM across all locations

A majority (58.3%) of respondents report that CEFM has increased during or after climate crises. This perception is slightly stronger among men (62%) than women (54.8%). Location-wise, the trend is consistent and high across the board: Assashuni (69%), Shyamnagar (54%), Koyra(53%), Dacope (57%).

These figures indicate a uniform pattern: when livelihoods collapse due to cyclones, salinity intrusion, or loss of agricultural income, families increasingly resort to early marriage.

Climate change is widely believed to undermine women's livelihoods and their SRHR access

A significant proportion of respondents - 71% (Very + Somewhat Likely) - believe that climate change negatively affects women's livelihoods and their ability to access SRHR services.

Notably:

- Women themselves express the highest concern
 - 22.7% "very likely" vs. only 5% among men
- Men are more likely to view the threat as "somewhat likely"
 - 66.8% vs. 47.4% among women

This gender difference suggests that women are acutely aware of how fragile income opportunities are - especially as many depend on agriculture, shrimp cultivation, small livestock, or informal labour, all of which are highly climate-sensitive. Reduced income undermines SRHR decisions in several ways:

- Inability to afford contraceptives or transport.
- Dependence on male household members for health-seeking.
- Heightened pressure to marry daughters early to reduce financial burden.
- Reduced autonomy for adolescent girls and young women.

Economic drivers are central to climate-linked early marriage decisions

The data underscores that livelihood loss is the dominant driver of early marriage during climate shocks. Women (57%) are significantly more likely than men (43.7%) to identify income/livelihood loss as the main reason. The findings illustrate a typical crisis sequence: **First**, livelihoods collapse due to flooding, salinity, or crop failures; **then**, household food insecurity rises, and girls' schooling becomes unaffordable; **so**, families perceive early marriage as a cost-saving strategy; **as a result**, marriage becomes framed as "protection" - especially in unstable environments; **in the end**, girls lose access to education, SRHR services, and decision-making power.

"After the last cyclone, my cousin's daughter was married off at 15. She was forced to quit school. I always thought she was a bright girl, but..."
– Married women FGD participant, Koyra, Khulna

Protection concerns and reduced access to education amplify CEFM and restrict SRHR access

The data reveals a striking insight: **12.1% cite fear of GBV as a reason for marrying off girls during climate crises** - higher among men (17.8%), reflecting the gendered perception of protection threats. Displacement, crowded cyclone shelters, damaged homes, and unsafe mobility increase exposure to harassment and violence. Whereas, **7.3%** respondents identify **“reduced access to education”** as a factor, consistent with climate events that affect school infrastructure, commute safety, household capacity to pay fees, and cultural norms that deprioritize girls’ education during crises.

3.2.5 Health system readiness and gaps in responding to SRHR needs during climate shocks

The findings point to a clear consensus among community members: local healthcare systems are not adequately equipped to respond to SRHR needs during climate-related crises, and multiple structural improvements are required.

Expanding and climate-proofing healthcare infrastructure is seen as a foundational requirement

A substantial proportion (67.1%) believe that building more healthcare infrastructure is essential to improving SRHR service delivery during climate shocks. Women emphasize this more strongly than men (72.7% vs. 60.8%), reflecting their direct experience of facility shortages, long wait times, and mobility barriers. Communities perceive infrastructure gaps not only in terms of the number of facilities, but their resilience. Cyclones, flooding, and embankment

breaches repeatedly render SRHR facilities non-functional (as reflected earlier: 81% reporting frequent/occasional facility damage). Thus, expanding infrastructure alone is insufficient; facilities must also be:

- raised above flood levels;
- built with cyclone-resistant structural features;
- equipped with backup power and water systems;
- located strategically to serve hard-to-reach communities.

Community members strongly support specialized training for healthcare workers on SRHR during emergencies and mobile healthcare support

The most widely endorsed improvement - **81.7%** across all respondents - is training healthcare workers on SRHR in emergencies. This suggests widespread recognition of gaps in provider preparedness. During cyclones and floods, frontline workers are often the first point of care for adolescents and women. On the other hand, **over half (52%)** of the respondent believe that **mobile healthcare services** during emergencies would significantly strengthen SRHR resilience during climate events. Women (53.3%) and men (50.5%) both support this.

Strengthening supply chains for SRHR materials is identified as a critical need

About 36.9% of respondents - higher among women (38.5%) - highlight the need for better access to SRHR supplies during crises. This includes sanitary pads, contraceptives, pregnancy test kits, pain relievers, antiseptics, and hygiene products. Given the findings mentioned in the previous subsections, this is a key system weakness.

3.2.6 Evidence-informed SRHR intervention pathways for Climate-vulnerable settings

The findings illustrate a clear set of community-backed interventions that can enhance SRHR outcomes in climate-vulnerable coastal regions.

