



Portraits of Resilience:

Confronting Climate Change in Bangladesh





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**Photo Credit**

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Text Credit

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Enhancing Climate Change Adaptation and Disaster Resilience in Bangladesh

Disclaimer

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FORWARDING

Climate induced natural hazards are emerging and are becoming a major cause of concern, particularly in the coastal and haor areas of Bangladesh. There is growing evidence that these hazards are appearing more frequently. Over the last thirty years, Bangladesh has experienced nearly 200 climate-related disasters which have accounted for around \$16 billion economic losses including the damage of assets, property and livelihoods.

Tackling this challenge of climate change and natural disasters Islamic Relief Bangladesh has been implementing a project titled "Enhancing Climate Change Adaptation and Disaster Resilience in Bangladesh" for the affected communities helping communities bounce back from the adversity. Here are a collection of photo stories from people who have survived – coped or confronted these challenges.

We found many inspiring success stories during our time spent with communities. We believe this photo story book " Portraits of Resilience: Confronting Climate Change in Bangladesh" will generate a sense of hope highlighting what's possible and portray the resilience of the people of our country.

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ISLAMIC RELIEF'S RESILIENCE FRAMEWORK



Islamic Relief Bangladesh is working to systematically enhance the resilience of the most climate-vulnerable households and communities in Bangladesh through strengthening their adaptive capacity and reducing their risk exposure by supporting households, communities, local government and national institutions to anticipate, plan for and adapt to and recover from climate variability and shocks. We work to support the strengthening, linking and integration of local to national sub-systems through bottom-up planning designed to inform national level development planning and climate finance decisions if favour of the most climate-vulnerable communities and persons in Bangladesh.

Household Level Community Level Upazilla Level District Level National Level



Climate Change:

Effects & Vulnerabilities

Climate change increasing vulnerability

Many people living in low-lying areas are vulnerable to heavy rain, floods, cyclones and drought. Natural disasters are invariably accompanied by heavy loss of life property, and can further push vulnerable communities into poverty.

Bigger and more frequent cyclones expected

The sky was overcast since dawn. The fragments of black clouds made the coastal people scared as it seemed to be parading up and down, the sky was getting prepared for some disastrous event.



Too little water during dry season and too much in rainy season...

Eroding river banks

"The river was 5 kilometres away when I got married. But now, it is at my doorstep, ready to grab my kitchen," Rahima Begum, a local said, "I have moved my house five times. Again the river is so close! I need to stay on a boat. It's too risky to stay here anymore!" - She said.





Loosing land to water

River not only give life it also takes a sometimes too. Thus people survive; mix their tears with the river water, sacrificing everything. Years come and go with ups and downs for the inhabitants...

Rivers drying up

It was a warm morning. The colour of the sky was being reflected in everything. The river was flickering in the first glow of the morning sun. Hasan (12) threw his net in it. Something had caused the water to surge, he froze and carefully eased his foot back, I was standing there curious to see his reactions ... after a half an hour he came back having nothing in the hands. His face blanched in fear. The incoming storm had broken all his joy and happiness. He left saying, I will go now. You must come tomorrow morning, it's not safe.





Too much salt

It was an early April morning. The ground was dry; there was no chance of rain. Malek Mia was lifting pond water using a shallow machine pump. The hot summer sun was beating down on him. He felt so thirsty that he could hardly stand. He sipped the pond water but spewed out from his mouth instantly. Water is everywhere, but not a drop to drink! Salinity has gripped nearly 80% villages under Koira Upazila, causing persistent crisis of safe drinking water.



Inundated with water but no work

Shahin (21) was sitting on the Golui of the boat with a gloomy face. Hearing my call, he turned around to me. I asked, "Why are you sitting alone with a dismal face?" "I've had no work for the last 4 months. In the Haor areas, long time outpouring takes the arable lands under water which makes income sources uncertain and people unemployed temporarily", he replied.



Seeking water with shallow pump

Abdus Satter (57) was walking past with parts of a shallow pump tube well and a water container on his left shoulder. He stopped, stood motionless and stared at me. From twenty yards away, I asked enthusiastically - "Chacha (Uncle), where are you going with all these "? He replied, "Water scarcity has gripped the whole area. Water... nowhere is water...harvesting time has gone... I am forwarding to the river to lift water from there if I can".



