



Safe and sound

Securing the lives and livelihoods
of Bangladesh's most vulnerable

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USAID
FROM THE AMERICAN PEOPLE



Save the Children



Today's children are the future of our nation.
We cannot allow their futures to end
before they even begin.

Imam Khalil
Choto Gabua Jame Masjid, Golkhali



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This book was commissioned by Save the Children USA's Bangladesh country office

This publication was made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of this publication are the sole responsibility of Save the Children USA and do not necessarily reflect the views of USAID or the United States Government.

Words, photography & design: Kelley Lynch (www.kelleyslynch.com)

Additional photo/drawing credits: p49 (re-) drawing of latrine by Kevin Lynch; p51 Hand washing drawings by Paula Lynch; p104 Cyclone Sidr satellite image courtesy of MODIS Rapid Response Project at NASA/GSFC; p112-113 food aid, transitional shelter photographs by Jeff Holt; p113 child-friendly spaces photograph by Benjamin Bryant; p114 cash-for-work photograph by Jeff Holt; p115 fingerlings photograph by Sharmin Asma

Printed by: Genesis (pvt) Ltd, 73 Siddheshwari Road, Ramna, Dhaka-1217, Bangladesh

Acknowledgements

Save the Children would like to thank its many partners in the Jibon o Jibika program, including Helen Keller International (HKI), The NGO Forum for Drinking Water and Sanitation (NGO Forum), the Bangladesh Red Crescent Society (BDRCS) and their 14 local partner NGOs.

The author would like to thank the many people who helped to make this book possible. First and foremost thanks go to Sharmin Asma from Save the Children's Dhaka office — a fantastic translator and fixer who appreciates the value of good stories and knows how to find them. Save the Children's excellent field staff were with us every step of the way, especially Md. Monzur ul Alam, Bidhan John Costa, Kokhon Dhopu and Samiul Kaiser. Alauddin Hossain fed us very well on the *chars*. Mahabub Hassan, Abdus Sattar, Shah Suja, Shohel Rana, Ayon Seal, Abdus Samad, and Nasreen Jahan from the Barisal & Patuakhali office made sure everything happened as it was supposed to. The senior staff in Dhaka, including Margarita Clark, Saikat Saha, Md. Ruhul Amin, Dr. Ferdousi Begum, and A.K.M. Towfique Aziz gave helpful feedback and information. Helen de Jode provided very useful editorial support. Kevin and Paula Lynch both kindly contributed drawings that helped to complete the book. Finally, I would like to say a special thank you to John Meyer and Erica Khetrin in the Dhaka office who provided support and assistance throughout.



Preface 007



Over the last five years the Jibon o Jibika (Life and Livelihoods) program implemented by Save the Children and its partners has worked to improve conditions for Barisal's most vulnerable.

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Preface

Safe and sound was produced by the Jibon o Jibika (JoJ) or “Life and Livelihoods” program as a way to share the stories and experiences of individuals, families and communities that have participated in the program over the last five years.

Implemented by Save the Children and partners with the support of USAID, the program produced evaluations, studies and reports which have helped to assess impact and document the effectiveness of its program strategies. While these materials have been valuable in describing the program’s challenges and successes and to help plan next steps, they have often obscured the voices of those most important to the program: people living in the areas of Barisal Division where JoJ implemented interventions to improve the well-being of children and their families.

Barisal, a coastal area in south-central Bangladesh, faces some of the country’s highest rates of food insecurity, malnutrition, and vulnerability to natural disasters. Based on in-depth interviews conducted in one typical coastal community during the last year of the program, *Safe and sound* will help readers understand the challenges and opportunities facing communities in this unique region. It gives the families with whom we have worked over the past five years an opportunity to share, in their own words, how the physical, economic and social landscape in Barisal has changed as a result of JoJ. From mothers deciding to change the way they feed and care for their children to farmers helping uplift their entire communities to students and housewives saving lives when a cyclone strikes — there are countless ways that people in Barisal have shown they are the real heroes in the JoJ story.

Woven around the three key program areas of JoJ: health and nutrition, food production, and disaster risk reduction, *Safe and sound* serves as both a celebration of the changes families in Barisal have been able to make over the last five years and a reminder of how much more remains to be done to ensure every child is able to grow and develop to their full potential. As Save the Children moves into a new phase of programming in Barisal through the USAID-supported Nobo Jibon or “New Life” program, *Safe and sound* is a reminder of the tremendous power and potential of people in Barisal.

The personal stories captured in this book are a source of enjoyment and inspiration for Save the Children’s team in Bangladesh. I hope the same will be true for all readers, especially those working in support of poor and marginalized communities in Bangladesh and elsewhere.

Kelland Stevenson
Country Director
Save the Children USA

Securing the vulnerable

Bangladesh has a surplus of statistics. After years living under the development microscope the country can offer up numbers on all aspects of life for its 162 million inhabitants. But in Barisal Division, a remote and watery area of 2.6 million people in south-central Bangladesh, the statistics are all at the wrong ends of the scale.

Barisal has:

- Among the highest rates of poverty in Bangladesh
- High levels of unemployment and illiteracy
- High rates of malnutrition, leading to high levels of stunting and wasting in children
- Low levels of dietary diversity
- Poor access to healthcare
- Poor hygiene, childcare and feeding practices.

Add this to the area's high susceptibility to natural disasters – in particular floods and cyclones – and it is not surprising that 86% of the population of Barisal Division are considered vulnerable or very vulnerable.

Over the last five years the Jibon o Jibika (JoJ) — Life and Livelihoods — program implemented by Save the Children and its partners* set about improving conditions in Barisal Division. They began with the children about to be born, improving nutrition and access to healthcare for pregnant mothers and their children and increasing vaccination coverage and levels of breastfeeding. JoJ also reduced deaths due to diarrhea and pneumonia in children, increased families' dietary diversity, and reduced overall levels of chronic malnutrition by 11%.

*The JoJ program was implemented in partnership with Helen Keller International (HKI), the NGO Forum for Drinking Water and Sanitation (NGO Forum), the Cyclone Preparedness Program (CPP) of the Bangladesh Red Crescent Society (BDRCS), and approximately 14 local partner NGOs.

Working at the household level the program also addressed food insecurity and dietary diversity by training homestead food production groups to grow and sell vegetables and to keep poultry.

At the union level the program dramatically increased the capacity of communities to prepare for and respond more effectively during and after disasters.

In the following pages we bring to life the story behind these achievements from communities based in the program's three districts (Barisal, Bhola and Patuakhali). The stories explain in the words of JoJ's beneficiaries how the three interrelated results — enhanced maternal child health and nutrition, increased household food availability and access, and improved community disaster preparedness — have succeeded in safeguarding their lives and their livelihoods.

The disaster preparedness aspect of the program was put to the test in 2007 when Cyclone Sidr hit the program area, and again in 2009 when Cyclone Aila hit. On both occasions the loss of life was most likely less than it would have been had the communities and agencies not been so carefully prepared.

The devastation of Cyclone Sidr caused Save the Children and its partners to delay their regular programming in order to undertake large-scale response and recovery. After Aila, thanks in part to lessons learned during Sidr, this was not necessary. In an additional section at the end of the book we look at what happened when these cyclones hit — how the program helped beneficiaries to meet their immediate needs and navigate the road to recovery.

As the JoJ program and the stories that follow illustrate, Bangladesh is much more than an alarming set of statistics. The country's greatest wealth lies in the spirit and determination of its people — people for whom life is never easy or certain — whose willingness to work at improving both their own lives and those of their children is truly inspiring.





Barisal Division has the highest number of children living in poverty in all of Bangladesh. Their lack of access to nutritious food, healthcare and basic sanitation is reflected in high rates of malnutrition — evidenced by the levels of stunting in children and the number who are underweight. Malnutrition not only increases mortality, it also has an irreversible impact on children's lifelong health and cognitive development — particularly when it occurs in the first two years of life.

Through the JoJ program community health volunteers have taught their communities how to achieve better health, nutrition and sanitation, and offered basic healthcare services within those communities.

Providing better nutrition for children — even before they are born — helps them to reach their full potential and goes a long way toward influencing rates of education, literacy, and economic prosperity in the longer term.

“Before in this area the only thing people did was try to plant enough rice for the year and catch some fish to supplement it,” says farmer Milon Miah. “The land not planted with rice was often left barren. We seldom ate vegetables. By the time they had traveled here from Kushtia or Jessore — more than 250km away — they were bruised and expensive.”

As in most of Bangladesh, paddy rice is the single most important crop in the area, with 95% of cropland devoted to its cultivation. However, thanks to farmers like Milon and the groups of women he has coached in homestead food production, many households now also cultivate vegetables year round. In addition, they have learned improved methods of keeping poultry.

This has brought about a fundamental change in people’s diets. Previously many poor households consumed few foods, with rice and oils at the top of the list. Occasionally they ate fish, and very rarely animal products, fruits or vegetables; their diets failed to meet the minimum requirements for energy and essential nutrients. Now that women are growing more vegetables, families are reaping the benefits in the form of better nutrition and better health.

The benefits are also financial: surplus vegetables and eggs are sold in the market, contributing to family incomes and women’s empowerment.

“We still eat a lot of rice, but we are now also eating lots of other things,” says Milon. “Over the last five years we have learned that eating a variety of foods is about more than just giving the rice more flavor.”







In Barisal Division much of the land lies less than a meter above sea level. The population's livelihoods reflect the landscape: 40% are fishermen who go out to sea to fish at least part of the year; 95% supplement their diet and their income by fishing in the rivers. There is no industry and little land for farming. Many people rely on finding work as daily laborers, both close to home and much farther away.

Life on the alluvial islands (*chars*) of coastal Bangladesh is uncertain at the best of times: this is the front line for cyclones. Those most at risk live in flimsy houses outside the protective earthen walls of the embankments. In these vulnerable areas, life and assets are regularly lost to floods and riverbank erosion.

For people already living in poverty the heightened risk of losing their few assets — houses, boats, nets, dry goods, chickens — can be reduced by disaster preparedness training.

The JoJ program's efforts to prepare fishermen, communities and agencies and to develop the infrastructure that helps people to survive both during and after a disaster has had an impact. As beneficiary Kabir Hossen says, "Now I have the skills that allow me to live on this *char*, where you have to be able to handle whatever nature brings."





Healthy mothers, healthy babies

If my baby eats healthy food, she will be healthy. She will be well. We will not have to pay for doctors and medicines. She will have a good brain so she will learn well.
If she is healthy, she will be happy.

— Hanufa Begum
Program beneficiary

Another important factor is cleanliness. Even if you feed your child good, nutritious food, if you don't follow hygienic practices your child will get sick and lose weight.

— Rabeya Begum
Community health volunteer

Healthy mothers, healthy babies

Malnutrition shows itself in a variety of forms. Two of the most common are ‘wasting’ and ‘stunting’. In children, wasting is an indicator of current or acute malnutrition. It is indicated by low weight for height. Stunting, on the other hand, reflects chronic malnutrition and is indicated by low height for age measurements. But whatever form it takes, when almost 50% of the children in a community are malnourished, as is the case in Barisal Division, the community’s long-term future is at risk.

Without proper nutrition during early childhood, children will never fully realize their potential. It is especially important while the child is developing in utero and for the first two years of life. During its first six months a baby doubles in size. By the end of its first year it will have tripled. With this rapid physical growth comes a corresponding growth in cognitive ability — 95% of the brain’s development happens in the first two years of life, and most of the rest by age five.

The absence of the right micro- and macro-nutrients early in life plays out over a lifetime. Brain development will never be what it could have been. Constant poor nutrition also has a lifelong impact on immunity: malnourished children grow up being sick more often, are at greater risk of dying, and will be more susceptible to chronic diseases in adulthood. The long-term social consequences include under achievement in school and lower overall economic productivity. A nation with high rates of malnutrition becomes a weak nation, a poor nation.

There is no single cause for the large number of malnourished children in Barisal, though it usually begins with poor antenatal care and inadequate maternal nutrition during pregnancy. Once born, babies are not exclusively breastfed, contributing to a lack of essential natural immunities. Drinking polluted water places them at greater risk of waterborne diseases. In subsequent years, poverty, ignorance, and lack of access to a

variety of nutritious foods make providing children with good nutrient content problematic for many households. Malnutrition can also result from sickness due to improper care and inadequate hygiene.

By focusing on early interventions to combat malnutrition in three districts in Barisal Division, Save the Children and its partners have improved the outlook for children. Over last five years the agency has taken a multi-faceted approach to maternal and child health and nutrition, which has resulted in decreased levels of all forms of malnutrition in children under two.

At the program's core are more than 3,000 community health volunteers (CHVs) who work within their communities to provide education, training, follow up, and essential healthcare support to mothers and babies. Over time, their job descriptions have been expanded to include treating less serious cases of the illnesses that often lead to malnutrition in children: diarrhea and pneumonia. In some areas, CHVs have also been trained to successfully treat cases of severe acute malnutrition.

Tubewells installed to provide clean water and latrines for basic sanitation have also been essential to turning back the tide of malnutrition. Both are critical for preventing diarrheal disease, which is strongly linked to malnutrition.

The JoJ program has also taken a comprehensive approach to health education. CHVs and program staff have involved decision makers in families and communities in learning about maternal and child health. Popular programs featuring music and drama have involved the entire community in the effort to safeguard mothers and babies. Local elites, village doctors and even local Imams (religious leaders) are also on board, because, as they too have learned, supporting families in raising healthy, well-nourished children helps the community as a whole to reach its potential.



Keeping mother and baby on track

Providing rural women with affordable maternal and child healthcare in one accessible location has changed their approach to pregnancy and early childcare, and brought about healthier results.

Usually vacant except for a few stray goats, on one day each month the community center in Golkhali overflows with mothers and babies. This is an opportunity for mothers to have their babies vaccinated by the government health worker, and to have one of the JoJ program's community health volunteers (CHVs) weigh their baby and address any concerns they may have.

Rabeya Begum, who is running today's growth monitoring and promotion (GMP) session, is well known to all of the women here. Not only does she live in this community, she has been meeting with all of these mothers both singly and in groups since early in their pregnancies. She has used home visits and monthly courtyard education sessions with groups of expectant or new mothers to teach them how to take better care of themselves and their developing babies during pregnancy and beyond. She has also sent them to the nearby government clinic to receive monthly antenatal checkups and followed up with them afterwards.

The GMP sessions are a continuation of the service. Mothers under Rabeya's care during pregnancy bring their babies and toddlers in for follow-up-monitoring every month for the first two years of their lives.

Mahinur Begum, mother of 18-day-old Lamia, has just finished: "Today was my first GMP session and I have already benefited a lot from it," she says. "The baby got her injections from the government health worker and I now know that she is growing well and that I am doing the right thing by only breastfeeding her. Rabeya told me to eat plenty of vegetables and eggs and small fish, plus meat and chicken liver, so I will regain my strength and have plenty of milk. She also told me to be sure to get plenty of rest. I already know all of this

because I have been hearing it from Rabeya for a long time now. But it is always good to be reminded.

"We didn't have CHVs or this kind of service here when I was pregnant with my first two children. I did have a couple of antenatal check ups, but that is only because my sister-in-law is a government health worker in Galachipa. She would tell me to come see her, but I could only afford to go a couple of times. By the time my husband and I crossed the river, paid for transport and had something to eat, each visit cost us almost 500 Taka (US \$7.25). And we had missed a day of work.

"This time it was completely different. Not only was the service free, I got it on a regular basis, close to home. And I learned so much. I learned what to eat: the different combinations of foods and all of the nutrients I need. I learned that pregnant women should get rest and not lift heavy things. Rabeya also taught us the danger signs for pregnant women and women in labor. One of them was bleeding after delivery.

"When the time came to deliver, I gave birth at home with the help of the *dhatri* (traditional birth attendant). After the baby was born, I started bleeding a lot. Because of what I had learned from Rabeya, we didn't waste any time. We left immediately for the hospital in Galachipa and called my sister-in-law on the way to tell her we were coming. Having this information may have saved my life.