Mobile SRHR clinics are widely viewed as one of the most effective interventions

Mobile SRHR clinics receive high endorsement (64%), with women placing strong emphasis on them due to the unique access barriers they face. Mobile clinics are seen not only as a service-delivery tool but also as a gender-equitable access strategy that bypasses structural mobility constraints. They are particularly vital for adolescents, who often cannot approach SRHR facilities due to stigma, fear, or lack of privacy.

Youth-friendly SRHR services are perceived as essential

Youth-friendly SRHR services are strongly supported (66%). Women slightly prioritize them more than men, reflecting their awareness of the barriers girls face. Youth-friendly services are gender-transformative because they create safe access points for adolescents - especially girls - at a time when climate change is worsening protection risks, psychological stress, and misinformation.

Training emergency responders on SRHR

Training emergency responders receives the strongest overall support (74%). Training responders in SRHR - including youth and gender sensitivity - ensures services are safe, respectful, and accessible for women and girls, who

experience heightened vulnerability during climate shocks.

Community awareness and SRHR education are essential

More than half of respondents identify education and awareness as effective interventions. The data shows that SRHR knowledge gaps are wider among men. Also, women often lack the decision-making power to seek care or negotiate contraception. Adolescent girls receive limited SRHR information due to stigma and cultural silence. Respondents suggested that education campaigns challenge these gendered barriers by:

- normalizing discussion of menstruation, contraception, and reproductive health;
- increasing male acceptance of shared decision-making;
- supporting adolescents to make informed choices;
- reducing discrimination during crises.

Preventing climate-induced CEFM requires targeted interventions

To reduce early marriage during climate shocks, respondents strongly support:

- Strengthened legal enforcement (34%)
- Cash assistance to households (31%)
- Continued education for girls (19%)
- Safe spaces for adolescent girls (8%)
- Economic empowerment for families and girls (8%)

“Us, the men, need to understand the importance of facilitating safe spaces for women and girls during emergencies. It’s a shared responsibility.”

– Men’s FGD participant, Shyamnagar

3.3 Water, Sanitation, and Hygiene (WASH)

The findings illustrate a complex and increasingly fragile WASH landscape shaped by salinity intrusion, flooding, water contamination, poor sanitation infrastructure, and gender-specific safety risks.

3.3.1 Climate-stressed WASH conditions and household water management practices

Communities rely on a combination of multiple water sources for drinking, hygiene, and agriculture, but these sources are heavily compromised by climate-induced disruptions - pushing households, especially women and girls, into unsafe and high-burden coping practices.

Drinking water sources are highly varied

No single safe drinking water source dominates, underscoring the instability of supply in the region:

- **Tube wells (60.4%)** and **rainwater (52.1%)** are the most common drinking water sources.
- A significant proportion still depends on pond water (30%) and river/stream water (10.2%), both highly vulnerable to contamination.
- Bottled water (35.6%) indicates **rising dependency on purchased water**, reflecting both affordability challenges and quality concerns.
- Only 20.2% have access to municipal piped water.

This diversification reflects a coping system rather than a resilient WASH system.



Plan International Bangladesh has piloted inclusive WASH blocks at educational institutions. © Plan International Bangladesh

Agricultural and irrigation water sources are equally climate-sensitive

Agriculture relies primarily on surface water, which is increasingly compromised:

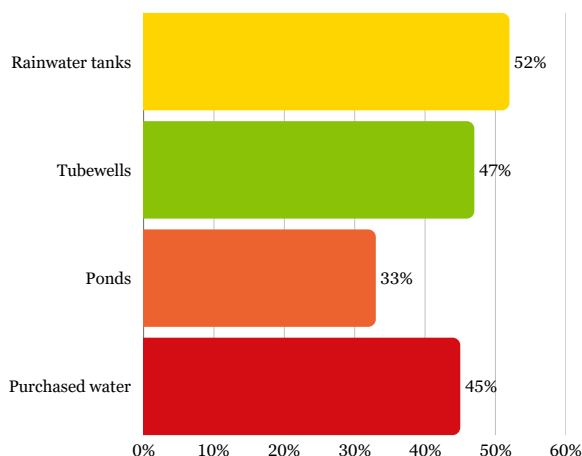
- **Pond water (55.7%)** and **river/stream water (40.6%)** are major sources.
- Tube wells (34%) and groundwater (31%) remain significant but **are often saline**.
- Only 27.4% use rainwater harvesting for irrigation, despite the region's suitability.

This dependence on climate-exposed surface water sources makes agricultural livelihoods especially vulnerable to salinity, flooding, and heatwaves.

Women face severe water shortages and unsafe hygiene conditions

Only **24.7% of women report having water available for hygiene** during disasters. Even when water is available, women rely on:

Figure: Water sources women rely on for maintaining hygiene



"After the cyclone, I had to stop going to school because I didn't have any access to clean water or sanitary products. I felt ashamed, and there was no place to change my clothes."