Pushed to migrate

"I only see rippling sea waves, dried river beds and endless fields! Water is everywhere, but not a drop to drink. No fresh water any more, only salty-rotten crops! I don't want to live here anymore, I just can't cope any longer" – Sufia Khatun



Climate induced migration drives slum growth

We are not educated, but can sense that something grave is happening around us. I couldn't believe my eyes – the land I had tilled for years, that fed me and my family for generations, has vanished. Our livelihood is lost. The cyclone swept all our belongings & cattle away, the last six years I have been living in a slum. I don't want to live like this ... who wants to? The kitchen is so close to the toilet. When I cook, I don't get the smell of curry, rather I get the stink of a toilet.



Improving sanitation

Using a hanging latrine is a common practice in coastal and Haor areas which poses a serious threat to public health through water-borne diseases. Promoting hygienic sanitation system is essential for the people of the Haor areas. IRB distributed a number of improved latrine pans among communities to reduce the water-borne disease transmission.

Flooded out

Mojid Gazi (76) is leaving behind his near-to-collapsed house with nothing except his old torn slippers. He doesn't know where to go now.





From Adversity to Hope



Expanding incomes

"Life is not so easy in the Haor area. Food insecurity and seasonal flooding make us vulnerable throughout the year. In most areas, only rice is harvested. Every year, our lands go under water for almost six to eight months because of flash flooding". With the technological support of IRB, Bikash Ranjan Chakrobarty cultivated pumpkins, and got a tremendous result.

Successful cultivation of pumpkins in the wetland has brought him a good fortune, enabling him to lead a better life for him and his family.

Bumper harvest

Nobolal Das (50), a poor farmer of Hobibpur Union of Sulla Upazila, is expecting a good profit this year. "I earned BDT 50,000.00 by selling over 2,200 pieces of sweet pumpkins last year. This year, I have cultivated it on a larger scale, hoping to get bigger yields."



Diversifying livelihood for climate change

After reaching Sulla Upazila, we rode on a horse-drawn vehicle to go to Sorojit Mondol's (55) house. The last ray of sunshine was spread over his yard. A jovial face greeted us. With a board smile on face, he said - "As a livelihood beneficiary of IRB, I started to cultivate chilly, and that's the beginning of my success; after that I need not look back. I also grow vegetables in my homestead and rear poultry. With the profit from chilly and other income sources, I will go and buy a cow and rent another 16 decimals of land."





Overcoming livelihood risk

Poor & marginalized farmers are least able to cope up with environmental & economic shocks in the coastal and Haor areas of Bangladesh. Their means of subsistence is facing a continuous threat of ruin for climate change. Currently, they are trying to build up their capacity to adapt with this susceptibility. Climate adaptive new crop varieties are now their main source of livelihood and food security.



Barley: Old crop for a new climate

Ahad Ali along with his son was packing intensely the bale of seasoned barley. "I used only two irrigations in my land before and after sowing seeds of barley. It doesn't require much irrigation to yield barley. An improved production and better profits from barley has been attained after a proper water supply ensured for irrigation next to storage from monsoon rainfall in existing canals and on-farm reservoirs." - Ahad Ali

Discovering the potentials of barley

An early morning of autumn, the sky was more clear than as it is, no fleck of cloud cumulus was seen anywhere. Sweet fragrance of ripe barley was floating in the air. Walking beside the barley field, noticed three farmers were chopping ripe barley. Their faces were shining with gratifying smiles. I asked them about barley production. Enthusiastically he said "From 5 decimal of lands I got around 26kg of barley, which is way beyond my expectation, it has been an excellent yield."



Changing crops with changing climate

It looked as if the whole of nature had stepped into winter even with the sun shining the field looked barren. Both sides of the field remain dewy. A little ahead I see Yousuf Hawlader (47) along with his son who was weeding on his land to grow the saplings of tomato. A happy expression was seen in their faces. With a jovial face he shared his experience like- "at first I couldn't ascertain the seasonal crop grown with changing weather. With the technological support of Farmer's Field Laboratory it become possible to grow seasonal crops at a successful rate, which assures my income earning in the winter season, i cannot thank you enough".