"Will I keep coming every month? Of course I will. I heard that when they started this program mothers received food rations if they attended the antenatal and GMP sessions. They don't give that anymore, but that's fine. We don't need that incentive. We see the benefit. They have the shots, they have the scales, they have the knowledge. Why wouldn't I come?"

Mahinur and her sisters-in-law sit on the porch talking and playing with their children. Mahinur's day has a more restful pace than it did after her first two pregnancies. Where previously mothers were expected to go back to work the day after they gave birth, CHVs now counsel them to take get plenty of rest for the 42 days after delivery. Not only does this allow the mother to recover, it allows for exclusive breastfeeding of the child on demand and fosters bonding.

Not having so much to do also allows Mahinur to focus on eating well. Says Mahinur, "Every day I try to make sure I am getting as many of the three types of food as I can — foods for growth like eggs, milk, fish and chicken; foods for energy like rice and bread, and fruits and vegetables for disease prevention. If I eat a mix of things, my strength will grow, my baby will get more breast milk and both of us will be healthy."









There is no way Mahinur can manage everything that needs to be done in the house and take good care of the baby. If I help, everything gets done. I do all of the physical work like fetching water and washing the clothes. I also help with the cooking and hold the baby when she cries.

I am doing more than my father ever did. But so are most of the men I know. Things are changing. The message that men should help their wives is everywhere. It is on TV. Rabeya talks about it every time we see her. Even the Imam has been talking about this for the last few years. Now we realize that this is a 'together duty'.

This has also turned out to be good for all of us in another way: because I am more involved at home, my relationship with my wife and my children has improved. We feel a closer bond as husband and wife, and also as a family.

— Mujibur Rahman
Mahinur's husband



WORKING TOGETHER



Laying the groundwork

The JoJ program's 3000+ community health volunteers are the hub in a wheel of health and nutrition services that are transforming communities. In the process they are altering beliefs about a woman's place in society.

"I am what I am today in part because of a trick my father played on his father," says Rabeya Begum, 32. "I was a brilliant student. I loved school and wanted to go as far as I could, even to university ..." Having done well in grades one through four, Rabeya received a scholarship for grade five and was poised to continue on to grade six when her grandfather, a conservative Imam, intervened. "He told my father: 'It is against our religion for women to be educated. If Rabeya continues to go to school, I will kill myself and disinherit you.'

"I wanted to continue going to school more than anything. I was lucky. My father also wanted me to continue, so he found a way to trick his father. He had me get married." Where in Bangladesh marriage normally spells the end of a girl's education, Rabeya's father had found a young man whose family promised to allow her continue going to school. "It solved everything," she says. "My grandfather would not carry through with his threats because I was married, just as he wished. And I could continue to go to school, because now that I was married and living in their house, my in-laws were responsible for me. Whatever I did was entirely their decision."

Rabeya did well in her SSC exam (Secondary School Certificate) and had completed her first year of college

(grade eleven), when one of her sisters-in-law died. The extra work required at home and her in-laws' financial difficulties made continuing at school impossible. "Nobody actually had to ask me to stop," she says "I just knew what I had to do." Rabeya was 16.

For the next 12 years Rabeya worked as a teacher and a seamstress and for three of those years worked at home with her five sisters-in-law. "They kept me so busy, always ordering me to do this and that and complaining about me to my mother-in-law. Those were the three longest years of my life.

"In November 2005 my brother-in-law, who is a headmaster in a primary school in Galachipa, saw an ad in the paper saying that women with a tenth grade education could apply to be community health volunteers. He showed it to me and I applied. Not long after my interview a field officer came to my house and told me I'd got the job and had a training to attend.

Rabeya covers a lot of ground on foot each week. Every CHV is responsible for approximately 150 households. The day before a monthly GMP session, she visits each of her beneficiaries and reminds them to attend the session. She also makes 12-15 house visits each week to check up on beneficiaries, including pregnant woman or children who have missed a GMP session or been ill.





“Now I have been a CHV for almost five years. Not since I attended school have I done something I felt so happy about. This is so much more than just a job. It is a service. It is about teaching a community how to be healthy. Things may still be far from perfect, they are definitely changing.

“The care of pregnant women has changed. Wow. It has changed a lot. Before, these women thought that only fish and meat were most nutritious and that *dhal*, for example, which is readily available here, didn’t offer much in the way of nutrition. Now they know that what they need is a variety of foods: fish, *dhal*, eggs, milk, spinach, bananas, guavas, papaya, berries ... and that eating the right food in the right amounts gives you strength, helps you grow and protects you against disease.

“Previously if a woman was pregnant she would eat less food. The belief was that if she ate too much the baby would grow too big and would not be able to come out. Now women know better, and their mothers-in-law also know better and allow their daughters-in-law to eat more.

“Everyone also understands that pregnant women should not carry heavy things or be made to do difficult physical tasks. Husbands have also raised their voices in this. If their family members insist that his pregnant wife do heavy work, the husband may now step in to protect her and offer to do it in her place. Before, they didn’t know that this was important.

“There have been other changes for women who have just delivered. Previously the family would only give a little food to the new mother, and much of it was of low nutritional value like fried or puffed rice. Now these women are getting enough food, and it is of good nutritional value. They are also

If a baby is born in one of the households in her working area, Rabeya will go to visit the day after it is born. If the house is nearby, she may even go the same night. “The mothers are always so happy to see us,” she says. “Whenever they need advice or a solution to a health problem they always consult us first. Maybe they trust us too much,” she laughs. “Sometimes they ask us for advice on how to handle their personal problems — marriage, family ...”

getting proper rest. This allows them to recover their strength and also to practice exclusive breastfeeding.

“This is something we have stressed again and again: the importance of exclusive breastfeeding for the first six months. No more honey on the tongue of the newborn — which people did so that the child would grow up to speak sweetly. No more throwing away the colostrum, which is the first and best milk, because it is ‘spoiled’ and giving the baby sugar water until its mother’s ‘good’ milk comes in. Breast milk and only breast milk for the first six months.

“At the end of those six months we have a celebration called *mukhe bhat*. It is a traditional celebration in the Hindu community marking the baby’s first 180 days. We have adopted the idea and use it to celebrate the first day of complementary feeding. Previously mothers would begin to give solid food — usually biscuits softened with water — at around three to four months. Now they know better.

“But none of this would make any difference if we did not also teach them about cleanliness. One thing we keep talking about all the time is the importance of washing their hands with soap after using the latrine and before cooking and eating. It really doesn’t matter how many times you feed your child or how healthy the food is, if you don’t do it in a hygienic way, your child will get sick.

“Some of these may sound like small things, but they have made a big difference to the health of this community.

“When I first started doing this job my in-laws didn’t like it much. They complained that I used to earn more as a seamstress. But over these five years they have come to understand what I am doing.

“Years ago my mother-in-law lost three sons to diarrhea because she didn’t know what to do. She thought you should not give water to a child with diarrhea. Now when my in-laws see me teaching the community and treating illnesses and even saving lives, they look at me with respect — as does the whole community.

“People are calling a woman in their time of need. Now that means something.”

COURTYARD SESSIONS

Rabeya's busy schedule includes not only making house visits and conducting GMP sessions, but also conducting monthly courtyard education sessions for groups of beneficiaries who are at a similar stage in the pregnancy to age two cycle. The topics covered are relevant to where beneficiaries are in the cycle, but some topics, such as proper nutrition, feature regularly. Today Rabeya compares a 'stove' made of three bricks to the human body. She explains that children need some of each of the three kinds of food every day — protein plus carbohydrates, fats/oils plus vitamins and minerals. Not getting some of each is like pulling the equivalent number of bricks out from under the pot. For each stone that is removed the pot is in a more precarious position, until finally, it falls to the ground.

It is a simple and effective means by which to convey this essential information. Even so, many of these women lack the power to implement what they have learned within their households. Once married, women in Bangladesh live with their husbands' families. Within the household they have limited voice and power. That belongs to husbands and mothers-in-law.

"That is why everyone is invited to the courtyard sessions," says Rabeya. "Husbands, mothers-in-law, sisters-in-law — if they want to attend, they are welcome. This ensures that the messages are clear and that they are going out to everyone at the same time. This is how we invite support for these changes which result in healthier pregnancies, healthier mothers and healthier babies."





MAKING PROMISES





“Previously a lot of children in this area were underweight,” says community health volunteer Rabeya Begum. “Out of 40-50 children that I was monitoring, I would have eight to ten who were severely malnourished. Now I might have only one or two. I believe this is due to our frequent household visits. We are keeping an eye on them.

“Sometimes mothers will say ‘I feed my child properly’ but when I go there and see for myself, I see a different thing. So we counsel, counsel, counsel and then we ask the mothers to promise that they will do the things we have taught them.”

It can be a lot to remember. That’s why CHVs present families with promise sheets. There is a separate sheet for each stage of development from newborn through age two. “It works as a checklist,” says Komola, one of Rabeya’s beneficiaries. “We hang it in a prominent place in the house so that everyone has a clear idea how to take care of the baby, and can act accordingly.”

HANUFA BEGUM, 27

Hanufa and her husband run a small tea shop on a busy little stretch of road in Purbo Golkhali. Hanufa saw her local CHV, Maksuda Begum, regularly before and after her second child, Kulsum, was born. “I was healthy, the baby was healthy,” Hanufa says. “We didn’t have a single problem until the baby was seven months old.”

“At that time I took her to the monthly GMP session as usual. When Maksuda *apa* weighed the baby, she saw that she had not gained weight like she should have. Maksuda told me the baby had become malnourished, and asked me if there was a problem. I told her that the baby had been defecating again and again but that I was still feeding her and giving her liquids.

“When I was growing up people believed that if a baby had diarrhea what was needed was to ‘dry’ the baby’s stomach. To do this they would give no food and no breast milk, only a little oral rehydration solution (ORS). But at GMP and courtyard sessions Maksuda told us again and again that this could lead to malnutrition and that instead we must continue to breastfeed and give normal food — just make it a little soft — along with ORS.

“I was surprised to learn that my baby had become malnourished. What if Maksuda had not been there watching

over us? Perhaps I wouldn’t have realized there was a problem for a long time.

“Later that day Maksuda came to our house to check that we were properly making and giving the baby ORS. Kulsum began to get better the next day.

“By the following month my baby had still not entirely regained the weight she had lost. Maksuda said that she was still moderately malnourished and told me to give her more food and to be sure I was giving the right foods. I followed her advice and by the following month, my baby was at the correct weight.

“Now I understand how easy it is for a child to become malnourished. And if my baby is malnourished, she will not be healthy, and if she is not healthy it tells upon everything. We would be worried all the time. We could not pay attention to anything else in our lives. Our money would be lost in treating her. And in the future, it might mean that she would not be as smart or strong as she could have been. Maybe she would not even be able to get an education and would become a burden we have to carry for the rest of our lives. That is why I am so glad that Maksuda is here. She tells me everything I need to know for my baby’s health, so that we can all live a better life.”







Perfect timing

Diarrhea and pneumonia are the two most common — and most life-threatening — illnesses affecting children under five in rural Bangladesh. Where previously CHVs could only refer these cases to the hospital, they have now been trained to recognize and treat less-severe forms of these illnesses with great success, helping babies — and mothers — to breathe a little easier.

The smoke of hundreds of morning cooking fires still hangs in the air when Nazma, carrying six-month-old Azizur on her hip, knocks on CHV Sunanda Roy's door. "Apa? she calls. "Apa? Can you help?" A few minutes later, the wooden bolt slides across the door from inside and when the double doors are thrown open, Sunanda looks down and smiles. Nazma has been one of her beneficiaries for over a year now.

Sunanda ushers mother and baby onto the wooden platform bed in her front room and, climbing up after them, asks what she can do to help.

CHV Sunanda Roy counts five-month-old Azizur Rahman's respiration rate — the best indicator of an Acute Respiratory Infection (ARI) — one form of which is pneumonia. In some parts of Barisal Division CHVs are also treating the most life-threatening form of malnutrition — severe acute malnutrition (SAM) — at the community level. With a recovery rate of over 90%, they have been far more successful than hospitals, largely because families cannot afford the time and money required for one parent — usually the mother — to stay with the child in the hospital long enough for the child to recover. Staying home, the costs are low, and with the CHVs, follow up is assured.



“About ten days ago the baby got a cold,” Nazma explains. It wasn’t too bad. For the last few days I thought he was getting better. But then last night he started coughing more and he was having trouble breathing. He also had a high fever. Now I am worried.”

Sunanda pulls her big black bag up onto the bed, takes out her ARI (acute respiratory infection) timer and has Nazma lay the baby down on her lap. Watching the rise and fall of his chest, she counts his breaths for a full minute.

It is a scene repeated every day by CHVs in the program areas, all of whom have now been trained to recognize and treat less-severe forms of the two most common — and potentially most deadly — illnesses that affect children in rural Bangladesh: pneumonia and diarrhea.

“Diarrhea is all about clean water, basic sanitation and personal hygiene,” says Sunanda. “Pneumonia is about mothers being aware of how best to take care of their babies. I have seen some mothers, for example, who let their babies play in the mud during the winter. And then when the baby got sick, they thought it was just a cold. Most never thought the baby’s cough could be the start of pneumonia. By the time those mothers realized something was really wrong and got the baby to a doctor it was often too late. Now, because

of all we have taught them, there are fewer cases of both diarrhea and pneumonia ...”

But there are always going to be cases. Community case management (CCM) takes what CHVs have been offering one step further. Its goal is to identify these illnesses before they become severe and to treat them right here in the community.

CHVs in other parts of the program area have been doing CCM for more than three years. Over that time they have had tremendous success, diagnosing and treating more than 36,000 cases of pneumonia and preventing more than 25,000 children with diarrhea from becoming dehydrated.

“Previously if, during the GMP sessions, we saw that the weight of a child had faltered we would ask the mother the reason behind it. In most cases the answer would be ‘my child is sick’ and almost always it was with pneumonia or diarrhea.

“Before we were trained, all we could do was tell the family to take the sick child to the hospital. Now we can do something about it. We still send severe cases to the hospital. For example, if the respiration rate indicates that the child has a severe case of pneumonia, or if the child is dehydrated from diarrhea. But these cases are relatively few in number. Most can be treated and followed up right here in the village.”



When the minute is up on the ARI timer, Sunanda looks at Nazma. “58,” she announces. She runs her finger along the respiration rate chart. “Eight over normal for a five-month-old baby.” The case is not severe, but it needs to be treated.

Sunanda reaches into her big black bag and pulls out Cotrim, an antibiotic that the Government of Bangladesh provides free of charge to the CHVs for the treatment of their beneficiaries. She dissolves the tablet in a spoonful of clean water and gives it to the baby, talking Nazma through the procedure so that she will be able to give the medicine at home. Sunanda tells Nazma how often to give it, and stresses that she must give the medicine until it is finished, not simply stop when the baby seems better. She then quizzes Nazma to make sure she has understood, and when she is satisfied with the answers, gives Nazma the rest of the medicine and tells her she will stop by Nazma’s house tomorrow to check on the baby.

When Nazma and Azizur leave, Sunanda stands in the doorway watching them make their way across the field towards home. “CCM is the best part of my job,” she says. “All of the other things we do as CHVs are about changing behavior: nutrition, hygiene ... But those things are indirect. You have to wait some time to see the impact and even then

you are not always sure why something happened. But with CCM there is a direct result. I can see for myself that a baby is sick, and I can see that it gets better. This makes me happy. It makes the mothers happy too.”

Nazma is certainly happy when, three days later, Sunanda stops by for a second time to check on the baby. He is clearly much improved.

“With so little money I can’t always take care of my child as well as I would like. I know poor nutrition can cause him to become sick. And if he is sick I cannot work and I have to spend the money I have to make him well. That is how — very, very quickly — someone like me can lose everything.

“Because Sunanda was able to recognize and treat my son’s pneumonia, I didn’t have to spend money on transport and doctors and medicines. I didn’t have to go around looking for someone else and hoping they would know how to properly treat my baby. Sunanda has taken care of me since early in my pregnancy. I know her and she knows me and my baby. I trust her.