– Adolescent girls' FGD participant, Dacope, Khulna

Sanitation safety for women and girls is extremely poor, particularly during climate events

Safety at toilets and bathing spaces is a major gendered vulnerability:

- Only **10.8% of women** always feel **safe**.
- 55.2% sometimes feel safe, and 34.1% never feel safe.
- The main **drivers of insecurity** include:
 - No separate facilities for women and men (36%)
 - Long distances to facilities (21.9%)
 - Poor structural conditions (16.3%)
 - Lack of lighting (18.8%)
 - Presence of unknown men (5.9%)

Access to clean water is severely compromised by salinity, flooding, and heatwaves

More than **58% of women report difficulty accessing clean water** in the past year due to climate stress. Flooding and salinity intrusion are particularly damaging:

- **74.4%** say flooding contaminates water sources.
- **77%** report destruction of sanitation facilities.
- **51.6%** face clean water shortages due to damaged infrastructure.
- **32.4%** report increased waterborne diseases following floods.

Salinity intrusion alone severely impacts **daily water use**:

- **50.9%** say it has affected **drinking water access**.
- **76.5%** report poor taste and smell of water.
- **54.4%** report **increased** water purification costs.
- **38.9%** say agricultural water has become unusable.

Women and girls face significant menstrual hygiene barriers, exacerbated by WASH gaps

The primary challenges are:

- Lack of access to sanitary products (38.3%)
- Inadequate private spaces (28.3%)
- Stigma and taboos (15.3%)
- Limited knowledge (7.8%) or information (10.3%)

During flooding or cyclones, sanitation practices shift to unsafe coping mechanisms - women and girls adopt risky alternatives under crisis:

- **67.1%** use community/shared toilets (often **unsafe** or **damaged**)
- **69.4%** avoid facilities due to **lack of privacy**
- **51%** adopt **temporary** solutions
- 20.3% resort to open defecation during crisis times

3.3.2 Institutional responses to WASH challenges

The data shows that while multiple agencies - local authorities, NGOs, and development partners - have undertaken important WASH-related interventions, their reach remains limited, fragmented, and heavily skewed toward emergency responses rather than long-term, climate-resilient solutions.

Support from key agencies is limited and unevenly distributed

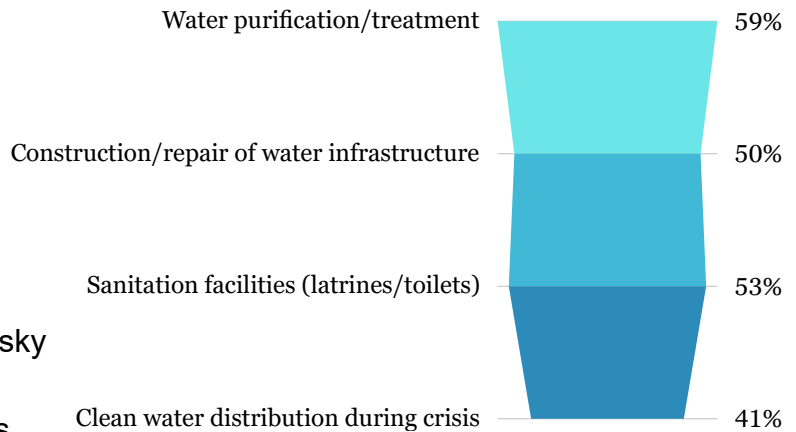
Only **19.3%** of respondents report receiving any support for **water resource management**, while **80.7%** receive none.

A sharp gender disparity is evident:

- 25.8% of men report receiving support
- Only 13.3% of women report the same

Where support exists, it focuses primarily on infrastructure repair, water purification, and sanitation facilities

Among the minority receiving assistance, agencies have focused on **key services**:



This indicates agencies are primarily addressing acute water insecurity and damage from floods or cyclones - reflecting a reactive rather than preventive pattern. Interestingly, sanitation support is primarily reported by **men (19.3%)** compared to **women (2.1%)**, indicating women's limited direct engagement in infrastructure processes or that services are not being communicated effectively to women.

Agencies have significantly contributed to sanitation and hygiene interventions for women and girls

When looking specifically at actions for women and girls, agency involvement appears broader:

- Improving sanitation facilities (71.8%)
- Distributing menstrual hygiene products (67.3%)
- Conducting awareness campaigns (52.9%)
- Emergency sanitation support during disasters (39.6%)
- Training on menstrual hygiene management (27%)

Communities highlight clear, system-level solutions that agencies should prioritize

When asked what actions should be taken to improve sanitation and hygiene, respondents show a strong consensus around systemic, long-term, and climate-informed solutions:

a. Community-based sanitation management (76.7%)

This is the top recommendation from respondents across genders.

b. Climate-resilient sanitation infrastructure (67.7%)

Women express stronger support (70.8%) than men (64.3%), reflecting their disproportionate exposure to unsafe WASH conditions.

c. Increased funding for menstrual hygiene programs (53.7%)

Women again show higher demand (57.3% vs. 49.7% among men), indicating persistent unmet needs in MHHM during disasters.

d. Strengthening capacity of local government (41%)

Respondents recognize that local authorities lack the technical, financial, and logistical capabilities to manage WASH systems, especially during recurring climate shocks.

e. Improved coordination between government, NGOs, and communities (23.4%)

This highlights fragmentation in WASH service delivery and the need for harmonized, multi-stakeholder planning.