The promise of sunflower

It was a winter afternoon. The sun was setting, and the low-lying field of sunflowers glowed with the soft yellow sunlight. A gentle breeze was swaying across the field when we were walking past it. Asit Mondol (43) was busy in his field. "What are the benefits of growing sunflowers?" - We asked him with enthusiasm. With a trace of smile he replied, "Sunflowers are getting hugely popularity among the coastal farmers because of its market value. I invested only BDT 9,000.00 and profited about BDT 25,000.00."





From fallow to bitter gourds

"In the past, vast areas of homestead remained fallow as nobody cultivated it for any vegetable. But the situation has changed; farmers are now cultivating bitter gourds here. I don't use pesticides rather I follow the perching method when the pests attack the crop. For less investment and more profit, bitter gourd cultivation is gaining popularity in Patuakhali district."

-Hasan Dhali (35)



Cashing in with betel leaf

Betel leaf (Paan) is gradually becoming an important cash crop to the framers of the coastal belt for its high net return. Farmers in Golachipa use their shallow land near their homestead for growing betel leaves. "I got 2.27 tones yields from an acre of land. To the most of the growers in Golachipa, Paan production could be quite lucrative. Some farmers are seeking more leased lands to increase their Pann production" states Shuvas Majhi, a local farmer.

A photograph of a farmer in a blue shirt and a colorful headscarf, standing in a lush green rice field. He is holding a long-handled spray nozzle, which is emitting a fine mist of liquid. The background shows a clear blue sky, some trees, and a white structure, possibly a house or a shed. The overall scene is bright and sunny.

Empowering farmers

Last year Nuru Mia (58) spent BDT 3,300.00 for purchasing pesticides. It made him worried because a higher spends on inputs is required while the major amount is spent for pesticide. This year he got a brilliant idea from the Producer Group Meeting that Mahogany (*Swietenia macrophylla*) and Neem seeds (*Azadirachta indica*) can be used as bio-pesticide which is much more effective for reduces the need foring insecticide.



Early rice variety brings smiles

It was the change over period between autumn and winter. The sky was pale blue, air neither cold nor hot, and the sun's rays were invitingly sweet. I took a walk to meet Shushoma Mondol, a livelihood beneficiary of IRB. I reached ten minutes early and found Shushoma Mondol waiting for me by the roadside, discussing business with a local shopkeeper: "I heard you would come today" she said in a high pitched voice. We went to the land of Shushoma Mondol, filled with ripen paddy. Gentle breeze over the golden paddy delighted me when we were walking by the the field.

Husking stress tolerant rice

Evening had fallen. The sound of Azan was coming from the north when I arrived at the doorstep of Shirn Apa. Shirin Apa greeted me with a smiling face. In response to my queries, she explained, "Last year we had to suffer because of excessive rainfall which delayed harvest; but this year we have achieved tremendous success in cultivating stress tolerant paddy cultivation with the support of IRB." A Smile tugged at the corners of her lips...



Popularising homestead gardening

Homestead gardening during both summer and winter seasons is gaining popularity in coastal and haor areas of Bangladesh. Islamic Relief Bangladesh has been arranging regular group meetings with the producer groups; therefore they are getting ideas about climate adaptive method of growing vegetables by increased resource utilization. As a result, women are increasingly getting more involved alongside their male counterparts. Use of a quick cow dung compost in producing these vegetables has been the most praiseworthy aspect of homestead gardening.





Profiting from cow rearing

About 10 km north to Sunamganj town lies a small village named Sulla. The narrow snake-like earthen road has a pleasant shadow over it, courtesy of all sorts of trees on both sides of the road. In the middle of this poor village lives Shibani Mondol (45) with her two sons and three cows. "I had a small place for cows. Now I have three cows, worth BDT 40,000.00. As I made good profits, my children are attending school now."



Rearing livestock for lambs

The little boy was playing with a new born lamb. Both of them seemed to be toys of mud with drizzle on their faces. When asked his name, he promptly responded 'Joglu' my friend, indicating towards the lamb with a jovial face. At that time, father of the boy came, Jahangir Alam, a beneficiary of IRB who has got support of three goats and two sheep, the only possession he has to support his family income.



Proud to be pigeon farming

As I approached to her Monjura Khatun's (28) house, she was in a little bit of hurry to husk paddy. The pale blue sky was clear, and the sunshine was warm enough to balance the cold. It was a perfect winter day. Suddenly I heard cooing behind me; a pair of pigeons were moving around in circles and making the cooing sound. She smiled hesitantly, and enthusiastically asked me whether I would like to see her pigeon firm. As I approached, she happily entered into the room. As the cage doors opened, the pigeons came out. Within seconds, they flew in circular formations over head, glittering like diamonds in the sunshine.