“Because she is here, we get good healthcare for our children right here in our community, we get it for free and we get it at the right time — before our children get really sick.”

SHANTI BEGUM, 42

“We already have three children. They are 26, 15 and 12. We never expected to have another. But then almost a year ago my husband’s brother died. Everyone was so upset and in all of the grieving, I forgot to take my birth control pill — and ended up getting pregnant.

“When I had been pregnant about four months, Rabeya, who had been coming here to see my four-year-old granddaughter, started coming here to see me. She gave me advice about eating nutritious food and taking rest and told me not to do hard work. I did as she said, but even though we had nutritious food, I couldn’t always eat it. I was sick. The doctor said it was a kidney infection. It gave me sores in my mouth and left me without much appetite.

“Nevertheless, everything seemed to be going well in my pregnancy until one day when I came back from bathing and looked down to see fresh blood pooling around my feet. I ran to my sister-in-law’s house and they brought *pani pora* (holy water) and I drank that. It only made the pain worse. Soon I realized that I was going to give birth. My mother called the *dhatri* (traditional birth attendant) and with her help the baby was born at around midnight.

“I knew this was not the right time for my baby to come. But I didn’t think it mattered. I thought that if I could take care of it well it would be ok.

“The next morning I asked someone to call Rabeya to come to the house. While I was waiting, I tried to get the baby to drink. I had milk. I tried and tried, but she didn’t suck.

“When Rabeya saw the baby she told us we should go to the hospital immediately. All day my husband went place to place trying to get a loan from our relatives, but he couldn’t manage it, so in the end we just stayed home.

“The next morning when Rabeya came to our house to get news of us from our relatives, she found us still there.”

“I was shocked,” Rabeya says. “Not only were they still there, but it was winter and they were sitting there with the baby in the cold. I took the baby. She was cold. Very cold. I took her to the sun and got out my timer. I counted her breathing. It was 70 per minute. The baby had severe

pneumonia. And then while I was holding her, she began to turn blue. She was trying so hard to breathe. The family was standing around me. They started to cry. I felt so bad, so sad. I did not want to see that baby die. I stood up and told them ‘I will not leave until I see you take this baby to the hospital.’ Then I started calling out to everyone in the *bari* (family compound) saying ‘Look! This baby is very sick. If you want it to survive, it must go to the hospital right away. It is up to you to help.’

Shanti continues the story: “My son’s mother-in-law loaned us some money. First we went to the hospital in Galachipa town, just across the river. The doctor there said he couldn’t help and referred us to the children’s hospital in Patuakhali, which is 36 km away. We had to hire a microbus to get there.

“When we arrived it was midnight. The doctor examined the baby and said she had to stay in the hospital. For ten days we watched and waited. On the tenth day the doctor said she was out of danger. He prescribed some medicine and told us we could take her home.

“We were not back long when I found that while the baby was eating well and urinating, she was not defecating. This time we didn’t wait. We called the doctor in Patuakhali and he told us to bring her back right away. Of course this meant borrowing more money. But we had no choice.”

Now the baby is getting better but Rabeya believes early action would have meant a better outcome. “If they had taken the baby on the first day as I suggested I think she would be in better health today.”

While this is undoubtedly true, the realities of life for many in Bangladesh are more complex. “Rabeya taught me that for a baby to grow up well, it needs loving care and good food,” says Shanti. “But that is not always enough. For my baby I also needed a doctor and I needed medicine. And for those things I needed money. My husband and I are daily laborers. We have no savings. We own nothing. If we’d had two big trees to cut and sell, or a cow or even a goat or some chickens to sell we could have had money to take the baby to the hospital. If we had the money we never would have waited ...”



“When a problem is beyond what we can deal with, our job is to refer our beneficiaries to the hospital,” says Rabeya. “But that doesn’t always mean they go.” Rabeya lists the main obstacles to getting formal healthcare for children under two: “The first is knowledge: people don’t always know they need to take their child to the doctor. Second: Husband and in-laws. A mother may want to take her child to the doctor but her in-laws may keep saying ‘Oh no, he’ll be fine.’ And she does not have the power to go against them. Third: access to good medical care. There is not one truly good doctor here — even in the hospital at Galachipa. The closest one is in Patuakhali. Fourth: money. The average person in this area makes about 3000 Taka a month (US \$44). Finding money for the doctor and for transport to get there is difficult for everyone. It can lead to delays. By the time they have the money together, the child may have already died.”



Integrated community care

Village doctors provide the majority of outpatient healthcare in rural Bangladesh, especially among the poor. These semi-qualified or unqualified allopathic practitioners, drug vendors and practitioners of non-allopathic or mixed systems of medicine are usually located nearby and provide inexpensive services. Village doctor Sultan Ahmed talks about how the training he has received from the JoJ program linked with the work of CHVs and improvements to basic sanitation in the area have all contributed to better health for his community.

“My role is to serve this community as best I can. People here do not have access to the doctors in the town, so it is my job to do as much as I can for them, and when I reach the limits of my abilities, to refer them to a hospital.

“Previously I used to refer a lot of patients. If they were children, it was usually because they had diarrhea or pneumonia. But in recent years this has changed. Now I almost never see severe patients.”

Doctor Ahmed attributes this in part to the CCM training he received through the JoJ program. “The CCM training taught me how to better recognize and treat pneumonia and dehydration associated with diarrhea. Now, before the situation gets bad, I can treat it.

“This is also because of the CHVs,” he says. “They go house to house seeing people. That is important because they are reaching everyone, which is not possible for a doctor like me. They are also performing a valuable education service. I talk

with people about health issues whenever I can, but again, I don’t see them as often as the CHVs do. Thanks to their work, mothers also know more about when to seek medical attention for their children, so they bring them to see me sooner — before the situation gets bad.

“Another big change that has taken place in this area over the last few years is an improvement in basic sanitation and personal hygiene. The open latrine is the most common cause of diarrhea. After that is the use of pond water. Thanks to Save the Children and its partners, in recent months open latrines have become sanitary latrines, and new tubewells have been installed so that more people have access to clean water. There has also been education about good sanitation and hygiene. The Union chairman has been behind all of this 100%.

“We are all working together. The result has been that health in this community has greatly improved.”





The weight of water

There is no shortage of water in Bangladesh, but there is a severe shortage of clean water. The abundant clean water that comes with installing a deep tubewell can have far reaching implications for a community's health and well-being.

Two years ago, before Save the Children and its partners sunk a deep tubewell in 70-year-old Aiful Begum's family courtyard, women from her community had yet another taxing and time consuming job to add to the long list of daily family chores that she compares to 'trying to repair a tent torn in 101 places every day from dawn to dusk.'

"At that time we had to walk to another tubewell more than a kilometer away to collect clean water," she says, "and then carry the 20-30 kg *kalshi* full of water back home. It cost so much in time and effort that we would never use that water for anything but drinking. And even then, we would think carefully before we drank it. One *kalshi* would last a family of four one day — or less. If the water was finished before the end of the day, we wouldn't go all the way back to the tubewell to get more. We were too busy for that. We would just go to the river or the pond instead. Diarrhea was common at that time."

Aiful explains that having diarrhea was costly — and not only financially. "Going to the doctor is a hassle. It requires a responsible person, transport, money and what not. It means a loss of work and possibly a loss of wages while you or your child is ill. So when children would get sick we would try to take care of them at home as much as possible, and then only take them to the doctor when things got bad. The

nearest doctor is in Galachipa town. Including transport and medicine, it costs almost 500 Taka (US \$7.25) for treatment."

Socially the costs of diarrhea were also high. "As long as we had a diarrhea patient in the house, people would stay away from us," she says.

But the greatest cost was often paid by children: "Sometimes, if the problem was really bad, children would die."

All of this changed with the installation of the tubewell. "Since we've had this tubewell there has been almost no diarrhea here," Aiful says. "And with so much clean water available we use it to wash our hands and to shower more often. We like that it doesn't cause sores on our skin like the pond and canal water we used to wash with."

To ensure the tubewell's continued viability, JoJ staff put Aiful in charge of the tubewell and trained her in basic repair and maintenance. Now when something breaks — a few days ago it was the 120 Taka (US \$1.80) ring that secures the handle to the pump — she calls her family and her neighbors together, tells them what's wrong and asks them to help with whatever is needed.

"Everybody is always happy to contribute," she says. "Whether it is by making repairs, cleaning the cement platform or contributing money for spare parts, these costs are nothing compared to what we used to pay."



Clean is healthy

Many vulnerable households use open or pit latrines or have no latrine at all. This, coupled with poor sanitation practices, results in polluted soil, water and food, and is a major cause of disease. In rural Barisal, better latrines and training for their owners, is having an impact on family health.

Duli and several of her neighbors, each of whom have received a new latrine with support from the JoJ program, gather round to discuss the virtues of their new hardware. It is an unlikely topic of conversation, and one that is accompanied by a lot of laughter, but for all of the women the health advantages are immediately apparent.

When did you get these latrines?

Duli: About six months ago. The old ones were broken in the cyclone.

Rahima: We never had latrines that came with training before. Use different shoes inside the latrine, keep the latrine clean like this, wash your hands with soap after using the latrine ...

Do you do all of this now?

All: Of course!

Have you noticed any change in your households since you got these latrines and started doing these things?

Duli: There has been a noticeable change in my children's health. They all have less diarrhea. My three-year-old used to get sick at least once a month. She has only been sick once since the latrine was installed.

Hajera: There is also a decrease in the number of flies.

Rahima: Besides the children getting sick, you know what was the worst thing about the old latrines? Sitting over here eating and looking at your waste sitting over there.

Rowshon: It sits there when you're eating. It sits there when you're not. It sits there in front of you all the time.

Duli: It is also good because now we can use the latrine in the day. When the old latrines were broken we made curtains around them with plantain leaves, but they were not very private, so all of the women would drink a lot less water in the day and try to wait to use the latrine at night.

If your old latrine was so bad, why didn't you do anything about it before?

Duli: We didn't have money to build a new one.

Hajera: So Sidr actually brought us good luck!

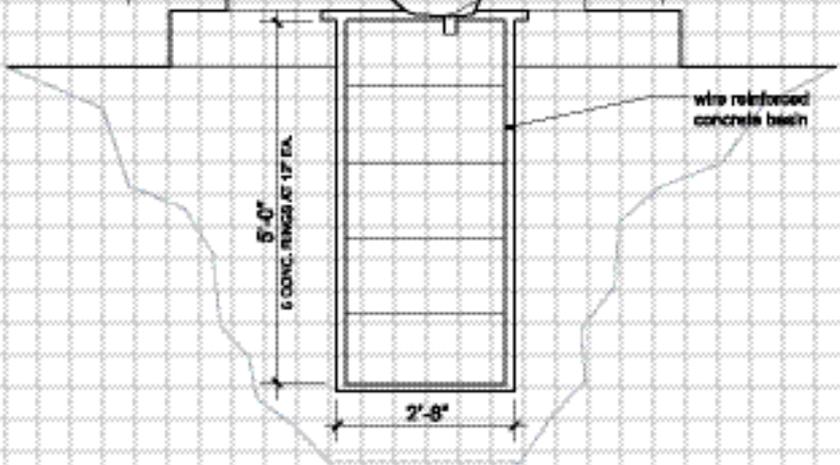
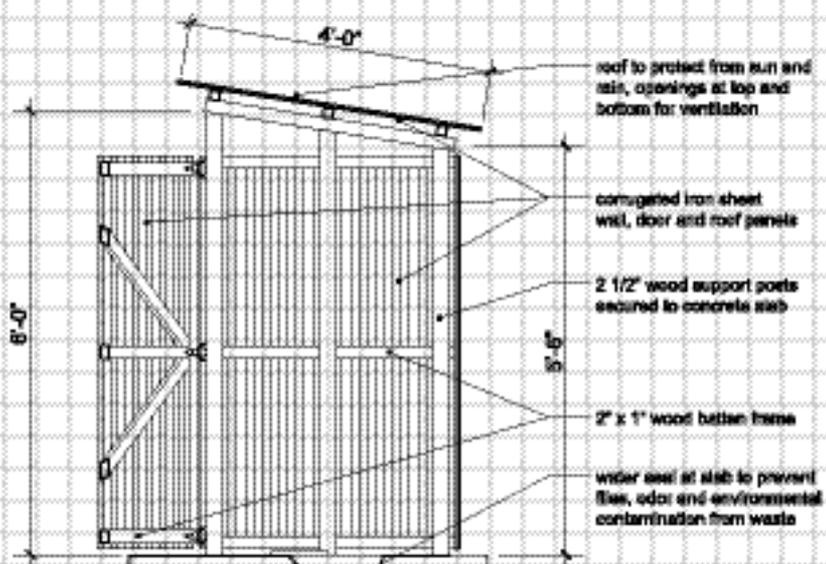
Rahima: And now that we are lucky to have these good latrines, we take good care of them. It's not always easy. I keep telling my children to use as much water as it takes to wash away all of the dirty stuff — but that doesn't always happen, so I go and check it a couple of times a day.

What is the best thing about these new latrines?

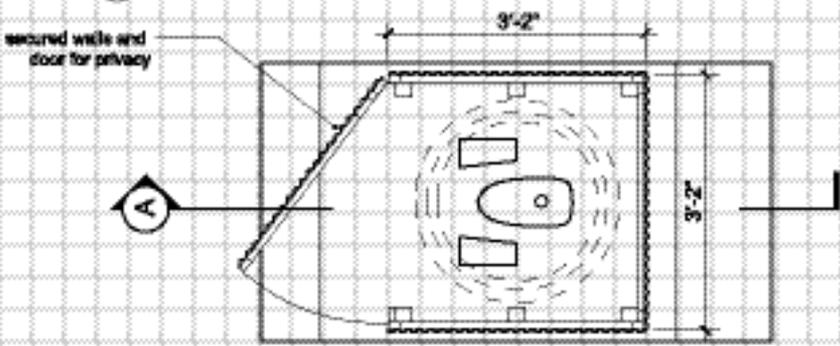
Rowshon: When people come to our homes they get a good impression of us.

Rahima: Because of them our environment is cleaner. When everything is in order, like now, and it looks good — and smells good — we feel more peaceful.

Duli: From my religious education I know that Allah likes those who keep themselves and the environment clean. And if everything is clean, you must be healthy.



02 Section A



01 Plan





1. Wet hands



2. Soap (20 seconds)



3. Wash backs of hands, fingers interlaced



4. Wash palms and wrists



5. Wash fingers, thumbs and under fingernails



6. Rinse

Wash your hands

One of the most effective methods of reducing the incidence of disease is also the simplest. But developing new habits is not always easy.

After food, the greatest single expenditure for families in rural parts of Barisal Division is healthcare. While sanitary latrines, clean water close to home and education make a big difference to household health, proper hand washing alone — with soap or ash — can have the greatest impact on reducing the incidence of respiratory and diarrheal diseases.

“There are five critical times to wash your hands,” says CHV Rabeya Begum. “Before preparing food, before eating, before feeding children, after defecating and after cleaning up after an infant who has defecated.” But, as she goes on to explain, any habit, no matter how big or small, can be difficult to change. Hand washing is no exception, especially when

people don’t know what’s at stake. “People didn’t know that they were getting sick or causing their children to get sick because they were not washing their hands,” she says. “And it wasn’t easy to make them understand this. They wanted proof, like seeing that one family washed their hands and their children didn’t get sick. They also needed motivation, motivation, motivation. This is a habit that has changed very slowly. Actually, you could say it is still forming.

“Now a lot of my beneficiaries have learned to wash their hands at the right times, but getting them to use soap is another matter. So I just keep on reminding them. I’m afraid that if I don’t they will stop.”

GETTING THE WORD OUT



Before Friday prayers Imam Khalil of Choto Gabua Jame Masjid in Golkhali takes a few minutes to deliver some important health messages to the men who have gathered. “I use this time to convey different messages every week,” he says. “Sometimes I talk to them about how to take care of a pregnant woman, sometimes about the importance of exclusively breastfeeding their children for the first six months. Other times I talk about the importance of good nutrition to children’s development ...”