Only 11.8% of respondents report community-based monitoring of sanitation facilities

Things to note!

The findings show that agencies play a meaningful but limited and reactive role in addressing WASH challenges. Communities express clear preferences for durable, community-led, climate-adaptive solutions, including:

1. Climate-resilient infrastructure
2. Stronger community governance mechanisms
3. Improved coordination among stakeholders
4. Increased investment in menstrual hygiene
5. Capacity building for local institutions

These insights collectively suggest that the next generation of WASH interventions in Khulna and Satkhira must shift from ad-hoc emergency responses to integrated, climate-smart, gender-responsive, and community-driven systems.



A student using the vending machine placed inside an inclusive WASH block. © Plan International Bangladesh

3.3.3 Private sector engagement in potable water supply: reach, affordability and resilience

The findings show that private sector actors play a visible but uneven role in supporting potable water access in the climate-stressed areas of Khulna and Satkhira. While households rely heavily on private water sources and technologies, the reach, affordability, and resilience of these services remain highly variable.

Private sector involvement in potable water provision is widespread but not fully inclusive

A significant proportion of respondents identify multiple private sector actors as part of the local water ecosystem:

- Water supply companies (62.5%)
- Bottled water companies (54.2%)
- Water filtration/purification technology providers (52%)
- NGOs partnering with private companies (44.3%)

This indicates the presence of a **hybrid water economy** where households rely on paid water delivery, bottled water, and purification technologies, especially in areas where salinity intrusion and flooding have compromised natural and public water sources.

“We need to develop affordable and sustainable water service models, such as water kiosks or subscription-based services, operated by local entrepreneurs to provide continuous access to clean water.”

– An NGO Official, KII, Shyamnagar, Satkhira

Climate-resilient solutions remain limited and poorly understood

Only 22.7% of respondents report that private sector actors offer any climate-resilient water solutions (e.g., salinity-resistant supply, robust filtration systems). A large majority are either not sure (43.3%) or report that no such solutions are available (34%).

This indicates:

- Low awareness or visibility of climate-adaptive technologies
- Limited diffusion of salinity-resilient innovations
- A gap between available solutions and community outreach

Private water services are not reaching the last mile equitably

The data suggests that private sector support is far from universal:

- Only 19.3% of respondents report receiving any external support for water management.
- Women report significantly lower access (13.3%) than men (25.8%).
- Community-level water distribution systems are rare (8.3%).

Affordability remains a core barrier, especially in climate-stressed areas

Although the survey does not directly measure affordability, several proxy indicators reveal cost pressures:

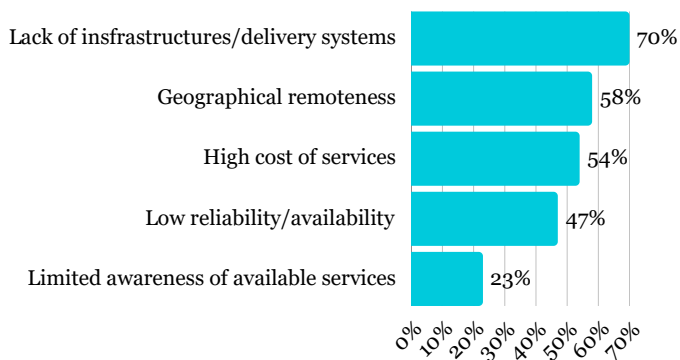
- High reliance on bottled water (54.2%) signals increasing financial burdens.
- Increased purification costs (54.4%) due to salinity stress further strain household budgets.
- Women’s lower reported access to private sector services suggests affordability constraints tied to household decision-making and income control.

3.3.4 Gaps in private sector water provision and financial barriers to safe water access

The findings reveal a water market where private sector actors play a visible but insufficient role, leaving major gaps in infrastructure, coverage, affordability, and climate resilience. Households in Khulna and Satkhira - already facing salinity intrusion, water contamination, and recurrent flooding - depend heavily on private water sources. Yet private services remain inconsistent, unaffordable for many families, and poorly adapted to climate-induced water stress.

Access barriers highlight structural and economic challenges in private water service delivery

Communities identify several major barriers limiting access to private water services:



These qualitative data reveal that even where private services exist, households struggle to access them because:

- Water trucks and filtration units do not reach remote or waterlogged settlements.
- Transport disruptions from flooding make last-mile delivery unreliable.
- High mineral content and salinity increase purification costs.
- Low-income households cannot afford bottled or treated water.