Rearing poultry for meat and eggs

"Each morning I wake up with the clucks & quacks of my hens & ducks. I have made this small poultry farm with the support of IRB, which gave me the hope to stand strong despite my poverty."

- Oleda Begum (28)



“With the help of my mother, I have found it easy to look after the chickens. We have approximately 200 chickens that would be ready for sale soon.”

Shopon Hawlader (30)



A man in a striped shirt is administering a vaccine to a cow. He is holding a small vial and a syringe. A woman in a yellow shirt and pink headscarf is assisting. Another man in a white shirt is holding the cow's head. The scene is outdoors with trees and other animals in the background.

Enhancing animal healthcare

It was an early morning. Dozens of men, women and children were standing in a row, waiting to receive free vaccines against diseases for their cattle. For the past 2 years, free livestock vaccines and treatments are being provided once a month. Very few veterinary pharmacies exist in the locality. So the biggest struggle is the transportation and lack of access to crucial livestock medicines. This livestock and poultry vaccination camp has created huge interest and enthusiasm among the farmers. Now cattle owner are seeking treatment sooner instead of using traditional medicines.



Back to fishing

An early November morning it was. A veil of mist shrouded the land. The ripen rice stands motionless in the fields. We sat to talk with Kalil Mia (47). Kalil Mia continued his story taking a break from his work in the field. "Days were passing easily before, but Cyclone SIDR changed the scenario. I lost everything. I was unable to buy a boat & fishing net. But the support of IRB rescued me. Each morning, I can set out on my fishing trip now" – narrated Kalil Mia (47)



Cultivating tiger prawns

Shopon Kumar (38) leases a pond this year. Before this he used to cultivate prawn fish in a homestead pond which gave him the experience and interest for prawn farming. His younger son Sourav (12) reached off to the direction to the local market. He caught two prawns from his father's pond and hopes to sell BDT 120.00.

A woman wearing a pink and white striped shawl is smiling warmly. She is standing in front of a traditional thatched-roof structure made of wood and dried grass. The background is a clear, bright sky.

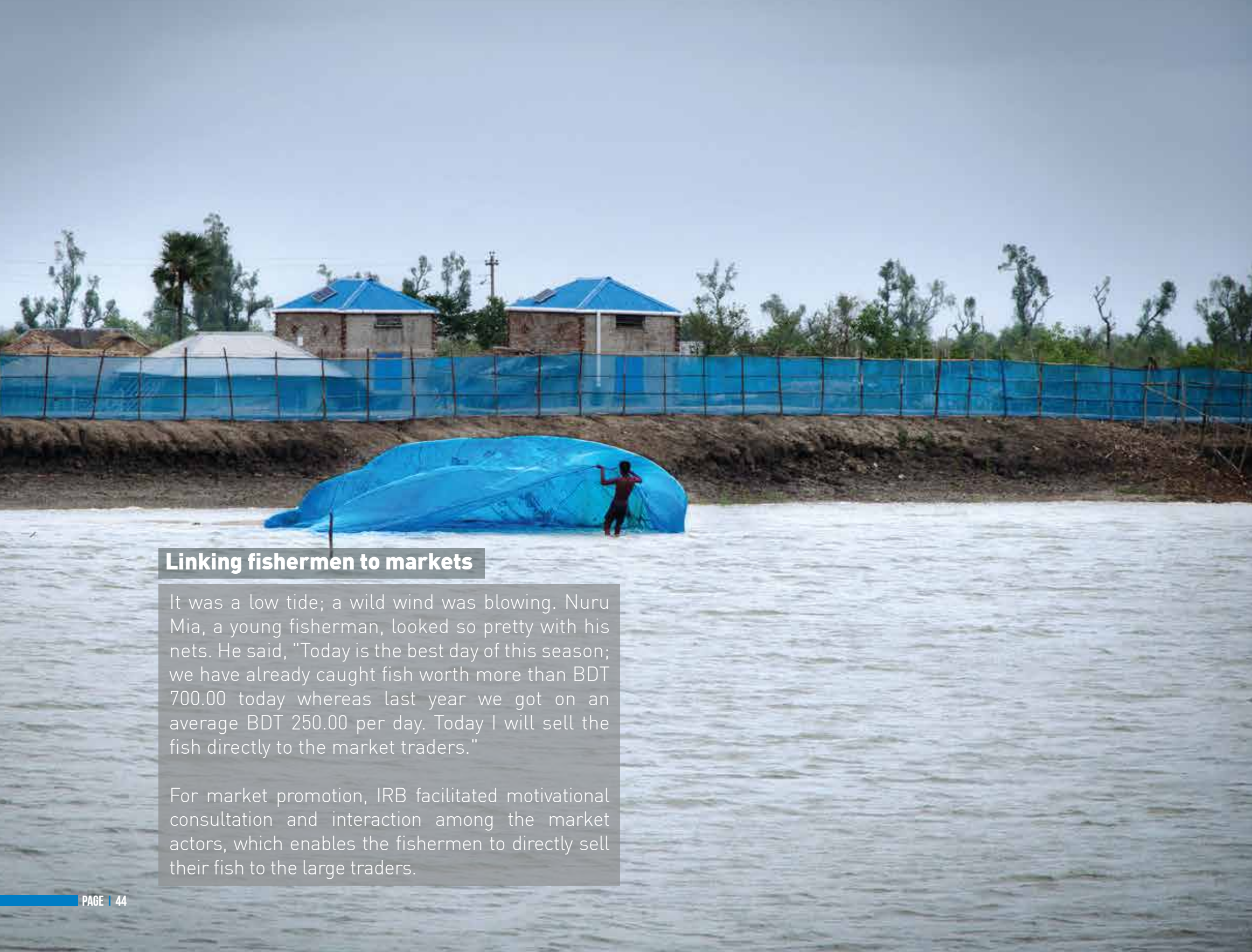
New serial entrepreneur multiplying incomes