Imam Khalil is one of a number of influential community members that has regularly participated in monthly community meetings facilitated by JoJ staff and local community health volunteers. The meetings have been a venue for passing on messages like these to the people in the community who can best get the word out: teachers, health and family planning personnel, members of local government, local elites, traditional healers, traditional birth attendants, and perhaps most important of all, religious leaders.

“Imams are very respected in our community,” says Imam Khalil. “When we say something, people listen and take action. I am giving these messages all the time now — at religious and community events, in the madrasa and even when I meet people in the street. It has become an everyday part of my job. Today’s children are the future of our nation. I don’t want their futures to end before they even begin.”







Music and messages

Mothers and young children need their family and their community to protect and support them during their most vulnerable time: pregnancy and the first six months of life. An afternoon of educational entertainment ensures that everyone receives this important message.

Late on a sweltering Monday afternoon, just as the sun dips behind the trees that line the soccer pitch in the village of Golkhali, the catchy beat of the popular Bangla song *Bondhu tumi koi, koi* (Where are you, my love?) draws people from their houses. Mothers and babies, fathers and babies, children and their grandparents, gather to listen to the musicians. When the crowd has swelled to several hundred onlookers, Mr. Moti and his group begin to play the music they were hired to perform: songs with more practical messages of love and care — specifically for mothers and their babies.

This isn't just entertainment. In a world where many people have never been to school, less than half of the population can read and even those who can read have little or no access to books, this afternoon's program is 'edutain-

ment'. Educational entertainment is one of the ways people in rural Bangladesh have always learned and continue to learn about their history, religion and culture. It is only the messages being conveyed today that stretch the usual boundaries of this traditional medium, with songs about the importance of exclusive breastfeeding, how to care for pregnant mothers, the value of ensuring proper nutrition for children, and the importance of clean water, basic sanitation and personal hygiene.

These are the same messages that they hear from CHVs, village doctors, teachers, Imams and others in their community — messages that have been vital to improving the health of the most vulnerable members of this community, and those who make up the majority of this crowd: mothers and their young children.



Growing green

Now that I have a garden and I have poultry things have changed. I have learned how to take care of both of them, so I can eat a variety of things. Before I would cook only one or two types of food in a day. Now I cook more — maybe eggs, *dhal* and vegetables. Like most people in my community, we now eat better and we feed our children better. And we women have some money in our hands. We can access the market and food more than we could before. And with this our life is improving: thanks to the garden and the poultry we have saved enough money to open a small tea shop.

— Sonia Begum
Homestead food producer and group leader

Growing green

For the nutritional wellbeing of pregnant mothers and children, the availability of food and the ability to access it is just as important as knowing what to eat and eating it in a hygienic manner.

Over the life of the JoJ program CHVs, Imams, drama and music programs, village doctors and others made people aware of the importance of eating a varied diet. But advice alone will not solve the problem of malnutrition. Food must be readily available or people must have the money to buy it.

A poor diet with limited intake and a lack of diversity is a well-recognized indicator of poverty and vulnerability. Until recently many families in the JoJ program areas lived almost entirely on a diet of rice, with some fish and pulses. They also had limited opportunities to buy other kinds of food, as fruits and vegetables were not always available in the market, and what was available was expensive and of poor quality. Families also faced annual 'lean seasons' when basic foodstuffs were hard to come by.

To address issues of availability and access, the JoJ program supported groups of women in establishing improved homestead vegetable gardens with year-round yields. Homestead food producers (HFPs), as these women were known, were organized into groups around a number of village model farms. Those in charge of the farms, the village model farmers (VMFs), received extensive training in improved homestead food production and poultry management. They were then responsible for passing on this information to their food production groups in a systematic way, providing them with training, technical information and support in addition to inputs such as seeds. Over the life of the JoJ program a total of 440 VMFs and 26,400 HFPs were involved in these activities.

VMFs also received training in market development and entrepreneurship and were responsible for establishing marketing groups through which the homestead food producers could sell their surplus vegetables. Not only did this make vegetables available to the wider community, it allowed the women, many of them for the first time, to earn a small income.

In Bangladesh men tend to have the upper hand in household decision-making, including how the family's resources will be spent. Many of the HFPs discovered that having an income of their own was not only a source of pride, but gave them more of a voice within their homes.

Some of these HFPs have gone on to become poultry vaccinators, performing a service that has helped to protect others' valuable assets while adding to their own by providing them with another opportunity to earn.

Initially many women had to push their families to be allowed to participate in these programs, but once their extended families saw the financial benefits they provided — without requiring a lot of extra work — they were happy to have them continue. Ultimately, the incomes that have given women a greater status in their households have also benefited their children: whether it is food, school-related expenses, medicine, clothing or other essentials, women are far more likely than men to spend their income on their children.

Over the past five years JoJ's efforts to improve availability and access to food have helped to increased dietary diversity in the program areas and have proved beneficial to more than just the HFPs and their families. "We have all benefitted," says one Golkhali resident. "Vegetables are easy to find and more affordable. Now all of us can eat better."



Most farmers throughout Barisal Division lack irrigation. They rely entirely on surface water — usually ponds — to water their crops. Without sufficient irrigation it is not possible to grow high yield varieties, nor is it advisable to use chemical fertilizers which can deplete the soil over time and end up decreasing yields. VMFs have led a more natural green revolution, teaching women in their HFP groups how to make compost and natural pesticides to keep the soil and the families who rely on it healthy and productive.

Green revolution

Vegetable gardens are transforming parts of rural Barisal, resulting not only in healthier children, but also in stronger families and communities.

When JoJ staff suggested to rice farmer Milon Miah that they would teach him to grow vegetables if he would pass on what he learned to several groups of women, it didn't exactly sound like he was being asked to lead a revolution.

Five years later, he and Dilara Begum, the leader of one of the homestead production groups Milon was responsible for 'coaching,' marvel at the transformation they have helped to bring about in their community.

"We used to plant in the name of Allah," says Dilara. "Like a lot of people, we had a garden of sorts, but we didn't know much about what we were doing. We grew some fruits and vegetables and we ate them but never to our satisfaction.

"We would plant a few things here and there around the house according to what we knew had always been grown in a particular season. Before the monsoon we would plant some bitter gourd here, snake gourds there, and cucumbers over there, and then use whatever grew for as long as it lasted. Then in the winter we would plant some long beans and another gourd we call *lao*.

"There was not a big harvest. We would just wait and when one gourd matured, we would take it off the vine and eat it. Then we'd wait another week or ten days and another would be ready. In the meantime if we found some leaves or other vegetables growing somewhere we might eat them. Or maybe a coconut was matured and we ate that. When those crops ran out, the ground was left barren until we planted something for the next season."

"At that time we really only had one menu," says Milon. "Lots of rice, some fish and *dhal*. Because in this whole southern region all of the fruit and vegetables used to come from Kushtia or Jessore — more than 250km from here — there was not much of it. And what was there was two or three days old and bruised. We thought that was just how fruit and vegetables were, and to be honest, we didn't really mind, because the rivers were full of fish.

"In the last several years all of this has completely changed. Now there is not a single barren piece of land around our homes. We grow, we eat and we sell the surplus. The market is full of vegetables and our daily menu has changed."

"The big change for me was the change in the way we cultivate," says Dilara. "It is far more systematic. We have learned that if you take care of a plant in the right way you can get three harvests in a year, and with proper planning, you will always have vegetables. You harvest some and then you plant more in between, and the yield just keeps coming.

"We used to plant things closely in a field or around the house. Milon taught us that this is not good for the seedlings. We have learned to plant in beds and to plant things the proper distance apart. This allows weeding and it also makes it easy for us to walk across the garden to water it. Before many plants died under our feet. Now they do not. The beds also allow the monsoon rain to drain out so that it doesn't rot the roots. He also taught us to make compost so that we don't need to use harmful chemical fertilizers."

HOMESTEAD FOOD PRODUCTION

“Previously we didn’t know much about fertilizers,” says Milon. “Then we learned about chemical fertilizer. But at first we didn’t know the bad side of it. It totally ruins the fertility of the earth. The first time you use it you will get a good yield. Then you are tempted to use it again, but after two or three times, the fertility of the earth is lost. Now I keep thinking about those chemicals going into the food as it grows. Then when we eat it, the chemicals are inside us.

“It is the same with pesticides. That is why I try to use natural methods as much as possible. Sometimes I spray diluted cow milk on the crops. It repels tiny black insects we call *zab*. For others I boil leaves from the *Babla* and *Urmuri* trees and then allow the water to ferment for six or seven days before spraying it on. I also use natural fruit fly traps. These things work pretty well. Only if it is absolutely necessary will I use a small amount of chemical pesticide.

“When I started doing this there was only one other person in the village who gardened like this. We were two people in 3,000. Now, five years later, many, many more people are growing their own vegetables. Far fewer people here even need to buy vegetables in the market, so a lot of our surplus is going across the river to Galachipa town.”

Dilara adds: “Now people who are not even part of the program ask us to give them advice on starting a garden. They see what we are doing and want to grow their own fruits and vegetables.”

“The greening of this area has brought about a lot of changes in the community,” Milon continues. “Thanks to the local CHV and the program staff people have learned that eating one thing with lots of rice isn’t healthy. You need a menu with three or four things daily — a variety. And you need to eat fruits and vegetables if you are going to be healthy. Now people are stronger and healthier, the diarrhea in their families is less and their immune power is more.”

“Those who benefit the most are the children,” says Dilara. “Their parents are producing a greater variety of food and more of it, so the children are eating better, and that makes them healthier. And because their parents no longer have to buy vegetables and can even make some money by selling their surplus, more children are now going to school.”

“I am so proud that I have been able to be a part of all of this,” says Milon.

Dilara agrees. “Me, too. I hope that one day soon people from this village will carry this knowledge to other villages and they will use it to transform their communities. And then those people will carry what they have learned on to other villages. And so on and so on. In this way, little by little, this entire part of Bangladesh will be transformed.”

“In this area the production of vegetables is high, the prices are high and the consumption is also high,” says VMF Milon Miah. “Now people know that vegetables are good for your health, so they eat a lot of them.”





“Several years ago some people from the JoJ program came to my house and asked me if I was interested in learning how to do vegetable gardening. They told me about the benefits. It sounded good, so I agreed.

“At that time we were living an okay kind of life. My husband had two fish ponds. He supported our family by catching fish and selling them in the market. After we started the garden, our lives began to improve. We had a lot of vegetables to eat, and enough left over that we could sell some of them. With that money we bought six goats and some poultry. Things were good and getting better.

“Then, just over a year ago, my husband got sick. I borrowed money from my brother-in-law and took my husband to the hospital. He was in the hospital in Barisal town for a week. By the time they sent us home we had spent all of the money we had borrowed — and the doctor had told me that my husband could never work again.

“We had been home only a few hours when my brother-in-law showed up at our house demanding that we repay the loan within three days: ‘Who will repay the loan now that you are so sick,’ he asked. After he left I remember both of us just sitting in front of the house crying. How could we ever repay

Dilara Begum is head of one of VMF Milon Miah’s homestead food production groups. Her husband, Jalal Mridha, is also a keen gardener. He has been supportive of Dilara from the beginning: “Sometimes it was difficult for all of the women to go to Milon’s house for training, so Dilara would hold the sessions here. And I mean right here — on our crops! It was so practical: they created beds, made compost and dug fields. At one point our crops had so much attention that they died!”

Nevertheless, Jalal showed his support by stringing up a *shamiana* for them so that they didn’t have to sit out in the sun. “I was happy to do that,” says Jalal. “It made me happy to see all that they were learning and doing.”

him? I said to my husband, ‘Let’s just give him part of our land so he will leave us alone.’ So we gave him what was then part of our garden: this piece of land right beside our house [her brother-in-law is now putting up a large two storey brick house alongside the family’s two room tin and wood house].

“Now that my husband was too weak to work, I had to carry the whole family. It was the garden that kept us alive.

“Eight months later my husband fell sick again. This time we sold our goats and took another loan to pay for his treatment. We also took our three children out of school because we no longer had the money to send them.

“This time when they sent us home after another week in the hospital, they said we should do our best to fulfill my husband’s last wishes, because he would certainly be dead within a month.

“When we got home we didn’t have much food: I had not had time to take care of the garden and we didn’t have money to buy the food we needed. Some people from the local government gave us food and rice and some money so that we could eat and also send our children back to school.

“That was six months ago. My husband is still not supposed to work, but he has found the strength to work with me in the garden. This garden is the only thing we have now — this and the fish ponds and our few chickens. Now we have planted everything and we are looking forward to the next harvest. If it is good we will repay our loan and buy some ducks and some more chickens and maybe even some goats. We will be able to eat better food again, and maybe even be able to save a little money. One day we hope to have enough to start a small tea stall. My husband can manage that. As for me — I will continue to support the family by catching fish and improving what has become our most valuable asset: our garden.”

MARKETING GROUPS



Women from homestead food production groups bring surplus produce from their home gardens to the home of their mentor, VMF Milon Miah. Milon weighs the vegetables and notes in his ledger what each woman has given. He will sell the produce to a wholesaler who will sell it on to those who sit in the market. The next time the women come with their vegetables, Milon will give each of them what they are owed.

The amount of surplus produce from an individual homestead garden is often quite small. If it is too little to be worth the time and effort of a trip to the market, it would likely be left to rot in the field or given away to a friend or neighbor. However, when combined with the produce from other households, even a very small amount can be sold and can bring money into a family.





The power of money

In rural Bangladesh a woman's place is in the home. The income that women now earn from selling their surplus produce has not changed that fact, but it has brought about changes within those homes. Empowerment is the other fruit that is growing in the soil of Barisal's homestead gardens, and the women gathered in Milon Miah's courtyard this morning have something to say about it.

Is this a good service?

Parveen: This is a great service. We come and give our vegetables to Milon *bhai* in the morning and we get our money in the afternoon. We don't have to worry. He takes care of everything. We can just drop it off and go home to do all of our other work.

Rehena: I don't have a man in my house, so without this I would not be able to sell my vegetables.

Why?

Rehena: Because there are men in the village who want us to be secluded in our homes. They say it's not decent for a woman to sit in the market.

Who are these men and why do they say this?

Jasmine: Our husbands! And if other men see us in the market they would also say 'Why is that woman from that house going to the market?'

Parveen: Our husbands don't want us to go out. It is a shame for them. Besides, we feel shy about sitting in the market with men. We're not used to it.

Tara: In our culture women stay in the house. It is bad for them to be in the market. People would laugh at them. They would even laugh at their children. 'Look,' their friends would say, 'your family is poor, your mother sits in the market.'

Jasmine: But when our husbands sell the vegetables in the market they spend too much of the money they get on tea and cigarettes ...

Rehena: Our husbands aren't as mature as we are. They sell and then they spend what they earn. They buy daily necessities for the most part, but if they were more careful they could save more money.

Who is in charge of the money that you earn?

Jasmine: We keep it with us. See? I have it tied right here into the end of my sari.

Rehena: We don't mention to our husbands how much we have made — unless they ask. If they know we have money they may ask us for it.

How much do you make?

Parveen: For the last two years most of us have made a profit of about 500-1000 Taka (US \$7.25-\$14.50) per month.

How do you spend it?

Parveen: Books and school supplies for our children, clothes and food for festivals, chickens to start a new business — things like that.

Before, did you make decisions in your household about how to spend money?

Parveen: Before our husbands didn't give any money to our hands — so there was never a question of spending.

Has having money changed your relationships with your husbands?

Rehena: Now that we have a little money in our hands, we can share in some of the decisions. They ask us what we think.

Have there been any other changes?

Parveen: Our standard of living has improved. We have good food to eat. We can expand our gardening and poultry businesses and spend more money on our children.

Tara: This has changed the way we eat. Now, in a week we no longer eat the same things again and again. We eat many different things: meat, fish, eggs, vegetables. This is good for our children, and for the whole family: thanks to our gardens, we all eat better food and we all eat more of it.