72% of the respondents believe that the existing private sector water supply service does not reach them properly due to their geographical remoteness.

Case vignette: When safe water becomes a monthly financial shock

For a typical 5-member household in climate-affected areas, the cost of accessing potable water has become a persistent economic strain.

While about one-fifth of households manage with less than BDT 100 per month (**19.8%**), the majority face much higher costs: 37.1% spend BDT 301–500 and a further 18.7% spend BDT 501–800. **In effect, nearly 56% of families incur medium-to-high monthly water expenditures,** reflecting the hidden costs of living with salinity intrusion, flooding, and unreliable public water systems.

These costs escalate sharply during climate shocks. For families whose incomes drop during waterlogging or cyclones, **monthly water costs exceeding BDT 500 represent a significant financial burden,** underscoring how climate events directly translate into higher household water expenditure and expose the limits of market-based water provision for low-income communities.

3.4 Livelihoods and Youth Economic Empowerment (YEE)

The data reveals that climate change is exerting sustained and deepening pressure on livelihoods in the target coastal regions, with women and youth experiencing the highest levels of disruption.

3.4.1 Climate change impacts on youth and women's livelihood systems

These impacts stem from recurring climate hazards - particularly salinity intrusion, cyclones, flooding, and erosion - which collectively erode income stability, increase production costs, and push families toward distress coping strategies.

Livelihood disruptions are frequent and disproportionately affect women

Nearly half of all respondents (**45%**) report **experiencing livelihood disruptions every year** due to climate hazards. This burden falls far more heavily on women (56.5%) than men (32.3%), indicating gendered exposure to climate-sensitive work. In contrast, men show higher representation in the “rarely” disrupted category (46.5%) compared to women (32.1%), suggesting that their livelihood activities - often involving mobility or diversified job options - are comparatively more resilient.

““I want to learn digital skills to improve my income, but after the last flood, I didn't have the money to go to the training center. Our family's income was severely impacted.”

- Young girl, FGD, Koyra, Khulna



Plan International Bangladesh is promoting climate-smart livelihoods practices among young girls and women through different projects. © Plan International Bangladesh

Increased soil salinity and cyclone events are the most widespread livelihood stressors

Among climate impacts, increased soil salinity (33.3%) is perceived as the most significant threat to livelihoods, with women reporting higher sensitivity (36.5%) than men (29.8%). Salinity undermines agricultural productivity, reduces fodder availability, and affects freshwater sources needed for small-scale aquaculture and household-based enterprises.

Cyclones and storm surges represent another major stressor (26.3%), followed by riverbank erosion (17.9%) and flooding (12.4%).

Climate change is diminishing income security for a majority of households

The most severe livelihood consequence reported is reduced income (44.7%), affecting both men and women at similar rates. This indicates widespread erosion of earning potential as climate hazards limit productivity, increase downtime, or destroy crops, fish ponds, and assets. Another 31% report complete loss of income sources, with women again facing higher impact (32.9%) compared to men (28.8%). This reflects the fragility of income streams typically available to women - informal, low-capital, and dependent on functioning natural ecosystems.

The increase in production or operational costs (15.2%) shows that climate change is making livelihoods not only less reliable but also more expensive, further squeezing households with limited economic resilience.

About 9.1% of respondents report being forced to migrate temporarily or permanently due to climate-driven livelihood pressures.

3.4.2 Building digital and green skills pathways for youth and young women

The data indicates strong interest among youth - and especially young women - in acquiring digital and green skills that can expand their livelihood opportunities in a climate-affected economy.

Gender-differentiated digital skills preferences and implications

Across all digital skills, young women demonstrate strong preferences for options that allow them to generate income without navigating mobility restrictions.

Key gendered patterns include:

- Freelancing skills (e.g., graphic design, writing, virtual assistance) attract strong interest from women (27.1%), far higher than men (11.8%).
- Interest in basic IT skills is also high among women (23.2%).
- Women show moderate interest in digital marketing and e-commerce (26.5%).
- Whereas, significant proportions of young men express interest in digital marketing and e-commerce (41.7%); data management, GIS, and remote sensing (15.8%), and coding & software development (6%) - as one put it during an FGD in Dacope, *'I have seen someone earning good money working with software. I want to explore this field as well.'*

Strong interest in green economy opportunities

Youth exhibit substantial interest in green sectors, with distinct gender patterns:

- **Climate-smart agriculture and aquaculture is the top choice** overall (41.1%), driven by both men (46%) and women (36.7%).
- **Renewable energy** attracts far stronger interest from men (24.5%) compared to women (9.4%).
- **Eco-tourism and conservation** show higher interest among women (20.5%) than men (4.8%).

3.4.3 Gender and youth-specific barriers to participation in emerging green sectors

The findings reveal that women and youth face a combination of structural, economic, digital, and gender-normative barriers that limit their access to training and employment in emerging green sectors such as renewable energy, sustainable agriculture, climate-smart aquaculture, and the digital green economy.