“Finding Hasina would not be difficult”, villagers explained. Following their directions, I crossed two bridges and passed a tea stall and some shops to get a path shaded with banana trees. Hasina Begum was grinding chillies into paste for cooking curry when I arrived. I sat on the plinth. Hasina Begum gained reputation for her hard work. Once at every month, she leaves her house at 3.00pm, walks for two hours to attend her Producers Group Meeting. Hasina Begum operates several businesses. She raises chickens, goats and ducks with the support of IRB. She also traded rice and pulses. She grows her own vegetables and sell some too she is a very enterprising entrepreneur.

Promoting inclusive livelihood

Twenty Seven-year-old Abu Saleh from the village of Panpotti, is in a wheelchair, lost his legs falling from a tree. It was hard for Mohiuddin to support his family, but now he hopes to have a cow of his own after he was selected as a beneficiary of IRB.





Linking fishermen to markets

It was a low tide; a wild wind was blowing. Nuru Mia, a young fisherman, looked so pretty with his nets. He said, "Today is the best day of this season; we have already caught fish worth more than BDT 700.00 today whereas last year we got on an average BDT 250.00 per day. Today I will sell the fish directly to the market traders."

For market promotion, IRB facilitated motivational consultation and interaction among the market actors, which enables the fishermen to directly sell their fish to the large traders.

Making money from sanitation

IRB helps Mizanur Rahman (45), a rural small-scale sanitation entrepreneur to expand his business. Villagers come to him to buy sanitation materials which enable him to promote many sanitation products among low income rural customers.



Cow dung turns a profit

“No belongings were left we had everything disappear; I became helpless to bear my 6-member household. I started selling Chatki made of cow dung in local markets at BDT 5.00 each. Amazingly a good profit was coming due to local demands. Daily food costs can easily be managed from the profit compared to our previous period,” narrated by Sahina Khatun.





Boat ownership brings hope and income

"I lost all of my properties. It was completely impossible for me to buy a boat and fishing net. With the support of IRB, it become possible to buy a new one, which brings back the hope we can live in dignity". Jhumka's face flashed with a laugh of happiness.

From begging to banking

38-year-old Asima Khatun was born blind. She has no property. She used to go door to door for begging with her daughter. "I don't like begging; it has no dignity", narrated Asima. But after being a livelihood beneficiary of IRB, she is dreaming a better future for her and her daughter.



Model for Scaling up Community Resilience through Community Resource Centers



Islamic Relief Bangladesh has developed a network of Community Resource Centre which act as a hub of social business, information and services related to resilient livelihood and climate change adaptation.