I knew that rearing chickens could be a good source of income, but I didn't know how to get the best from them. JoJ staff and the VMF taught me to rear them in systematic way: to feed the chickens a balanced diet, keep them separate from other households' chickens so that they are not infected by diseases, separate the mother chicken from her babies after 15 days so that soon the mother starts laying eggs again, etc. Now that I am doing these things I have been able to sell some of the eggs and have even saved a little of that money. Twenty Taka (US \$0.29) may sound like nothing, but for me this is something. I love it that my children can come and ask me to give them a couple of Taka to spend instead of asking their father.

—Rani, poultry beneficiary, Golkhali

Free range

Livestock offers households a valuable source of income and food. Cattle and even goat ownership is uncommon in rural Barisal, but almost all households own some poultry. Learning to better manage them and protecting them from disease safeguards an important source of nutrition and additional income for many families. In some cases it also provides an alternative livelihood for the vaccinators, some whom are women.

Poultry vaccinator Maria Zaman remembers a time four or five years ago when, after one chicken in her village got sick, all of them got sick and before long the whole village was chickenless. “It was hard for people to find eggs and meat at that time,” she says. “People ate less and their income decreased. It cost them a lot to replace those birds.”

As part of the homestead food production groups, participants were given two or three chickens or ducks and trained in improved poultry rearing practices. As with the gardens, the idea was that the birds would provide a source of nutrition for the family — primarily eggs — and any eventual surplus would provide another small source of income for the family. But that was only possible if the birds survived the greatest threat they faced (apart from being eaten): disease.

Chickens in Bangladeshi villages are almost exclusively ‘free range.’ And while that may be good for the birds, it means that if even one chicken gets sick, it puts every other chicken in the village at risk.

With the threat of avian flu and other poultry diseases in the program area, JoJ staff trained a number of program participants in each of the program areas to be poultry vaccinators. Since receiving her training, Maria has vaccinated thousands of birds in her area for cholera, small pox, chicken pox, duck leg and Newcastle disease, among others.

Providing this service has had benefits for her: The Government of Bangladesh provides the vaccines free of

charge to the vaccinators, who charge their clients a fixed rate for the service: one Taka for a large chicken (US \$0.02) and half of that for a small one. While Maria is certainly not going to get rich vaccinating chickens, the money is not as insignificant as it may sound. Each chicken needs a series of five injections that must be repeated each year.

Maria makes on average 500-700 Taka (US \$7.25-\$10) each month from her work. She says she is happy with the change in her personal circumstances. “I am no longer just doing my daily activities in the home,” she says. “I also have a job. I go out and I earn some money and because I have money I have some power. Before, if I needed even one Taka I had to ask my husband for it. Now I keep the money I earn with me and I decide how to use it. I spend most of it on my three children — on school and the small needs of the family. I like it that now sometimes my husband even asks me for money.”

The service has also had notable benefits for her community. “Before only a few people vaccinated their birds,” she says. “There was no local service and most people were not aware of the benefit of these vaccinations, so the risk of losing your birds to disease was high. Now there is less disease, and if there is an outbreak the survival rate is high. This means that people have more eggs, more meat and better nutrition.”

Mahinur Begum, whose chickens Maria is vaccinating today, sums it up this way: “Having our chickens vaccinated is like a cool breeze on a hot summer day. It means at least one of the worries in our day-to-day life is gone.”

MAHINUR BEGUM, 25

“It took some doing to convince us that we should grow vegetables. My husband was making a reasonable living with our fruit and wood trees, so at first we didn’t see the point. But now that we are doing both, we really see the benefit.

“I love having a big vegetable garden. For the most part we used to eat just fish or meat or *dhal* with rice. When we would buy vegetables from the market, we would buy just one kind because eating even a moderate number of vegetables would cost about 50 Taka (US \$0.73) a day.

“Now I can go just go out in my garden, choose what I want to eat — cauliflower today, spinach tomorrow — and cook it.

“This was especially helpful when I was pregnant. The CHV told me to eat a lot of vegetables. The garden made that easy and affordable. Now I use this garden to feed my baby. I like that we have grown it and we have an attachment to it. We

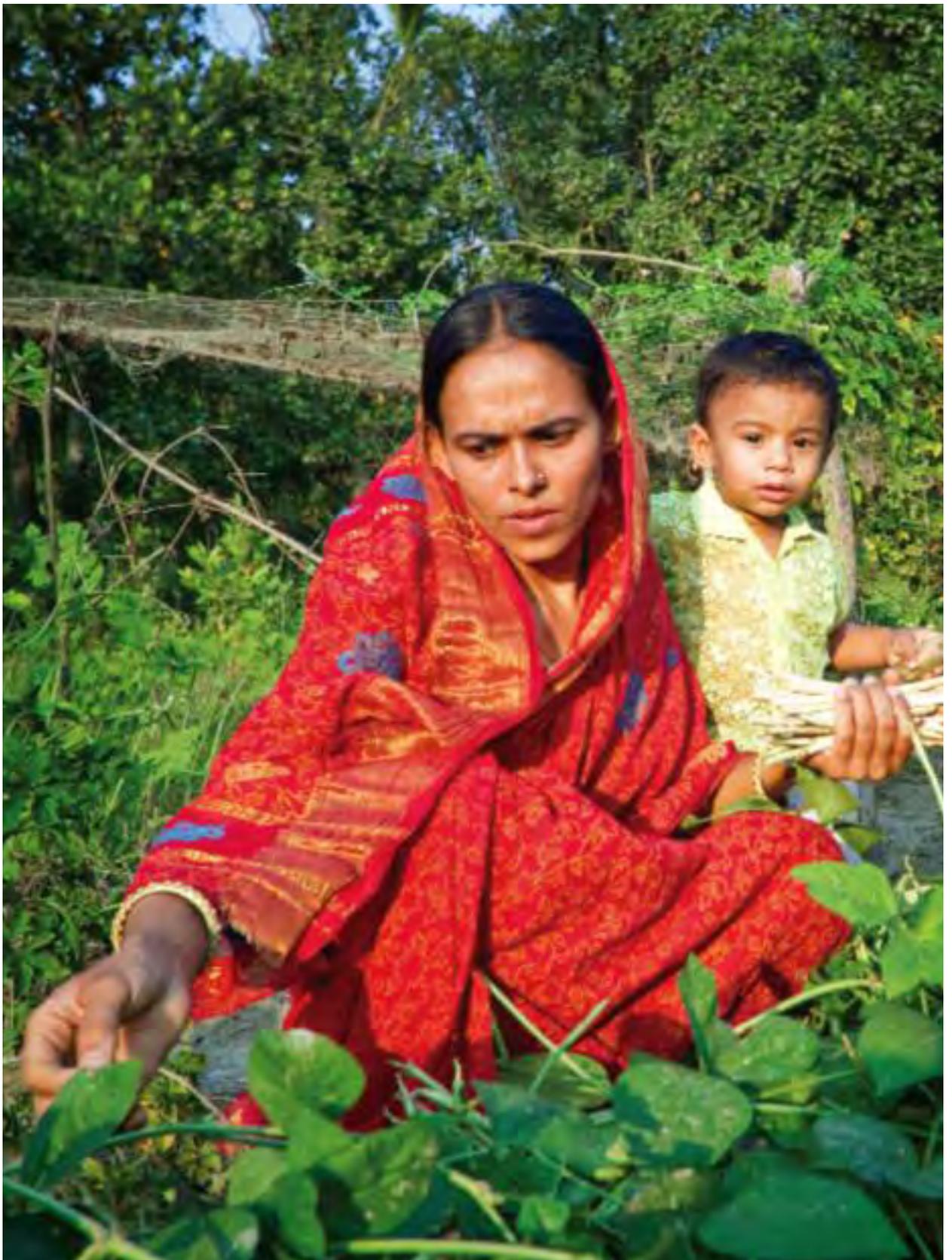
know that it was grown naturally, without chemicals, so we can feel good about feeding it to our son. I often cook *khichuri* and mix in lots of different vegetables. The eggs from our chickens make this a complete and nutritious food.

“Another thing I like about this garden is that because we grow more than we can eat, we are also earning money — almost 2,000 Taka (US \$29) profit each month.

“This is great, but money isn’t everything. You also have to have knowledge. Previously we didn’t know which food contained which kinds of nutrients and why they were essential to the body.

“Now we have food, we have money and thanks to the CHVs and program staff, we now know how to use it. Now we have everything.”

Mahinur and 14-month-old baby Narial in the garden behind the family’s house.









Fried mixed vegetables

CHV Rabeya Begum tells her beneficiaries “Eat your vegetables and you won’t have to worry about disease.” The colors of fruits and vegetables give an indication of the nutrients they contain. By reminding pregnant and lactating women that they and their children need to eat a rainbow of fruits and vegetables, CHVs help them to get the vitamins and minerals essential for good health.

SERVES 4

- 1 medium size cabbage, chopped
- 1 cup green beans, sliced lengthwise
- 3 medium tomatoes, chopped
- 1 handful *lau* (gourd) leaves, chopped
- 1 large onion, finely chopped
- $\frac{1}{2}$ tablespoon turmeric powder
- 2 tablespoons oil
- green chilies, sliced lengthwise and seeded (to taste)
- salt (to taste)

Wash the vegetables and chop all but the tomatoes and *lau* leaf into slivers. Heat the frying pan on the stove. Pour in a splash of oil. When the oil is hot add the onion and chili. Fry for a minute then add the turmeric. Fry another minute then add the salt and the rest of the vegetables, stirring until they are cooked but not limp. For more color add a little more turmeric.

Note: This recipe usually doesn’t require water. The water that comes from the vegetables as they cook is enough.

Curried eggs

Eggs are a good source of low-cost, high-quality protein, which is an important building block of bones, muscles, skin and blood. It is also used to build and repair tissues and to make enzymes, hormones, and other body chemicals. Rabeya puts it this way: "Eat eggs. They give you strength and energy and help you grow."

SERVES 4

- 4 (duck or chicken) eggs
- 2 small onions, finely chopped
- 2 tablespoons oil
- 1/2 teaspoon turmeric powder
- 1/2 teaspoon chili powder
- 1/2 teaspoon ground coriander
- 1/2 teaspoon ground cumin
- 2 tablespoons water
- green chillies, sliced lengthwise and seeded (to taste)
- salt (to taste)

Boil the eggs for 5-6 minutes, then remove the shell. Dust the eggs with half of the turmeric powder. Warm the oil in the pan then fry the eggs until the skin browns slightly. Remove the eggs from the heat and place in a bowl. Now add the onion and chili to the pan. Fry for 1 minute over medium heat. Add chili powder, ground coriander and the rest of the turmeric powder. Fry a little more then add 2 tablespoons of water. Put the eggs back in the pan with the rest of the ingredients and cook for 3 more minutes. For more sauce, add a little more water to the pan and continue to cook for another 5-6 minutes (with the eggs). Remove from the heat, sprinkle the eggs with the ground cumin and serve.





Khichuri

Khichuri (hodgepodge) provides — in one dish — everything a pregnant or lactating woman and her baby need for proper nutrition. As Rabeya tells her beneficiaries: “If you eat *khichuri* you are getting three different types of food. Oil and rice will provide you with energy, eggs and pulses will ensure proper growth and all of the different vegetables will keep you free from disease.”

SERVES 4

- 2 cups rice
- 1 cup lentils
- 2 medium potatoes, chopped
- 2 handfuls leafy green vegetables, chopped
- 1 handful cabbage, chopped
- 2 tomatoes, chopped
- 2 eggs
- 1 cup long beans, chopped
- 2 medium onions, finely chopped
- 3 tablespoons oil
- $\frac{1}{2}$ teaspoon ghee
- 1 teaspoon turmeric powder
- 1 teaspoon chili powder (optional)
- salt (to taste)
- chilies –seeded and split long ways (to taste)

Chop all of the vegetables into bite-sized pieces. Warm the oil in the pan and add onion, chili, turmeric powder and salt. Cook until the onions are soft. Add rice and lentils to the oil and cook for 5 minutes. Add all of the the vegetables except the tomato, cabbage and leafy greens to the pan and cook for a further 2 minutes.

Add 8 cups water and bring to a boil. Boil for 15 minutes uncovered, adding more water if it becomes dry. Reduce the heat and cook until the rice is almost cooked and the lentils are almost soft. At this point most of the water will be gone.

Break the eggs into the pot. Allow them to cook for 2 minutes and then stir into the mixture. After they are mixed in add the rest of the vegetables. Stir gently and cook for another few minutes. Remove from heat. (The rice will still be slightly mushy when it is ready to come off the heat.) Add ghee. Stir gently. Cover the pot and let it stand for 5-10 minutes while the rice absorbs the last of the moisture.

GARDENING WITH THE SEASONS

These days many of my plans are for the near future and most of them are related to gardening: the monsoon is coming. I will raise the earth in the beds before then. Then when that is finished I will focus on winter vegetables then it will be time to focus on summer vegetables ... I love this, living according to the seasons of my garden. Nurturing my plants, feeding them, watching them flower and bear fruit. It is like caring for my baby and watching him grow.

— Mahinur Begum





Protecting lives & livelihoods

This simulation will help me a lot. Watching it, I learned that cyclones are dangerous, and I learned how I can help. In Sidr we went to the cyclone shelter, but only after the roof blew off of our house. My mother and father were here watching with me today. Next time we will know what to do to prepare and we will move to the shelter earlier, not wait.

— Ansar Howlader
Student, class four

Protecting lives & livelihoods

Bangladesh is one of the most disaster-prone countries in the world, and coastal areas such as Barisal Division are on the front lines for cyclones, floods, tropical storms and other natural disasters.

Cyclones, tidal surges and storms represent a huge risk to lives and to livelihoods in these low-lying areas. With few permanent structures and little protection from wind and storm surge the loss of lives can be in the hundreds of thousands. An estimated 500,000 people died in the Bhola Cyclone of 1970 — the last major cyclone to hit this area before the two that hit during the five years of the JoJ program: Sidr in 2007 and Aila in 2009.

In Bangladesh's coastal belt it always just a matter of time before the next one arrives, but what is crucial when a cyclone threatens is that communities are prepared and act quickly. Before the JoJ program most households in the program areas had experienced one or more major disasters, including cyclones and/or floods. However, only 33% had received any form of warning that a storm was coming, and only 15% had received information on disaster preparedness so that they knew what steps they could take to safeguard their lives and their property.

The JoJ program's strategy has been to educate and involve communities. Disaster preparedness, risk reduction and effective early warning systems can be major factors in preventing the loss of lives. Strengthening the capacity of communities to cope with the impact of natural hazards so that lives are saved also means that development is

not held back and livelihoods are protected from the repeated shocks that tend to push people ever deeper into poverty.

Since 2005 Save the Children and its partners have taken a number of measures to help coastal communities prepare for cyclones and other natural disasters. These include recruiting and building the capacity of the local institutions responsible for disaster management: Union Disaster Management Committees (UDMCs) and the Bangladesh Red Crescent Society's Cyclone Preparedness Program (CPP). The JoJ program has focused on improving the capacity of these organizations to prepare their communities for disasters and to respond effectively whenever one strikes. This has resulted in local plans for disaster management and improved early warning and response systems. Efforts have also been made to improve the existing cyclone infrastructure by rehabilitating shelters for people and animals.

Another strategy for promoting cyclone preparedness has been cyclone simulations, which have improved levels of community awareness about preparing for and responding to disasters.

Community preparedness has also involved specific training sessions for fishermen and school children as well as the performance of folk songs and popular theatre, courtyard sessions, the dissemination of posters and booklets and the erection of billboards.

In this cyclone-prone region awareness and preparation are key.

Mapping risks and resources

Union Disaster Management Committees (UDMCs) have been supported, and in many cases reactivated, to help communities in Barisal Division prepare for natural disasters.