Limited availability of green skill programs

More than 55.6% of respondents highlight a lack of available training programs in their region. This challenge is more acute for women (59.7%) than men (51.2%). Also, a substantial 67.1% cite high costs - tuition, travel, materials - as their biggest obstacle. This barrier is more pronounced among men (70.5%) but remains high among women (63.9%).

More than 53.1% report lacking access to digital tools or reliable internet. Men (55%) and women (51.4%) are similarly affected.

Structural and institutional barriers to youth participation in climate-resilient and green sectors

Gender norms and cultural expectations remain the most widely cited barrier, with over **34% of respondents identifying cultural or gender-based norms as a constraint**, reported slightly more by women (34.8%) than men (33%).

- Beyond social norms, weak information flows and limited institutional support further narrow access, particularly for youth and young women. **21% of respondents cite lack of awareness about available programmes**, while 10% report insufficient support from government or institutional actors.
- Caregiving responsibilities compound these barriers for young women, with **17% of women identifying care burdens as a constraint**, compared to 15.7% of men.

Communities' preferences put forward by themselves

Respondents highlight several actionable solutions from their end.

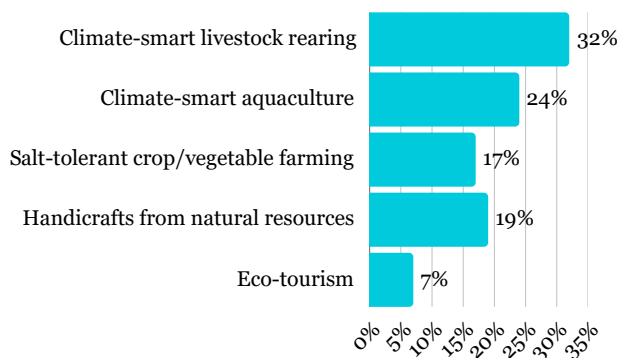
- **Government incentives and subsidies** preferred by **28.4%** respondents, with more preference among men (34.8%) than women (22.6%).
- 23.7% support subsidized training materials..
- 17.2% cite digital literacy and affordable internet access as key needs.
- 13.7% highlight the need for startup finance. Women (13.9%) and men (13.3%) show similar priorities.
- 11.2% of women endorse community-based green training centers (vs. 3% of men).

3.4.4 Climate-adaptive livelihood options for youth and women

The evidence shows that youth and women in the target coastal regions recognize several climate-adaptive livelihood pathways, yet actual engagement remains low.

Strong potential for climate-adaptive sub-sectors with gendered patterns shaping preferences

Respondents highlight five major climate-adaptive livelihood sectors:



Handicrafts from natural resources (19%) – overwhelmingly preferred by women (31.4%), aligning with existing gendered skills and mobility constraints; whereas, livestock and aquaculture is preferred predominantly by men.



A female YEE programme participant showing a handcraft product made by her. © Plan International Bangladesh

Only 21% of respondents report to be currently engaged in any climate-adaptive livelihood activity

Things to note!

Among those **who are engaged** in climate-adaptive livelihoods activity (n=264):

- **Climate-resilient aquaculture dominates** (72.2%), reflecting strong market demand.
- Salt-tolerant farming (49.6%) represents another major cluster, **particularly among women**.
- **Renewable energy services (35.7%) see male domination**, with very limited participation from women.
- Handicrafts (26.3%) show mixed but notable involvement.

Among those **not yet engaged** (a large 79%):

- Lack of technical **skills or training** (50.7%) is the most significant **barrier**.
- Lack of **startup capital** (25.6%) affects women more heavily (23.9% vs. 16% for men).
- Lack of **information/awareness** (10.8%) further inhibits participation.
- Lack of **land** (6.7%) restricts women disproportionately.
- Social norms discourages youth/women participation (4.8%) in perceived 'male dominated' sectors.

3.4.5 Private sector collaboration in scaling youth- and women-led climate-resilient enterprises

The findings show that private sector partnerships hold strong potential to transform youth and women-led enterprises in climate-impacted regions - but only if these partnerships address the core gaps that restrict business growth: finance, technology, market access, and capacity.

Access to finance, technology, and capacity building initiatives

Financial investment or loans emerge as the top requested partnership, identified by 40.4% of respondents. Both men and women highlight this need at similar rates, though women slightly more (41.7%) given their systemic challenges in accessing credit.

A substantial 28.9% of respondents identify capacity-building and training opportunities as a key private sector contribution. **Women express this need more strongly** (33.5%) than men (23.8%).

Only 10.6% explicitly identify access to technology and innovation as a desired partnership. When asked more specifically about what would improve their business:

- 19.1% of women and 9.5% of men state that technology adoption is critical for sustainability and scaling.

People need to know what sort of opportunities exist, otherwise they will not be able to dream of changing their current situation.