Strengthening Community Resilience



Easing communication infrastructure

From the crack of dawn, a wide range of people use the roads, old men transporting large sacks of ripe paddy, women carrying drinking water children going to school. IRB has helped to deliver infrastructure such as roads, to help communities recover from disasters and ensure that people can do what they need to do thrive.

The beginning days of a canal re-excavation site at Ramjannagar, Shyamnagar. Participants are clearing out rubble and chalking out marked space, the preliminary steps behind the construction.





Excavating canals for year round crops

"All this area is surrounded by agricultural land. Earlier we could cultivate our land 2 times in a year, now it is cultivated 3 times. In addition, re-excavation of the canal has removed the drainage congestion. For the last two years, the agricultural land of Ramjannagar had been left uncultivated due to the absence of proper irrigation. Thanks to IRB... after the re-excavation the whole canal, total 1100 acre of land has brought under irrigation in the dry season and this has helped us a lot."



Households are prepared

To increase the scope of focusing on the actual improvements of the quality of life, vulnerability must be reduced. Considering the reality of our working area,, we acknowledge that it is more important and useful for those communities to anticipate and remain prepared for calamities.



Digitising early warning system

Abu Taleb (55) saved his agricultural field as he received weather forecast of heavy rainfall through cell phone and restrained from planting paddy. After the heavy rain was over, he prepared his land and cultivated the onions in the following week which helped him to avoid substantial loss and obtain a good onion production yield.

Reinforcing community volunteers

Cyclone Preparedness Program (CPP) volunteers are integrated with early warning and emergency system and are capable of taking effective action during disaster period. IRB's effort is enabling communities to respond in warning message through 500 trained volunteers. In addition, early warning equipments including Megaphone, Hand Siren and Radio were provided to the Union Disaster Management Committees (UDMCs).





Protecting from river erosion

In a bright morning of November, Salina (41) was sitting on a bamboo bench inside the riverbank with a few other women. Looking at the green shades, they were discussing: “More or less every year water comes and subtracts shelter, but the next riverbank erosion won’t be able to do us much harm because of these trees, they protect us.”