Driving through the tiny towns that line the road to Kalapara on the southern coast of Bangladesh, one sees a surprising number of signboards bearing roadside maps. However, these simple, hand-painted maps don't feature roads, but rather crops, houses and cyclone shelters. They are 'risk and resources' maps, and they represent a new era in disaster preparedness and risk reduction in cyclone-prone Barisal. Drawn up with the assistance of Union volunteers, the maps were created under the supervision of the Union Disaster Management Committees (UDMC) — the legitimate bodies mandated to prepare for and manage natural disasters in their areas. UDMCs have been in existence since long before the beginning of the JoJ program in 2005. However, they had all but ceased to function.

With inputs, training and capacity building from Save the Children, these bodies have now been reactivated and

strengthened, and their mandate broadened. The committees no longer simply respond to disasters when they hit, they are now leading their communities and working in conjunction with other organizations to develop community-centered action plans, to raise awareness about disaster preparedness and risk reduction, to raise money for relief work, and to put up risk and resources maps in all of these the little towns.

Says CPP Union team leader and UDMC member Mozzaffar Hossein, "The maps help people in this community to plan. We can see where our assets are, which areas are most cyclone prone and where to take shelter if there is a disaster. It also helps CPP volunteers to plan: we now know exactly where to focus our efforts before a cyclone, and where to do rescue and response work afterwards. Preparedness is the key to saving lives, assets and resources."

CYCLONE SHELTER REHABILITATION

Shelter from the storms

Increasing access to cyclone shelters for humans and animals is essential to safeguarding lives.

Although everyone in coastal areas knows the location of the nearest cyclone shelter, only 15% of households made use of them during Sidr. Many didn't believe the cyclone was coming. Others were afraid to leave their homes and assets — especially livestock — unprotected. Still others didn't think they would find space in the shelters. Aila, which hit the area two years later, was a different matter, says farmer Abdul Rashid Howlader: "There are 3,500 people in this area, and almost every one of them went to the cyclone shelter. During Sidr they saw what a cyclone could do and they were really scared." The area's lone cyclone shelter was overwhelmed. "Not even half of us fit inside," he says. "We put the women and children inside and the men went up on the roof."

In the wake of the 1970 cyclone which hit this area, killing more than 500,000 people, the government built cyclone shelters in coastal areas of Barisal. They also built *killa* — massive earthen structures raised high above ground level and accessed by earthen ramps — to protect animals and their owners from the storm and the dangerous tidal surge.

Over the following decades, as the majority of cyclone activity shifted to Chittagong Division in the East, the cyclone shelters and *killa* in Barisal Division fell into disrepair.

With Sidr, the level of need became evident. JoJ staff conducted an assessment of available cyclone shelters, both formal and informal (many are school buildings). They found that most were in poor condition and lacked access to basic services such as water and sanitation, privacy for breast-feeding women and safe areas for children. These issues were addressed in the repair and rehabilitation of 65 existing shelters. Two *killa*, each of which holds up to 500 animals, were also rehabilitated. Still, as the program draws to a close, the capacity of existing cyclone shelters is inadequate for at-risk populations. Save the Children and its partners recognize that there is much more to be done to ensure each person — and animal — shelter from the storms.





This time it's not for real. Actors (including community members) in the cyclone simulation whose characters don't make it to the cyclone shelter die before a crowd of thousands. The simulation creates awareness that helps to save lives.

AGENCY DISASTER PREPAREDNESS

Taking stock

As part of its own emergency preparedness, Save the Children pre-positioned relief supplies in and around its warehouse in Barisal town, including water purification plants, family food rations, water ambulances, and recreation kits. Also pre-positioned in the warehouse were over 11,000 non-food item (NFI) kits containing hygiene items, cooking utensils and other essentials. Buying these items in such quantities at the time of the cyclone would have been impossible. However, because they were in the warehouse and ready to go, within hours of both Sidr and Aila these and other essentials, including food, clean water and medical care were reaching the hardest hit communities. Here, Save the Children staff talk about what is in an NFI kit and why.

BLANKET

The blanket is for the children to keep them warm, especially in winter. Sidr hit in November as the cool weather started.

KALSHI

We tell people they need to drink safe water but how can they get it if they don't have something to put it in?

BUCKET

A bucket can be used to carry water for other household uses like showering and washing clothes.

PLASTIC SHEET

After a disaster, people have lost their houses. The plastic sheet can be placed on the ground to sleep on or used as a tarpaulin and hung over the rope to serve as a tent.

PITCHER

Essential for taking a shower. Essential for washing your hands — any time you need to get water out of the bucket.

ROPE

Make a tent, make a clothesline. Rope can do a lot of things.

LAUNDRY SOAP (POWDER)

After a cyclone there's going to be a lot of standing water, which means mud. You need to be able to wash your clothes.

LAUNDRY SOAP (BAR)

Did we mention the mud?

MOSQUITO NET

Many households will have lost most of their belongings, including their mosquito nets. At night, with all of that standing water, there is going to be a lot of mosquitoes.

HAND AND BODY SOAP

To prevent yourself from getting sick you need to wash your hands, but this is hard to do. After a disaster people have no access to soap and no money to buy it.

CANDLES (AND MATCHES)

Surely this one is self-explanatory?

BAG

Not only does it hold the kit, it's one of those multi-purpose items. Who doesn't need a bag at some point?



After any disaster people's first concern is food and shelter. Most relief organizations give this. But there are other items that people also need — simple but important items they will often have lost in a cyclone that will make a big difference to their health and well-being. Few organizations give these items. Save the Children packs them into its NFI kits. "During Aila, my house was completely flooded and I lost everything," says farmer Abdul Rashid Howlader. "The NFI kit was really useful. The most useful item? The *kalshi* — definitely."



Safety at sea

In coastal Barisal many men rely on fishing for their livelihood. But fishing comes with risks. Trainings offered by the JoJ program have helped fishermen to minimize their risks by protecting their lives while they work.

When Sidr hit, Jamal Howlader, along with many other fishermen, was at sea. “It was almost evening when we heard the cyclone warning on the radio. At that time the signal level was four. We didn’t think anything of it. We hear that there is a signal one to three — which signals a depression in the bay and the possible start of a cyclone — more than 100 days in a year. The higher signals — four through seven — happen only seven or eight times in a year. Usually nothing ever happens. We didn’t think this time would be any different.

“The wind picked up a short time later and it started to rain. Not long after that the radio announced that the signal level was ten. It had jumped from four straight to ten. It was already night and now the cyclone was bearing down on us.

“Without sight of land or the stars to guide us, we had no sense of which way to go to safety. We gave up all hope and started praying. We prayed so much that our throats became sore. It wasn’t long before waves as tall as a three-storey building were crashing over our boat and we were bailing for our lives. After four or five hours the wind subsided. The worst of the storm had passed and we were still alive.

“In the morning light we saw that many others were not so lucky. The sea was littered with debris and dead bodies. We had heard people crying in the night, but we couldn’t help. It was all we could do just to save ourselves.”

In this coastal area the sea and river are close. On the *chars* (alluvial islands in the river), there is no industry and not many jobs. The available land is very little. In order to survive, over 40% of men work as fishermen. It is a profession that is not without risks. But now, thanks to training offered through the JoJ program, fishermen who go to sea have learned what they can do to keep those risks to a minimum.

The first lesson is on the items they need to bring when they go to sea. There are those they would normally bring: a torch, a mobile phone and a three band radio, and others

they would not: drinking water, life jackets, a compass and a basic medicine kit.

That they didn’t bring drinking water for trips that would last seven to ten days is perhaps most surprising: “We would just drink sea water,” says Howlader. “We’re used to it.” Now when they go to sea fishermen carry big drums of water plus a lot of jerrycans.

The jerrycans hold water, but they also address the chronic shortage of the next item on the list: life jackets. “We never used to carry any life jackets,” Howlader explains. “Now, on a boat of 10-12 people there will be three or four. We simply cannot manage one per person. The closest place to find them is Dhaka, and they cost 700-1000 Taka each (US \$10-\$14.50).” This is where the jerrycans come in: in a cyclone or other emergency they work as improvised flotation devices.

A compass is another thing Howlader felt he didn’t need: “I have been to sea so many times that I have the map in my mind, and when I need direction I have the stars to guide me.” But during Sidr he learned a valuable lesson: “We might desperately need to move when it is cloudy — like it was in the cyclone. Now that we carry a compass we don’t have to think about direction. We can just set it and go.”

A basic medicine kit is just that — basic: oral rehydration solution (ORS), paracetamol, dettol for cleaning wounds and some anti-diarrheals.

“In the training we also learned what to do if we are caught in a storm at sea, and they made sure we were clear about the signals — what they mean and when we should return to shore. Now when there is a signal one through three and we are at sea, we still don’t give it too much attention,” he laughs. “But we do stop and weigh things up: for our livelihood we need to be at sea, but there is also our safety to consider. And now, after Sidr, when we hear that it is a signal four, work or no work we head for shore.”

Everyday heroes

When a cyclone threatens Cyclone Preparedness Program (CPP) volunteers are first to raise the alarm. Recent training and new equipment are helping them to better ensure the safety of everyone in their communities.

In a cyclone, the person who saves your life might well be the man who makes the tea at your local tea stall or the housewife from next door. For many of these local businessmen, fishermen, housewives, and farmers this is not a job, but a calling. “My mother lost all of her relatives in the cyclone of 1970 — all except her father,” says teacher Kabir Hossen, 38. “She told me this story so many times as I was growing up. Every time I heard it I wondered, isn’t there anyone who can stand beside people during a cyclone and help to save them? Years later when I was old enough to be a CPP volunteer, I didn’t give it a second thought. I applied.”

Set up in the years after the devastating cyclone of 1970, the Bangladesh Red Crescent Society’s Cyclone Preparedness Program (CPP) has long performed an early warning function in coastal areas. When a cyclone threatens, volunteers stop their normal lives, don their Red Crescent vests and leap into action, warning people that a cyclone may be on the way and telling them what to do.

With the help of the JoJ program these volunteers have improved their capacity to do their job through further training in disaster management, first aid and search and rescue. They have also received more of the equipment they need to inform the community of an impending cyclone: megaphones, hand sirens, radios, and signal flags. Early warnings allow people to take measures to protect their lives and their assets. Previously in JoJ program areas only 33% of the population received a warning before a cyclone, now over

90% receive a warning and 73% of those warnings come from CPP volunteers. Not everyone who receives a warning decides to move: even during cyclones CPP volunteers are often forced to evacuate people from hazard-prone areas.

When they are not working to warn or rescue others, CPP volunteers continue working to heighten awareness of strategies for disaster risk reduction within their communities. They do this by holding courtyard education sessions where they discuss the meaning of the cyclone signals, explain when people should move to a shelter, demonstrate the construction and use of homemade flotation aids, tell participants how to seal off water sources and latrines, and show them how to secure valuables and food stores. The volunteers are also integral to the cyclone simulations.

As grateful as community members are for these everyday heroes, most of the volunteers, like Kabir, are just glad to be able to help: “Nature can be so powerful and unpredictable, especially when you live in a place like this *char*. I am so grateful for being a CPP volunteer and having this training. It has given me the skills and knowledge that allow me to live here and to stand beside others in their time of need.

During the early phases of the cyclone simulation CPP volunteers gather off to one side of the field where, playing themselves in the drama, they show how they learn and practice skills like search and rescue and first aid. By the end of the simulation they take center stage as the heroes and heroines of the drama.





“Having lived through Sidr, I knew how destructive nature could be. So when Mr. Mozaffar (the CPP leader in our area) suggested that I become a CPP volunteer, I agreed.

“We all know that in a time of danger we need to save ourselves, but not many of us know that there is a systematic way to do that. I learned what I know during the CPP volunteer training. It helped me a lot during Cyclone Aila.

“The day before Aila, I called my family and neighbors together and told them we must be prepared. I told them to pack their important papers and valuables, bury their dry food and prepare to move to the shelter. Everyone listened to me. None of us had believed Sidr would hit. We were not going to make that mistake again.

“At signal four, the male CPP volunteers go out with a megaphone and hand siren. The women volunteers don’t do this. Our culture doesn’t allow women to move around far from home. But they can do something that our culture does not allow the male volunteers to do — they can go door to door in their area and talk to the women of the house.

“The men can inform other men outside or the men in the house. But can a man go inside the house where there are women present? Is it decent? No. No. No. But as a woman I can go to any house and gain access to the women of the house. I can tell them directly that a cyclone is coming and I can tell them what they need to do.

“This is important because when the women know what is happening, they can motivate the men of the house to take action. They can also act to save themselves and their children. In a cyclone it is usually the women and children who are the first to die. Women can’t run fast. We can’t swim or climb trees. Our saris are cumbersome; if they are wet they drag us down.

“My contribution may not be as visible as that of the male CPP volunteers, but it is also very important.

“Because of my CPP training I know how to save property and lives and how to live safely before and after the disasters that always threaten us here. This gives me great peace of mind.”



Be prepared

Cyclone simulation exercises are put on by the Bangladesh Red Crescent Society's Cyclone Preparedness Program (CPP) with support from the JoJ program. Two hundred plus actors from the community rehearse for five days to present the spectacle before the start of cyclone season. The message is unequivocal: be prepared.

It starts as a day like any other. Men catch fish in a pond, others pray at the mosque, women husk rice and collect water. In another part of the village a wedding is underway and at the school the children are huddled over their books.

When the first cyclone warnings come over the radio nothing much changes. Flags are hoisted over the village. Soon signal levels one, two and three become signal level four. Two flags are raised. At this point those in the village who are CPP volunteers leave whatever they are doing and begin to warn people to prepare to move to the shelter. Some of the villagers respond by gathering together their important papers, burying their dry food, securing their tubewells and moving to the shelter. Others ignore the warning, even as three flags, signaling "great danger", fly over the village.

And then the cyclone hits. Sprays of water blast the village. Trees and houses are flattened. Those who did not move to

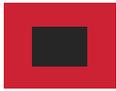
At signal four CPP volunteers warn the community using megaphones and hand sirens.

the shelter earlier grab their children and run. Buffeted by the wind and water they try to fight their way to the shelter. CPP volunteers help as many people as they can. But many fall on the way. Soon their bodies litter the ground.

Though almost 10,000 people watch the devastation, not one of them makes a move to help. On the contrary, they watch from the sidelines in an almost festive mood — because these are actors and this is a simulation. This time.

Cyclone simulations are educational entertainment on a grand scale. The elaborate one hour dramas are attended by thousands who watch as a small scale, purpose-built village populated by 200 'actors' (their fellow community members) is struck by a cyclone. Ropes pull at purpose planted trees creating the effect of a strong 'wind'. Fire engines lined up behind the miniature village aim their hoses at the sky to provide the 'rain'. The audience learns what to do when a cyclone threatens — and what not to do — by watching the choices the 'villagers' make as their personal dramas unfold simultaneously across the field.

*“Warning” (signals no. 1-3)
One flag is raised indicating that there is a depression in the bay that could become (or is already) a cyclone and that it may move this way.*



*“Great danger” (signals no. 8-10)
Three flags are raised indicating that the cyclone will almost definitely hit and that people must take shelter.*



At signals one through three CPP volunteers inform those they meet about the situation without leaving their work.



CPP volunteers raise the first warning signal over the village.



At signal 4 farmers stop working and move their animals to the *killa*.



Families rush to bury their dry food for safe keeping, tie off their tubewells, pack their valuable documents and move to the shelter.

*Elapsed time
in minutes*

0

8

10

14

15

20

23



*“Danger” (signals no. 4-7)
Two flags are raised indicating that a cyclone is in the bay and appears to be moving this way. There is a likelihood that it might hit. People should make preparations and begin to move to the shelter (which is often several km away).*



At signal four CPP volunteers stop whatever they are doing and gather in one place before going out to warn the community about the danger. Mosques begin to broadcast information about the cyclone’s path over their loudspeakers.

Village life in miniature: everyone goes about their activities simultaneously as the day begins.

TIMELINE OF A SIMULATION



CPP volunteers spread the word with sirens and megaphones, even as the trees begin to sway and the 'cyclone' starts to make itself felt. The volunteers move people to the shelter. Most people go, but some ignore the warnings or refuse to go.

