

Small WORLD

Issue 74 September 2021



Inside: meet smallholder farmers like Mohit who have achieved big success together with you.

**Practical
ACTION**

Big change starts small

HOW CAN WE MAKE FARMING WORK AGAIN?

Smallholder farmers around the world are saying the same thing: that farming no longer works. The weather has become too unpredictable, too intense. Droughts. Flash floods. Violent storms. The impacts of climate change are already being felt so severely that a paradigm shift is happening in the younger generation. Young people in rural communities can no longer see a future in farming, or even in staying in rural areas.

It's vital that we as a world make agriculture work again. Not just because it's a way for people in rural communities to feed themselves and make a living, but because agriculture is where the world's food comes from. It's the basis of our economies. We've learned from the pandemic that we need resilient food systems, food systems that are local. We can't afford for farming to fail.

At Practical Action, our vision is for a world where farming works again for smallholders in the poorest communities. And in this issue of Small World, we explore what we're doing with your help to achieve that.

On pages 3-4, my colleague Menila Kharel explains why we believe that smallholder farmers have the potential to be powerful agents of change. And that for real transformation to happen, the community needs to be in the driving seat.

Practical Action's philosophy has never been about handing out solutions, but about bringing people together to share knowledge and develop solutions collaboratively. And in our feature on pages 6-9, you'll see examples of where we're doing that to amazing effect.

Through decades of experience, we've learned that improving agriculture in communities is twice as effective at reducing poverty than any other approach. The work highlighted in this issue demonstrates that, with the right knowledge and skills, farming can be a pathway to success, and to resilience in the face of climate change.

As always, thank you for being a Practical Action supporter. This work wouldn't happen without you.

Sincerely,



Chris Henderson
Head of Agriculture



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Our farmer field schools, like this one in Zimbabwe, equip communities with climate-resilient farming skills.

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Cover image

Mohit's climate-resilient floating farm in Bangladesh.

From the GROUND UP

We talk to Menila Kharel, who leads our agriculture work in Nepal, about the importance of the community taking the reins as they adapt to climate change.



Menila Kharel

What's Practical Action's approach to working with farmers?

Most smallholder farmers around the world only grow food for their family to eat. Our goal is to support farmers in shifting to a more commercial way of farming, where they grow extra food to sell. We help connect smallholders to markets for their produce, so they can be successful and make a stable income.

The most important thing is that we use a bottom-up approach, where the communities themselves are in the driving seat of changing their lives. We bring them together to share their knowledge, and we share our knowledge and together we find a way to make farming work again.

What kind of knowledge is shared?

In many cases we help farmers rediscover the way their ancestors farmed. And we weave that together with 21st Century agricultural science.

We're living in a world where most rural farmers have become increasingly reliant on chemical fertilisers. These are promoted as a way to boost crop yields, but over time, they do the opposite, robbing the soil of the organic material that fosters life. These chemicals also contribute CO₂ to the atmosphere and add to the climate problem.

Traditional farming methods such as mixing crops, fertilising with manure, and having fallow



In Zimbabwe, women farmers like Thubelihle are combining traditional farming with the latest agricultural science to grow abundant crops.



At a farmer field school in Nepal, traditional knowledge is kept alive.



Modern tools help boost crop yields.



Weather boards help farmers plan ahead.

periods, all add organic matter and nutrients to the soil. While climate change is making farming seem impossible as a way of life, we're showing that if farmers use regenerative agriculture to put life back into the soil, they can grow healthy crops, make money, and nurture their local environment.

In Nepal, we're doing this via community farming schools. Community members work together to keep the traditional skills alive. And we impart new skills, based on the latest climate science, so crops can be grown at commercial scale.

Meanwhile in Zimbabwe, the farmers we're working with are managing a seed-bank of traditional crop varieties that flourish in arid conditions. They are rediscovering and protecting the ancestral knowledge embedded in those precious seeds and using it to thrive.

And in Bangladesh, we've helped introduce "weather boards". These have become the go-to source of information for communities. The boards bring together the latest weather forecasts and market information. This helps farmers know when to plant and when to harvest to get the best crops, and how to protect their crops from potential floods. They can also see what produce is in demand so they can negotiate for the best possible price.

One of Practical Action's strengths is that we are an international community, and we can share knowledge between countries too. In our south-south coffee project, we took farmers from Nepal to Peru to learn the climate resilient farming techniques they are using there. And now those Nepali coffee farmers are putting those techniques into action back home. You can really see the change beginning to spread.

Any how does this approach benefit the planet?

Part of the regenerative farming approach is that farmers use the natural resources they already have at hand, rather than buying in expensive chemicals that contribute to climate change. Often in rural communities, a household will not just grow one type of thing – they grow different crops and vegetables, they have a few chickens, goats or cows. This creates a great opportunity. By using animal manure they have a natural fertiliser, which costs them less and is better for the planet and their crops. Crop leftovers can be fed back to the livestock. It's a circular system that benefits everyone.

🌐 Find out how farmers are using weather boards to access vital climate information at: practicalaction.org/smallworld

Farming for SUCCESS

Meet the smallholders using regenerative agriculture to create exciting new futures for themselves.

Beryl is building an “Awesome” business

Lack of opportunities, coupled with droughts and consistently poor yields have driven the young generation in Kenya away from their rural farming homes to find livelihoods in busy, overcrowded cities. Like many young Kenyans, Beryl Opiyo didn't see any future in farming either. But with training from Practical Action, she has dared to dream big and create an ambitious new business.

Beryl began making peanut butter in a single room, roasting groundnuts in a manual roasting machine, then sorting, milling and packaging them herself. With training and determination over just a couple of years, Beryl has developed her “Awesome” peanut butter brand, using local crops to create a healthy, tasty snack.