– A government official, KII, Shyamnagar, Satkhira

Improved market linkages are essential for enterprise growth

Market access is another core area where private sector support is needed:

- 10.6% identify market access and distribution channels as a needed partnership.
- 18.4% say improved market linkages would significantly enhance sustainability.
- Men (24.3%) place higher emphasis on national linkages than women (13%).
- 18.5% of respondents highlight the need for improved **supply chain resilience** and raw material sourcing.

Although smaller proportions identify them explicitly, the following areas present high-value opportunities:

- Mentorship and business development support (5.7%)
- Collaboration on product development (2.8%)

The low figures can be resultant for limited exposure, not lack of need.

3.4.6 Integrating digital and green skills into youth development programming

The data shows clear community support for integrated, multi-skill training models that connect digital competencies with climate-resilient livelihood practices.

The strongest demand is for programs that integrate agricultural skills with digital tools

The most widely supported approach - endorsed by 44.4% of respondents - is training that combines agricultural skills with digital literacy and climate-smart technologies. Support is significantly higher among men (47.3%) but also

strong among women (41.7%), reflecting a shared understanding that agriculture and aquaculture are transforming under climate pressure.

Integrated digital skills and practical green applications are popular

A training model combining practical digital skills with green livelihood competencies is supported by 34.8% of respondents. Men show higher demand (39%) than women (30.9%), but interest across both groups is substantial.

While fewer respondents selected it overall (12.4%), **mentorship and internship opportunities** receive notably higher support from women (15.9%) than men (8.5%).

Community-based green and digital training is an emerging preference

About 6.6% prefer community-based training models linking youth with local green entrepreneurs and cooperatives. Women show stronger interest (9.8%) than men (3%), reflecting:

- Women's need for local, safe learning spaces
- Limited ability to travel to urban centers for training
- Strong community embeddedness in their economic and social lives

These community-based hubs could:

- Connect youth with local solar technicians, aquaculture specialists, eco-tourism operators, and green value chains
- Serve as safe training environments for young women
- Strengthen community ownership over youth skill development



Plan International Bangladesh is promoting various technical and vocational skills, such as mobile repairing, among youth and women. © Plan International Bangladesh





3.5 Gender-based Violence (GBV) and Gender-issues

The findings reveal a clear and troubling link between climate stressors - particularly salinity intrusion, floods, cyclones, and livelihood collapse - and increased GBV in coastal communities. While not all respondents recognize or report GBV, likely due to social stigma and underreporting, a significant proportion perceive a rise in violence during climate-induced crises.

3.5.1 Climate stress as a driver of heightened GBV risks in coastal communities

More than one-third of respondents (36.8%) report observing an increase in GBV during climate-related crises such as salinity intrusion, floods, and cyclones. Men (40.3%) report this slightly more often than women (33.6%), reflecting well-documented patterns of underreporting among women due to fear, stigma, and limited avenues for disclosure.

Among those identifying increased GBV, climate-induced livelihood loss emerges as the most significant trigger. Salinity-driven livelihood disruptions are cited by 71.1% of respondents, followed by displacement due to floods or cyclones (65.1%), climate-linked economic hardship (57.1%), and increased household stress (33.2%). These findings highlight a consistent sequence: environmental shocks erode livelihoods, economic pressure escalates household tension, and women and girls become disproportionately exposed to violence and control.

Plan International Bangladesh equips young people with leadership capacities and skills to prevent and take actions against GBV in their own communities. © Plan International Bangladesh

3.5.2 Forms of GBV exacerbated by climate-related shocks

Respondents identify multiple forms of GBV intensifying during climate crises, underscoring the breadth of climate-linked gendered harm. **Early or forced marriage is the most frequently reported outcome**, cited by 77.7% of respondents who observe increased GBV. Livelihood loss, school disruption, and perceptions of insecurity lead families to frame early marriage as a coping or “protective” strategy, particularly during prolonged displacement.

Domestic violence is reported by 74.4% of respondents, closely linked to heightened stress, financial strain, and household instability following floods and salinity shocks. Sexual violence and harassment (49%) are associated with unsafe shelters, lack of lighting, mixed-gender sanitation facilities, and long distances to water and sanitation points. Economic violence (39.3%) - including control over income, restriction of women’s work, and financial coercion - intensifies as livelihoods deteriorate.

3.5.3 Climate hazards and differentiated GBV pathways

Flooding and prolonged waterlogging are identified as the strongest climate drivers of GBV risk (35%), with consistent reporting across genders. Floods disrupt housing, displace families, and increase women’s exposure to unsafe environments while simultaneously increasing domestic tension. Cyclones and extreme storms (30.6%) further weaken protection systems through mass displacement, infrastructure damage, and reduced law enforcement presence.