28

33

CPP volunteers help in any way they can as families return to their homes. Some find their loved ones dead.



44

45



CPP volunteers give first aid to the living and recover the bodies of the dead.



56

57

60



The cyclone hits and those who did not move to the shelter earlier run for cover. Many of them do not survive.

CPP volunteers conduct search and rescue missions during and after the 'cyclone'.



The living and the dead leave the 'stage' as the simulation ends.



CPP volunteers and local officials conduct post-cyclone damage and needs assessments.



When cyclones happen

I saw the destruction of the 1970 cyclone. It was always in my mind. I couldn't forget it. So when the opportunity came to help people as a CPP volunteer, I knew that was what I needed to do. I would learn how to save my family and others in my community when the next one hit.

— Mozaffar Hossain, 49
Farmer and Union Team Leader, Cyclone Preparedness Program (CPP)

When cyclones happen

On November 12th 1970 the Bhola cyclone hit the coast of what is now Bangladesh. It was the deadliest tropical cyclone on record. Official estimates put the number of dead at 500,000. Unofficial estimates put the number at up to three times more. In 1991 another cyclone struck neighboring Chittagong district with wind speeds of 250 km/h and a six meter storm surge. Warnings from the Cyclone Preparedness Program two days before it struck actually made a big difference, though more than 139,000 lives were officially lost and ten million people were made homeless.

The Bay of Bengal, due to its unique geographical location, frequently suffers devastating cyclones. During the five year JoJ program two cyclones hit the region severely disrupting program activities and forcing Save the Children and its partners to divert attention into relief and rehabilitation activities.

On the evening of 15th November 2007 Cyclone Sidr, a category four cyclone, made landfall over southern Bangladesh. JoJ personnel monitored government early warning reports and responded in close collaboration with government counterparts.

Many families fled their homes leaving behind crops, food stores, productive assets and household items. For many everything they owned was destroyed in the storm or lost in the resulting floods. This included water sources and sanitation facilities. By the time Sidr had passed, 3,500 people were dead and the devastation of the storm had directly affected more than five million people — half of them children — across 30 districts.

Save the Children and its partners, who had worked in the area since 2005, were among the first international agencies to respond. Pre-positioned emergency relief supplies, staff and infrastructure, in addition to the emergency preparedness undertaken during the previous year, enabled them to mount a rapid and comprehensive response: in the first days after the storm program staff distributed food rations, provided clean drinking water, transported health workers and sick or injured people on boats and provided households with NFI kits containing mosquito nets, water containers, soap, cookware and other essentials.

Over the following months, Save the Children and its partners reached over 200,000 families with relief and began working with communities to rebuild facilities, roads and livelihoods. They operated safe spaces for children, provided families with latrines and reconstructed community water sources which continue to provide long-term access to safe drinking water.

After several months, the program moved into the recovery phase, helping people who were still struggling to rebuild their lives and livelihoods. Cyclones worsen the cycle of poverty: the loss of assets and income earning opportunities force vulnerable households to sell their remaining productive assets — notably land — in order to survive. They also increase the number of children who are withdrawn from school so that they can be engaged in income-earning labor. The right kinds of assistance at the right time minimizes these harmful coping strategies by helping people to resume their livelihoods as soon as possible.

On 25 May, 2009 another cyclone struck the region as it was still recovering from Sidr. Official estimates put the death toll from Cyclone Aila at 600. A category one storm, Aila made landfall to the west of Barisal Division and was far less destructive than Sidr. But the marked decline in the number of casualties was also due to people's fear that it might be another Sidr. This time people heeded the warnings and put into action all they had learned in the wake of Sidr about disaster preparedness and risk reduction.

The aftermath of any disaster is a critical time. Those who survive the disaster may become malnourished or contract diseases like cholera and pneumonia. It is a measure of success that in the wake of both Aila and Sidr, unlike in past disasters, there was no significant outbreak of disease and no significant increase in malnutrition.

Cyclones will always happen in this coastal region, but as inputs from the JoJ program have shown, they do not always have to be a 'disaster'. Helping communities to make the right preparations in advance and ensuring that people can resume their livelihoods as soon as possible afterwards, not only saves lives in the short term it also strengthens and improves them in the longer term.



“Now we are sitting here laughing and talking about Cyclone Sidr, but you can’t imagine what it was really like for us on that day.

“Everything was different from the beginning. The clouds in the sky were different. For a time they were motionless, but then the wind started blowing — hard. That is when the older people started talking: ‘This is like the cyclone of 1970,’ they kept saying. But nobody actually believed them.

“Throughout the afternoon they were announcing signal four. My eight-year-old son and I prepared to leave for the shelter. Because he had been an actor in one of the cyclone simulations earlier that year, we both knew what to do.

“The first thing I did was go to see my neighbors. I have a strong house so told them they could take shelter with me. I told them to bury most of their dry food and bring some of it along with their valuables and important papers to my house, so that we could shift to the cyclone shelter if we needed to.

“All day long we kept listening to the radio and monitoring the situation. When the others came to my house that evening, some of the women who had lived through the 1970 cyclone were talking about how many women had drowned because their long hair got tied up in the trees and debris in the water. They had also showed this in the simulation. I told the women that we should tie our hair up tight, so that whatever happened later we were prepared.

“In the early evening when I saw that the water had almost reached the level of the embankment I grew worried about staying in the house. I decided we should all move to the shelter. I grabbed my bag of valuables, took my son’s hand, and told the women to follow me. As we left my son reminded me to remove the head from the tubewell and tie the well off with plastic so that we would have clean water

to drink when we returned. I had completely forgotten about that.

“Twenty of us left together. We were still on our way at about 8 pm when the storm became really strong. We were half swimming, half walking and big trees were falling just in front of us.

“As we continued pushing towards the shelter, I thought I heard crying coming from a small house we were passing. I told the others to keep moving towards the shelter and asked my sister to watch my son while I went to investigate. Inside were two people, a husband and wife who were very old. They could barely walk and they had no one to help them to the shelter. They were so afraid because they remembered 1970 and they could see how similar this was.

“I took the woman in one arm and the man in the other, and with the bag of valuables still on my back, started moving towards where my sister and my son were waiting. By now the water was up to my chest. We continued on, my sister carrying my son and me carrying the two old people. I have no idea where I got so much strength. All I knew was that we had to get to the cyclone shelter if we were going to survive.

“Finally we made it to the shelter. I was so relieved to get there and to find that all of my neighbors had already arrived. But the shelter itself was a hell inside. There were hundreds of people; so many people we couldn’t even sit down. I consoled myself with the thought that at least we had made it — we had survived.

“The next day when we returned home, because of all of the preparation my son and I had done, I was able to resume my normal life quite quickly. Unlike many people, we had clean water to drink and food to eat. We owed our good fortune to all that we had learned in the simulation.”

“When Sidr hit, my family was not at all prepared. We had heard the sirens and the people with megaphones and the miking from the mosque, but we still didn’t believe it was really coming. My brother and I were studying and my father was praying when the wind and rain slammed into our house. We started crying and shouting. The cyclone had come and we were completely unprepared. What would we do now?”

“There was a *killa* nearby. So many people and animals were packed into that space. There was no cover. We just huddled together out in the open while the wind screamed and the rain drenched us.

“Later in the night, when the wind had died down, we returned home. Our house wasn’t broken, but the mud platform beneath it was. We were lucky. But I kept thinking that the next time that might not be the case. I wanted to know how we could prepare for cyclones so that we would all survive and the damage would be kept to a minimum.

“Some time after the cyclone, two of the teachers in my school received training from Save the Children in disaster management and child rights. When they returned they taught the students what they had learned. They taught us about warnings and signals, disaster management, risk reduction, and child rights and protection in times of disaster. “Two months after we finished these classes, Cyclone Aila hit.

“The day before Aila they were announcing on the radio that it was signal three. In class I had learned that at signals one through three we should start packing our valuables and our important papers and continue listening to the weather forecast. I told my family and my neighbors that this is what they should be doing.

“On the morning of Aila we woke up early. I called my family and neighbors to a meeting in our courtyard. When they had gathered I told them what I had learned at school and we all worked together to follow that.

We sent the pregnant women and children along with the sick and elderly to the cyclone shelter. We dug a hole near the house and buried our dry food like rice and pulses for safe keeping. Then we took the bags we had packed with our valuables, our money and our important documents, added some dry food to them, and set off for the shelter.

“On the way some of my classmates joined us. Because we had all had the same training, we worked together on the way to the shelter, going house to house and telling people this was no time to sit idle. We helped them pack their things and bury their food and sent them to the shelter. Some of the houses had tubewells. We told them how to tie them off with plastic so the contaminated water could not get in and spoil their water supply.

“All the time we kept moving in the direction of the cyclone shelter and helping people on the way. By the time we neared the shelter the water had risen to our knees and the wind was very strong. We came across a woman and her young daughter who were struggling just to keep moving. I carried the girl and my friend carried her mother all the way to the shelter.

“It was difficult and it was sometimes scary, but I was so happy inside. Because of what we learned in school we could help to save people’s lives.

“It feels good to know how to prepare for disasters and what to do when they hit. I will never again have to feel so vulnerable as I did during Sidr. Now I know what to do.”



First response

Save the Children and its partners provided immediate lifesaving relief and protection to over one million people affected by Cyclones Sidr and Aila. Here, a brief guide to the essential five.



WATER AND SANITATION

Cyclones damage community wells, contaminate drinking water supplies and destroy latrines. Without fast action, those that survive the disaster can succumb to diseases that can cause illness or even death.

In the immediate aftermath of Cyclones Aila and Sidr JoJ staff distributed water purification tablets, hygiene kits, and water containers. They also distributed bleaching powder to sanitize overflowed latrines. In areas with no source of clean water, they brought in water treatment plants to provide thousands of liters of potable water to communities in need.

Abdul Rashid Howlader was one of those who received water after Aila: “Two days after the cyclone Save the Children set up a water purification plant near my home. For the next few months we had clean water to drink, cook and shower.”

In the meantime Save the Children and its partners moved quickly to repair or replace damaged latrines and water sources to provide people with long-term access to drinking water.

As a result of the efforts of program staff and others there was no significant outbreak cholera or diarrheal disease following either Sidr or Aila.



FOOD

The cyclones damaged food stores in family homes and local markets. During Sidr, the main rice crop — a primary annual source of food and income — was in the fields. Much of it was lost.

To prevent a deterioration of the nutritional status of particularly vulnerable children during a period of economic stress, Save the Children and its partners mounted an immediate relief effort that put USAID and World Food Program commodities into the hands of 176,000 of the most severely affected families. These included high energy biscuits, wheat, rice, cooking oil and pulses, and additional food rations, including rice, potatoes, iodized salt and cooking oil.

For the most vulnerable, targeted provisioning of food rations continued for an additional six months (through January 2009), a period encompassing the annual ‘lean period’ for households in Barisal Division.

In Cyclone Aila Bhola district was the hardest hit of all of the JoJ program areas. After Aila, Save the Children and its partners provided food packages containing rice, pulses and potatoes to nearly 300 families in Bhola district. This was a one time distribution.



MEDICAL CARE

After a cyclone, providing medical care to survivors in the worst-affected areas is a challenge. Communities in Barisal Division are difficult to access by land even during normal times, and with roads blocked by fallen debris many cyclone-affected communities were all but inaccessible. This meant that many who needed medical care could not move to a hospital or clinic.

But thanks to the JoJ program's water ambulances and zodiac boats, teams of healthcare providers and more than 50 metric tons of medicines could be moved to them. This service continued for a number of months following Cyclone Sidr, enabling government and non-profit health workers reach more than 80,000 people.

At other times the water ambulances became satellite clinics providing health services, including vaccinations, to children in remote areas. They also lived up to their names. Equipped with beds inside, the water ambulances were also used to carry critically ill or injured patients from remote areas to the hospital. Some of those they carried were pregnant women. One of them gave birth on the way. Appropriately, she named her baby Nodi (river).



TRANSITIONAL SHELTER

At the time of Cyclone Sidr, Golbanu and her husband and their two children lived in a small house outside the protective embankment. As night fell their house was damaged by the strong winds, so they decided to move to the cyclone shelter. They picked up their two small children and went out into the worst of the storm. They hadn't gone far when strong currents ripped the children from their arms. They tried to swim after them, but could not. By the time Sidr passed they had lost not only their children, but also their house, their savings and everything they owned.

Golbanu was pregnant. She wondered what kind of life they could give this child. "We got a little food aid," she says, "but we were still living outside without anything."

Through the program the couple received a shelter kit with corrugated iron sheets, hardware and tools. While it in no way made up for their great losses, having a place to live and blankets to keep them warm at night did allow them to begin to think, in some small way, about the future again. "Because of this help," says Golbanu, "my son, who was born two months after the cyclone, was at least born into a warm, clean place."



CHILD-FRIENDLY SPACES

When six-year-old Bonny Amin and his family returned home after Cyclone Sidr they had a hard time recognizing the place where their house used to stand. Everything they owned — including the house — had washed away. A week later JoJ program staff invited Bonny and other children in the area, to spend his days at a nearby 'safe space.'

After a cyclone parents have a lot to do: look for work, rebuild their houses, collect food and water. "Where will my son stay while we are away from home?" Bonny's mother asks. "Will he sit in the open sun all day by himself? There is standing water everywhere. He could drown. There are snakes. Where will he get food?"

In response to these and other issues concerning children's well-being after a cyclone, program staff opened child-friendly spaces — supervised locations where children aged five to fourteen could play with other children and begin to restore a sense of normalcy to their lives. Medical care and counseling were also made available. "It was fun," says Bonny. "I played and sang and made new friends." Bonny's time in the safe space ended when the schools re-opened one month later.

Rebuilding lives

Many of the households most severely affected by Cyclones Sidr and Aila lost assets critical to their capacities to generate income, and as a result were pushed towards greater vulnerability. Many families took on additional debt, pulled their children out of school and sold their remaining productive assets to make ends meet. Once the life-saving response had been implemented, Save the Children with HKI and its other partners provided the assistance that allowed people to begin to recover their livelihoods and thereby mitigate the further loss of productive assets.



SEED REPLACEMENT

The massive inundation of saline water from Cyclone Sidr destroyed 50-60% of rice paddy and lentil production — the region's the two principal crops — only weeks before the year's biggest harvest. Not only were food and money lost, so was seed stock.

To help families recover their longer-term sources of food security and livelihoods, the JoJ program facilitated the replacement of assets used to generate both food and income. High yielding paddy seed was distributed to 5,000 families in June 2008 for the *aman* season. In September 2008 high quality pulses and vegetable seeds were provided to 10,000 families.

This intervention was particularly effective for several reasons. First, it helped to replenish scarce seed stock. Second, the use of improved paddy seed resulted in positive technological change. Farmers quickly adopted the high yield variety because of its superior production results. Another benefit came from the use of a voucher system. Households received seed vouchers that they redeemed with local seed merchants. This helped to support the local market and increased the awareness of local vendors regarding farmer preferences.



CASH-FOR-WORK

The devastation of a cyclone can leave the most vulnerable not only without food and productive assets, but also without work or money. Day laborers, many of whom live day to day on whatever they earn, are highly vulnerable. Most own no land and earn an income by working for others. In rural Barisal most laborers are engaged in agriculture and fisheries — the two sectors that were hardest hit during Sidr.

The cash-for-work (CFW) program was designed to provide income generating opportunities to 5000 beneficiaries — most of whom were day laborers and 60% of whom were women. The beneficiaries worked to rebuild community assets destroyed in the cyclone, such as embankments and roads, and to raise the land surrounding schools and other public facilities. Work was timed to coincide with the annual 'lean period' in the year following Sidr. Beneficiaries earned 125 Taka (US \$1.80) a day and each worked 100 days.

Beneficiaries reported using the majority of their earnings to buy food and clothing for their families.

A small CFW intervention was managed in Char Fasson, Bhola District following Cyclone Aila.