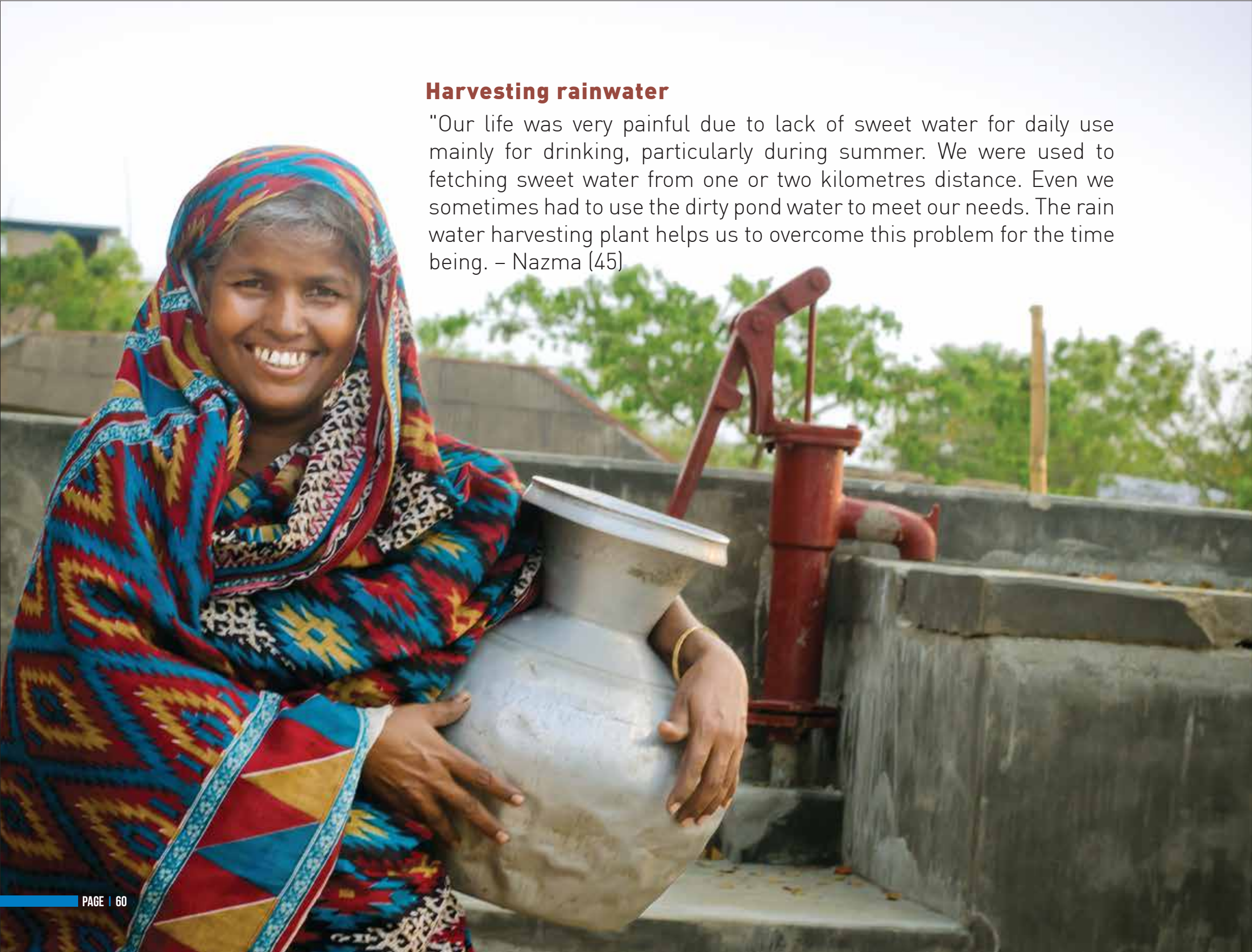
Drip irrigation from bottle water

March and April are the driest months in Bangladesh. Irrigation poses the greatest challenge for us since water availability needs to be there almost throughout the year. Majority of us could not afford money for irrigation. Therefore, we were looking for a quite cheap and effective method for irrigation. We collected abundant empty plastic bottles, the bottom portion of the bottles was removed, and the bottle was hung upside down., in such a way that the hole at the bottom releases water drops to the area surrounding the roots of the trees.



Brightening lives with community solar system

A spark of light came from the south corner of a muddy house at the early of that evening. On a wooden table different colourful books and khatas were scattered. 8-year-old Lata was busy in doing her home work for the next day sitting under the solar lamp with her school books. Her exams are supposed to be starting from next week. Her mother Aklima Khatun (35) was busy with the vegetables garden which is a little bit far from her house. Aklima came back with two hand-long bottle gourds in her hand and a f smile on face. After initial introduction, she warmly welcomed us and started to talk. Following her experience, I asked her quite enthusiastically, “What are the benefits of solar energy?” With a smiling face, she said, “It’s not just a light, but a light of hope. For many years, I was asking my husband to buy solar, but he can’t, because my husband works as a day labourer and it takes at least BDT 20,000.00 which is beyond his capacity... Children are doing homework for more hours. Having a solar light means that light is always available for us.”



Harvesting rainwater

"Our life was very painful due to lack of sweet water for daily use mainly for drinking, particularly during summer. We were used to fetching sweet water from one or two kilometres distance. Even we sometimes had to use the dirty pond water to meet our needs. The rain water harvesting plant helps us to overcome this problem for the time being. – Nazma (45)

Playing on raised school ground

It's ten minutes past 10 am, half an hour to go before the recess ends. Shouts are heard from the school ground where the restless children are busy in playing. Such sunny days bring smiles to the faces of the school children, which are not easily seen during the monsoon / rainy season.




Preparing the next generation

The afternoon draws into evening as the spring recedes; the bright rays of sunshine are dispersing through the trees. Some smiling little boys are watering the saplings. This initiative has attracted not only the older inhabitants, but also the younger members of the community of the area, to be an instrument for combating climate change issues. Community people establish them as the foremost agent of taking care of the saplings.





Save the planet
save humanity

A young boy with dark hair and green eyes, wearing a dark turtleneck and a grey jacket, is smiling and holding a white sign. The sign features a quote in green text and a logo in the top right corner. The background is a blurred outdoor setting with green foliage.

The Earth is green and beautiful, and Allah has appointed you his stewards over it.



(Saying of the Prophet Muhammad peace and blessings be upon him)