Salinity intrusion (27.9%) emerges as a chronic driver of GBV through economic pathways. By undermining agriculture, aquaculture, and fisheries, salinity erodes household income, increases conflict, and forces male migration - leaving women with reduced protection and greater responsibility. Water scarcity and drought, though reported by a smaller proportion (5.2%), disproportionately affect women due to their role in water collection and household management, increasing exposure to harassment and emotional abuse.

3.5.4 Community-identified priorities for GBV risk reduction during climate crises

Communities articulate clear and practical priorities for reducing GBV risk during emergencies. **Strengthening protection networks and improving shelter safety** is identified as the most urgent need (35.6%), reflecting widespread concern over unsafe displacement environments. **Rapid-response GBV teams** (25%) are particularly prioritised by women, highlighting the need for accessible, immediate protection mechanisms during crises.

Mobile health and protection services (21%) and **separate, secure WASH facilities** (17.2%) are also emphasised, with women consistently placing higher importance on sanitation safety and privacy.

“During a cyclone, we had to share the space in shelter with men we didn’t know. I kept my daughter close the entire time. I felt afraid.
– A female (mother), FGD, Assashuni, Satkhira

3.5.5 Community-led, gender-responsive strategies: limitations and potential

Only **17.7%** of respondents report the **presence of community-led GBV prevention initiatives** during or after climate events, while nearly half are unsure whether such efforts exist. Importantly, among those who reported to have seen the presence - these initiatives are perceived as effective: 74.4% describe them as somewhat effective and 16.6% as very effective. However, respondents are clear that scaling requires structural support. Integration of GBV risk reduction into climate adaptation plans (26.6%), predictable financing (23%), strengthened community ownership (20.4%), capacity-building for women (20.2%), and supportive government policies are all identified as necessary conditions for sustainability.

The data highlights the need for phase-specific but continuous GBV interventions.

- **Pre-crisis** efforts focus on awareness, training for women and girls (75.9%), and preparedness measures, but women's leadership in early warning and disaster committees remains limited.
- **During crises**, women- and child-friendly spaces (36.3%), deployment of trained female protection personnel (25.8%), and rapid-response mechanisms are viewed as most effective.
- **Post-crisis**, respondents prioritise legal aid (64.5%), psychosocial support (58.3%), and livelihood recovery (56.1%), particularly women, who link economic recovery directly to reduced vulnerability.



A young participant from Plan International Bangladesh taking over a leadership role of a local Bangladesh Police official during the flagship 'Girls Takeover' campaign. © Plan International Bangladesh

Chapter 4: Conclusion

The findings of this study highlight the serious vulnerabilities that women, adolescent girls, youth, and marginalized communities face due to climate-related challenges in Khulna and Satkhira. The connections between SRHR, WASH, and livelihoods show the urgent need for integrated, climate-resilient solutions that tackle overlapping social, economic, and environmental risks.

Climate change worsens existing inequalities, hitting women, adolescents, and people with disabilities the hardest. Issues related to water access, sanitation, and reproductive health are made worse by increased risks of GBV, CEFM, and economic instability. Adolescents, in particular, face heightened mental health issues, disruptions in their education, and higher dropout rates. These factors undermine their long-term opportunities and resilience.

In response, targeted interventions should combine SRHR, WASH, and livelihoods in both disaster response and long-term recovery plans. Strengthening cooperation among government agencies, NGOs, local organizations, and youth groups is crucial to ensure that services are accessible, inclusive, and fitting for the context. To build climate-resilient livelihoods, we should also focus on developing digital and green skills for women and youth, helping them engage in new sectors and adapt to changing economic conditions.

Community-driven solutions, gender-transformative policies, and locally-led initiatives-especially those led by women

and youth-are vital for creating lasting climate resilience. Incorporating these within evidence-based programming and inclusive policymaking will help ensure that interventions meet immediate needs while also empowering communities to handle future climate challenges.

By committing to integrated, gender-sensitive, and youth-inclusive strategies, stakeholders can support the well-being, rights, and resilience of Bangladesh's most climate-vulnerable populations. This will help pave the way for a more equitable and climate-ready future.



Smiling faces of programme participants - the driving force behind Plan's work. © Plan International Bangladesh

"Youth and women bear the brunt of the impact - and they need to be in the driving seat of the solutions."

- A government official, KII, Shyamnagar, Satkhira

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Until we are all equal

About Plan International

Plan International is an independent development and humanitarian organization that advances children's rights and equality for girls. We believe in the power and potential of every child but know this is often suppressed by poverty, violence, exclusion and discrimination. And it is girls who are most affected.

Working together with children, young people, supporters and partners, we strive for a just world, tackling the root causes of the challenges girls and vulnerable children face. We support children's rights from birth until they reach adulthood and we enable children to prepare for and respond to crises and adversity. We drive changes in practice and policy at local, national and global levels using our reach, experience and knowledge. For over 85 years, we have rallied other determined optimists to transform the lives of all children in more than 80 countries.

We won't stop until we are all equal.