



THIRST IN THE LAND OF WATER

Coastal women lead local adaptation efforts as water crisis deepens

Women collect water from a pump in a coastal village of Cox's Bazar, where salinity and falling groundwater levels have made access to safe water increasingly difficult.

PHOTO: COLLECTED

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We first bathe in salty pond water. Then we stand in a large bowl and pour exactly one mug of fresh water over ourselves to wash off the salt. We do not waste that water either. It is reused for laundry or poured at the base of coconut trees.

Jannatul Hafsa, a local

NILIMA JAHAN, back from Cox's Bazar

It is a coastline defined by water, an endless horizon where the sea meets the sky and waves roll as far as the eye can see.

Yet while this geography sustains a multi-billion-taka tourism industry, it remains a cruel irony for women in nearby coastal villages. In this “land of water”, there is water everywhere, yet not a drop safe enough to drink or use every day.

For 24-year-old Saleha Begum of Shilkhali village in Teknaf, every day begins with a race against time, not breakfast.

In a family of 10, she knows that if she cannot collect water before dawn, her five brothers will leave for work without bathing or eating.

The tube-well at her home has run dry as groundwater levels plummet, forcing Saleha and her mother to trek nearly a kilometre to a distant source. Carrying one pitcher in hand and another balanced against her waist, they make the exhausting trip 20 to 30 times a day.

Each 10-minute journey under the relentless sun has left Saleha with chronic body pain.

Despite the presence of several able-bodied men in the household, fetching water remains “women’s work”, a burden sustained by rigid social norms.

“If a man carries a pitcher here, he becomes a subject of social ridicule,” Saleha said.

The crisis is even harsher for Saleha’s neighbour, 35 year-old Tohura Begum.

A survivor of child marriage and domestic violence, Tohura was abandoned after her husband took a second wife. Now a day labourer supporting her elderly mother and young son, she finds the water struggle

is destroying her health.

“The injuries from years of abuse flare up every time I lift a pitcher. During menstruation, the burden becomes unbearable. That is when I need water for hygiene the most, yet I am often too weak to fetch it,” she said.

“Sometimes, out of sheer exhaustion, I stop bathing altogether.”

In Mognama of Pekua, families survive through extreme rationing.

“We first bathe in salty pond water. Then we stand in a large bowl and pour exactly one mug of fresh water over ourselves to wash off the salt,” said Jannatul Hafsa, a member of a local women-led organisation.

“We do not waste that water either. It is reused for laundry or poured at the base of coconut trees.”

Md Nasrullah, executive engineer of the Department of Public Health Engineering in Cox’s Bazar, described the crisis as a “geological catastrophe”.

While the term refers to the underground collapse, the causes are undeniably man-made, a result of human activity pushing nature past its breaking point.

The shortage stems from salinity intrusion, rocky underground layers, and excessive, unregulated groundwater extraction, particularly in tourism-heavy zones.

Nasrullah said underground rocky layers make drilling deep tube-wells extremely difficult in Teknaf and Ukhiya.

He also pointed to mounting pressure on fragile groundwater reserves following the Rohingya influx in the two upazilas.

“While the permanent local population is around 6 lakh, the total number of people relying on these resources has surged to nearly 35 lakh. We are extracting groundwater for a

population seven to eight times larger than intended,” he warned.

In Cox’s Bazar Sadar, where nearly one crore tourists visit annually, excessive groundwater extraction, particularly by luxury hotels, has created an underground vacuum.

This vacuum effectively “pulls” seawater into the freshwater lens, poisoning the supply through salinity intrusion, he added.

The Department of Public Health Engineering (DPHE) is currently expanding reservoirs and developing pipeline projects with support from the World Bank and the Asian Development Bank.

Yet for the women trekking through the heat today, these administrative promises offer no immediate relief.

In this vacuum, a predatory private market has emerged.

Residents are often forced to buy water from private deep tube-well owners, paying upwards of Tk 250 for a one-hour window of access, twice a

week.

For a day labourer like Tohura, who earns Tk 300 to Tk 400 on a good day, this “water tax” is devastating.

Those who can afford it use pipelines to collect water, but for most fishing families who cannot afford the infrastructure, pitchers and buckets are the only recourse.

“The hours spent securing every drop are hours stolen from their livelihoods, time that could have been used more productively to support their families,” said Umme Kulsum, a member of a local women-led organisation.

The struggle is compounded by allegations of local-level corruption.

Residents like Nurul Alam of Baharchara

claim that during the previous

government regime, families

were asked to “contribute”

from her pump.

“I don’t charge a fixed fee because I know their struggle. People just give me some money if they want, just to support my utility bills,” she said.

Faced with repeated failures of public infrastructure, local women have begun organising their own survival.

Refusing to remain “victims” of failed schemes, women across Cox’s Bazar are now spearheading their own climate adaptation strategies.

Through the “EmPower: Women for Climate-Resilient Societies” programme, a joint UN Women and UNEP initiative, local women-led associations are forming a Women Climate Action Network.

By developing their own Local Adaptation Plans of Action, these women are bypassing traditional, top-down aid to implement solutions that directly address their community’s needs.

Instead of waiting for the state, they identify local priorities.

At the Shilkhali school, a 4,000-litre rainwater harvesting tank was recently installed under the LAPA framework, ensuring students like Sumaiya no longer have to choose between education and hydration.

“The women decide their own priorities,” said Shiuly Sharma, executive director of Jago Nari Unnayan Sangstha.

“They identified rainwater harvesting as a sustainable way to combat the crisis in monsoon. Bringing water closer to home also reduces the risk of physical harassment and eve-teasing women face while trekking to distant pumps.”

In Chakaria, another group of female climate actors successfully installed solar panels at school and cyclone shelters.

During a recent storm that severed the national grid, these solar units powered a nebuliser that saved the life of a local infant.

Despite this empowerment, community-based solutions have limits.

Rainwater harvesting is seasonal, leaving villages vulnerable during eight months of drought.

“To tackle the plummeting water table and salinity, we need massive investment and advanced technology to treat surface and seawater,” Sharma added.

Cox’s Bazar Deputy Commissioner Mohammad Abdul Mannan admitted that current interventions are “not enough”, citing budgetary constraints.

“This is a matter of the government budget which doesn’t happen overnight,” he said, while encouraging “capable local citizens” to step forward.

As the sun set over Shilkhali in mid-April, Saleha was preparing for her 13th trip to the well.

She and Tohura are no longer just water fetchers. They are the de facto architects of climate survival in a land where the state has yet to match their resilience with accountability.



Rainwater harvesting tank at a school in Teknaf's Shilkhali village.



Carrying pitchers, women in the area trek nearly a kilometre to distant sources to fetch water for their families.

funds for pumps that never arrived.

“Around 25 families gave Tk 2,000 each, but the well was never installed,” he said.

The failure reaches the youngest citizens as well.

At South Shilkhali Government Primary School, a washroom facility completed last December remains non-functional because it lacks a water connection.

“Our 217 students face immense trouble; they have to bring bottles of water from home,” said Head Teacher Mohammad Ruhul Amin.

Even existing systems are unreliable.

“We bring water from a nearby pump through a pipeline, but when the electricity goes out, which happens for long periods during natural disasters, our children suffer,” he added.

The crisis also intrudes on the morning routine of young Sumaiya, a Class IV student.

Before she can even think about her lessons, she spends her mornings helping her mother carry heavy buckets of water from a distant source, arriving at class already exhausted.

Some residents, however, have tried to create their own solutions.

Dhalabi Chakma, also from Shilkhali, recently installed a deeper pump after years of walking long distances. Now, she allows neighbours to collect water