FINGERLINGS

In rural Barisal, ponds are an important household resource. Nearly 50% of all households own a small pond, which provides the family with water for domestic use and irrigation, and fish that not only provide income but also a critical source of protein, particularly for poor families with little access to land or other income.

Cyclone Sidr inundated ponds throughout the region with salt water, debris from destroyed structures, dead animals, and downed trees. This severely contaminated the water. Poorer households did not have the resources to recover their ponds.

The JoJ program helped to clean many ponds in the region, making them once again suitable for fish cultivation as well as household use such as washing clothes, watering livestock and irrigating vegetable gardens. The beneficiaries — 1,000 in all — were mostly women. They received money for pond renovation along with fingerlings and initial feed supplies.

They also received training on pond maintenance and fish cultivation.

Private sector hatcheries were enlisted to provide the fingerlings, which helped to stimulate local fisheries input markets.



SAPLINGS

“Sidr was a total disaster for us,” says Md. Isahat Mollah, 93. “We lost everything — trees, house, everything.”

Sidr destroyed four million trees, many of them critical to the protection of homesteads, some of them also important natural assets to supplement household income and nutrition, like fruit trees.

Mollah is one of 1000 beneficiaries who, after Sidr, received saplings to replace some of those he had lost.

The saplings included bamboo, mahogany, coconut and neem. “Each has its own use,” says Mollah. “Bamboo provides protection from the wind. This will be really important in future cyclones. We can also use it in fencing and in repairing the house — and it is a good cash crop. Neem has healing properties. It is good for health and the environment. Coconut has fruit you can eat or sell, and mahogany is valuable for its wood.

“It will be a couple more years before they are really useful,” says Mollah. “The coconut may need four or five years. Sometimes I wish I could pull on them to make them grow faster, but of course I can’t. Still, in the future they will definitely help us.”



ASSET TRANSFERS

Before Cyclone Sidr Lalmia worked as a daily laborer. After the cyclone, it was hard for him to find work. “Everyone was in same situation. People didn’t want to hire someone to do the house work. It was so bad that some days my family could not afford to eat.”

For Lalmia and others, JoJ’s asset transfer program changed that by providing productive assets — fishing nets, boats, sewing machines, livestock, rickshaws, etc — to those who had lost them during the cyclone and had not yet been able to restore them.

Beneficiaries identified the productive asset most appropriate to their household. Lalmia got a rickshaw. “Now I can earn enough to meet my family’s basic needs,” he says. In addition to carrying passengers, Lalmia carries agricultural produce, stationery, etc. He now earns 6,000 Taka (US \$87) more each month than he did as a laborer.

With his excess earnings Lalmia bought a cow. His family is benefiting from the milk. He also bought school materials for his grandson, repaired his house and bought some poultry. What’s left to do? “I want to educate my grandchildren,” he says.



“We lost only our house in the cyclone,” says Hashi Begum. “Not because we were lucky, but because didn’t have anything else to lose.

“For the week following the cyclone we lived with the village school teacher. Then we built a small shelter of six or seven pieces of tin. We didn’t buy them — there was no money for that — we just asked people and they gave us whatever they could spare.

“We had lived in that small shelter for almost a year when Save the Children selected me to join the Cash-for-work program. I worked from 8 am to 2 pm cutting and carrying mud to repair the roads and embankments that had been damaged in the cyclone.

“It was so good to have work again. My husband and I both work as daily laborers. After the cyclone it was hard to find work. We took loans from our neighbors so that we could buy a little food to eat.

“Having work made my life much easier. Things began to improve. I worked for 100 days in total and in that time I was

paid 12,500 Taka (US \$181). I used some of the money to buy food and daily necessities. I used some to send my son to school and to buy new clothes for the family. And I paid our neighbors what I had borrowed from them, with interest. With what was left I bought three chickens. You can’t do more with 12,500 Taka than that.”

While a lot of the money Hashi had earned was used to pay for things in the past or the present, the chickens were an investment in the family’s future. “With chickens you don’t have to worry about where you will get your next meal,” she says. “Those three chickens have now become 18. We eat eggs almost every day. Once the chickens have increased again in number, I will have enough eggs that I can sell some of them.

“What would I like to do in the future? Right now I don’t have cash and I don’t have a plan. I do know that I want to see my son well-educated. If I have to I will even beg the money for that. Then again, maybe I should start a poultry business. It seems I am already on my way.”

ABDUL KUDDUS, 44

“Before Sidr I was a fisherman. I had two boats and two nets. Life wasn’t bad. We could eat. But our only real assets were the nets and the boats. By the time Sidr had passed all of them were gone, and our house was flattened.

“Fortunately well before the cyclone I had hidden some money in a safe place in case we ever needed it. We used it to buy some food. Then I collected a lot of branches and made us a shelter. A couple of days later I started the only work I could do without nets and boats: daily labor.

“I did whatever work I could find. I worked in people’s houses, I removed trees from the road, I repaired others’ fishing nets, and I went to sea on a trawler now and then to catch fish for other people. Sometimes I broke even. Sometimes I came away with a little extra money. There were also days when I couldn’t find any work at all.

“I had earned more as a fisherman — a lot more. Before the cyclone we ate three meals a day and we regularly ate fish and even meat. While I was working as a daily laborer we couldn’t afford to buy much food, so we made do with less. Our poverty also brought about other changes. Our social status decreased. Previously we had been invited to weddings and other events. But if you are invited to a wedding you have to bring a gift, and if you don’t have the money to eat, you don’t have the money to buy a gift. Invitations are also a matter of status for those getting married. A ‘well-to-do’ relative in nice clothes is an asset; people are proud to introduce you to others. But after the cyclone we had only ripped clothes, and we couldn’t afford to buy any others.

“We also had to stop sending my two youngest children to school. Primary school is free, but you still have to pay for fees, notebooks, pens, tutors ... At that time my son Shohag was seven years old my son Afzan was 13.

“Afzan came to work with my 23-year-old son, Shajol, and me. Sometimes I would also try to involve Shohag but at seven he was too young. Most of the time he just stayed home and played.

“One day almost a year after the cyclone I saw that some Save the Children staff had come to this area and were

talking to people. I was standing on the road near my house when they came over to talk to me. They asked me a lot of questions about the cyclone, my work, how many people were in my house ... and then several days later I got a card that said I would receive the materials to make a net. It listed the distribution point, the date and the time.

“Immediately after receiving the materials I started work on the net. When I had finished making it, I borrowed 3,000 Taka (US \$44) with which I bought a small fishing boat.

“I was so happy to be fishing again! When I was working as a daily laborer the life I was leading was not a life. It was just surviving. I used to wonder how I would ever get back to my life again, and now, thanks to Save the Children, here I was.

“After Sidr far fewer people were fishing. Like me they had lost their boats and nets. That is why over the next month I caught and sold more fish than ever before: 30-40,000 Taka worth (US \$435-\$580). I used that money to repay the loan and to rebuild my house. I also used it to buy another boat and a second net.

“Now I am actually doing better than I was before the cyclone. I have three boats and three nets. My oldest son, my middle son and I go out with three others that I hire to work on my boats.

“Afzan is now 15. He never went back to school. After he started working with me, he didn’t want to go back. But Shohag is studying. I am really committed to his education. I have even hired him a tutor. I want him to grow up to have a really good job and I will do whatever it takes to make that happen.

“I am also branching out into other things. I used to focus only on fishing, but then one day a Save the Children staff member said to me ‘Kuddus, you have some space around your house. Why don’t you start a garden? Then you can save money and also meet your family’s nutrition needs.’ I liked the idea. And so for the last eight months I have also been gardening. Now I don’t have to buy any vegetables from the market and we eat much better than we did before. I am delighted. In all my years I have never met a fisherman who was also doing gardening — but it’s great.”









Give me a mother and a father and a healthy child
and I will give you a developed nation.

Mr. Mrinal Kanti Roy
Headmaster, Sahida Registered Primary School, Bhola



Program & partners

Building local capacity, sustaining change and leveraging impact through collaboration, partnership and complementary programming

ABOUT THE PROGRAM & THE PARTNERS

About the Program

Jibon o Jibika (JoJ) was implemented by Save the Children through a USAID Title II Development Assistance Program. The program was explicitly directed at reducing high levels of food insecurity and malnutrition in 13 upazilas (sub-districts) of Barisal Division. It was designed to achieve three interrelated strategic objectives (SOs): 1. Food availability and purchasing power will have increased, 2. The health and nutrition of pregnant women and children under the age of two will have improved, and, 3. Households will be more resilient to shocks that threaten their livelihoods. From 2005 through 2010, JoJ reached over two million people and, as this document has illustrated, had a significant impact on the social, cultural and physical landscape of entire communities. Here, we look at some of the numbers behind the program.

Over five years, JoJ enrolled 457,852 children under two years of age (88% of the total estimated population of children under two years of age in the program area). The program's network of 3,154 community health volunteers provided integrated management of childhood illness, growth monitoring and nutritional counseling to approximately 150,000 beneficiaries (children under two years and pregnant women) each month. Final evaluation results found that the program had a positive impact on indicators of nutrition among children under age two. For example, chronic malnutrition (low height-for-age) was reduced from 35.7% in 2005 to 31.5% in 2009. Severe stunting (<-3SD) was reduced from 11% to 7.9%.

JoJ also developed a strong partnership with the Government of Bangladesh's (GoB) Ministry of Health. As a result, antenatal care (ANC) was offered alongside routine expanded program for immunization (EPI) services in Barisal. Over the course of the program, 201,697 pregnant women received ANC check-ups at these delivery points and 84% of pregnant women in the program area received three or more ANC check-ups compared to only 13% at the baseline.

Because poor water and sanitation is an underlying cause of poor health and malnutrition among children, JoJ included a focus on changing hygiene behaviors and increasing access to water and sanitation infrastructure. JoJ installed 450 new water points (deep tube wells, pond sand filter systems),

rehabilitated 2,877 water points and tested more than 30,000 water points for arsenic, a common problem with ground-water supplies in Bangladesh. The program's final evaluation showed an increase in use of sanitary latrines from 36% at baseline to 74% in 2009. Appropriate hand washing behavior increased dramatically from less than 20% at baseline to 74% in 2009.

Livelihoods and food security components of JoJ helped address underlying causes of poverty by promoting household food production and increasing purchasing power to enable families to better care for their children. The program worked with approximately 30,000 women involved in Homestead Food Production Groups. Each group of 20 female members was provided with support to establish homestead gardens aimed at increasing food availability and household nutrition, as well as enabling women to sell modest surplus in the market. In addition, JoJ supported 440 village model farms, each of which worked with three Homestead Food Production women groups along with small farmers and ultra-poor members of the community. Market groups were formed from among the female garden producers to develop links with local markets and increase household income.

In 2009 the program also rolled out pilot activities in Char Fasson, a remote and disaster prone upazila in Bhola District. These activities tested a range of potential income generating activities (e.g. small-scale fish culture, bicycle and/or motorcycle repair) suitable for extremely poor households. Cash-for-work activities were implemented for households whose employment opportunities were disrupted by Cyclone Aila. Finally, Save the Children tested the use of Village Development Committees (VDCs) in planning and monitoring multi-sectoral activities.

JoJ emergency component worked with communities in southern Bangladesh, one of the most disaster-prone areas of the world, to prepare for natural disasters. This included recruitment and training of local disaster management committees and over 1,700 emergency management and preparedness volunteers, pre-positioning of rescue boats and relief goods, and emergency cyclone drills for some 48,000 residents living in the area affected by cyclone Sidr.

In 2009, the program also replaced and upgraded early warning equipment, pre-positioned relief goods and rehabilitated 25 cyclone shelters and one livestock shelter to help families protect their lives and property following a disaster.

In 2010, Save the Children entered into a new phase of its food security program in Barisal Division with the Nobo Jibon (“New Life”) program, also supported by USAID. Running until 2015, Nobo Jibon will build on the successful strategies developed under Jibon o Jibika while adopting new practices to improve integration of program components, reach new geographic areas and work more strategically through local partners.

About the Partners

Save the Children implemented JoJ in cooperation with three institutional partners, the Cyclone Preparedness Program, The NGO Forum for Drinking Water Supply and Sanitation and Helen Keller International. Additionally, program activities were implemented in coordination and cooperation with the Government of Bangladesh, particularly the Ministry of Food and Disaster Management.

Cyclone Preparedness Program (CPP)

The CPP is jointly managed by the Bangladesh Government and The Bangladesh Red Crescent Society (BDRCS). The BDRCS began in 1965 to establish an early warning system for coastal populations who were vulnerable to cyclones and other natural disasters. As officially mandated in the Government of Bangladesh’s Standing Order for Cyclones, Floods and Famine, the agency complements the government’s efforts to respond to emergencies and develop disaster preparedness plans and programs. In the mid-1980s, the BDRCS established the CPP to promote community participation in disaster preparedness and response. The program now covers 37 sub-districts in Bangladesh and supports nearly 50,000 volunteers who have been trained to disseminate cyclone warnings, manage evacuations, provide first aid and support initial emergency response activities.

Disaster preparedness components of JoJ were implemented with the support of the CPP and its volunteers working in the program area.

Helen Keller International (HKI)

HKI is a technical assistance agency that emphasizes building the technical and operational capacity of local government and non-governmental partners to provide needed services. HKI seeks to develop, test, and scale-up effective development interventions, and to embed sustainable delivery of interventions within partner and community structures. HKI has worked in Bangladesh since 1978, providing technical assistance to government partners and NGOs in various regions of the country, building capacity in areas such as homestead food production, vitamin A supplementation, nutrition education, nutritional surveillance, community-based rehabilitation of the blind and eye health. HKI has a strong record of success in improving the coverage and quality of programs, emphasizing capacity building and, increasingly, behavior change communications.

Implementation of homestead food production and other components of JoJ were supported by HKI, in cooperation with 14 implementing partners.

NGO Forum for Drinking Water Supply and Sanitation (NGO Forum)

NGO Forum is a national service delivery organization dedicated to improving the health status of disadvantaged women, children and men in Bangladesh. It focuses on reducing morbidity and mortality caused by water and excreta-borne diseases by ensuring safe and sustainable water supply, sanitation and hygiene promotion services. The agency works through a mixed software-hardware approach and emphasizes demand-driven programming. The agency was formed in 1972 to support and strengthen water and sanitation projects implemented by organizations in underserved areas, and continues to work through partnership with local NGOs and community-based organizations. Today, it reaches over 22,000 villages in Bangladesh and is an advocate for improved water and sanitation policies.

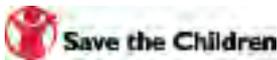
Implementation of water, sanitation and emergency response components of JoJ was supported by NGO Forum and its network of local NGOs and community-based organizations.

ABOUT SAVE THE CHILDREN

Save the Children is the leading independent organization creating real and lasting change for children in need in Bangladesh and around the world. For more than 75 years, Save the Children has been helping children survive and thrive by improving their health, education and economic opportunities, and in times of acute crisis, mobilizing rapid assistance to help children recover from the effects of war, conflict and natural disasters.

Save the Children began programs in Bangladesh in 1972, working initially with families affected by famine and disaster. More than three decades later, we operate in almost every district of the country, directly reaching over 14 million people, including 12 million children each year. With a staff of over 500 and a network of more than 65 partners throughout the country, Save the Children is one of the largest child-assistance organizations in Bangladesh. Our programs include education, health and nutrition, HIV/AIDS, food security, disaster preparedness and response, adolescent development and other initiatives with a focus on improving the lives of children and their families while documenting effective program strategies and advocating for long-term change.

To learn more about the work of Save the Children, please visit: www.savethechildren.org



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Over the past five years Save the Children's Jibon o Jibika (Life and Livelihoods) program has worked to improve conditions for some of Bangladesh's most vulnerable. Based in the remote, coastal district of Barisal, the program addressed three interrelated interventions: enhancing maternal and child health and nutrition, increasing household food availability and access, and improving community disaster preparedness. This book brings to life the program's achievements through the stories of its beneficiaries.