Initially, she bought her nuts to process, but after training in regenerative agriculture techniques, she has been inspired to grow her own nuts. This will lower her costs and allow her to grow her business further. Beryl is showing her generation that planet-friendly farming is not merely a way to put food on the table, but to build a thriving business and exciting future.

“My ambition is that my ‘Awesome’ peanut butter will become the best peanut butter company in the region. Thank you to

Practical Action supporters for helping young people like me find an alternative source of sustaining our livelihoods.”

Beryl is just one of 6,000 young Kenyans we're working with in partnership with the IKEA Foundation to prove that regenerative agriculture can make farming an attractive livelihood once again and create thriving local economies.

Our work with young farmers is just one aspect of our work that needs your support. Please make a gift today at: practicalaction.org/smallworld



Mohit is rising above the challenge of floods



It's hard to be a farmer in rural Bangladesh. During the increasingly extreme rainy season, rivers burst their banks, flooding the fields of riverside communities. Farmers like Mohit Gazi face the impossible challenge of

growing crops in a field that is submerged for five months of the year.

“For the last two years, our field has been under water for the whole rainy season,” says Mohit, “We couldn't harvest anything that whole time and we didn't earn any money.”

But after Practical Action worked with him, Mohit has risen to the challenge by using ingenious floating farms.

Floating farms are bamboo cages that rise and fall as water levels swell and recede. In the top half, Mohit grew nutritious pumpkins and gourds. In the bottom half of the farm below water level, he bred fish for eating and selling at market.

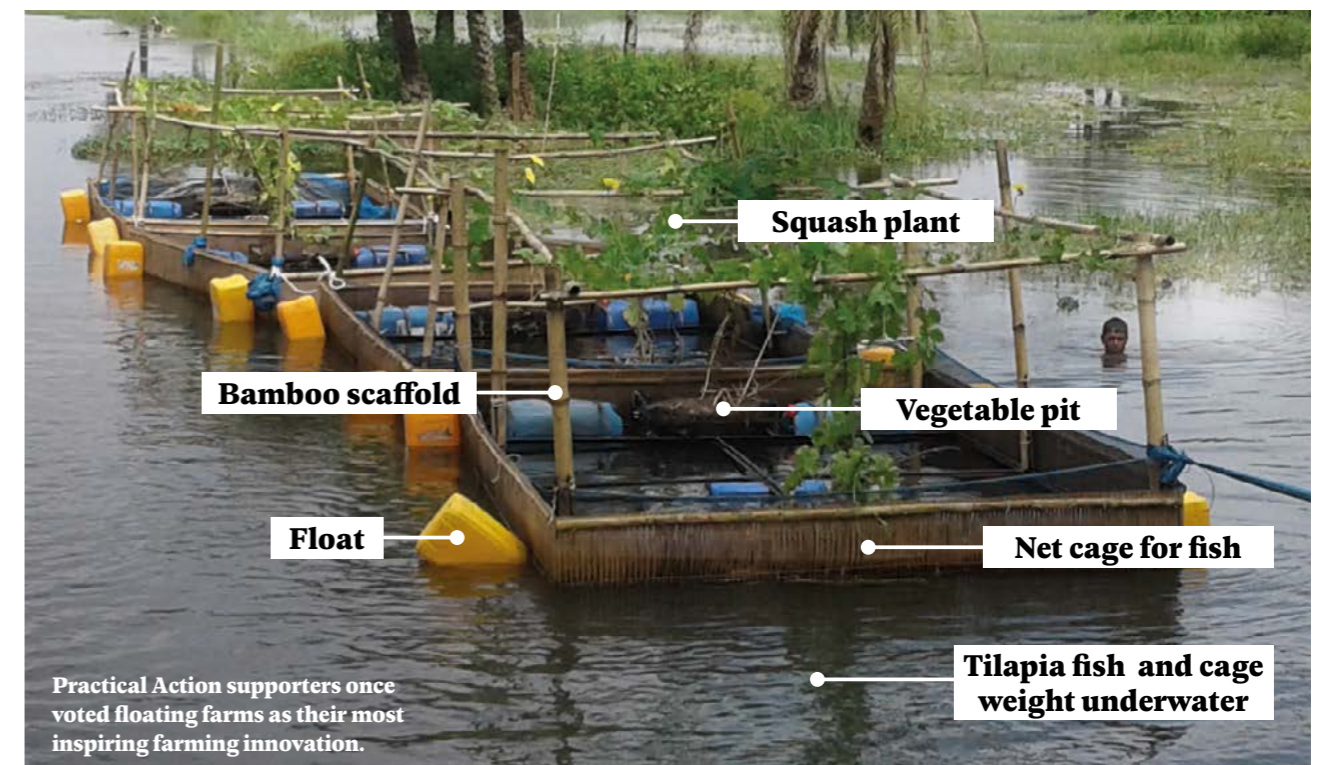
“Every year my harvest improved. Practical Action got me started and made me see what is possible – now I can do it on my own and I feel very hopeful about my family's future. My children have better nutrition and are healthier.”

However climate change continues to create considerable challenges for farmers in Bangladesh.

Dr Faruk Ul Islam, agricultural and disaster expert at Practical Action in Bangladesh, said: “The increased salinity of the water caused by flooding and cyclones has been problematic. Although we have successfully adjusted fish farming to include saline tolerant fish species, we are now following up with farmers to also adapt the vegetable component to the harsh conditions they face.”

Flooding is a challenge that faces more and more farmers around the world, but Mohit has shown that with ingenuity it's possible to grow food and make an income, whatever the changing climate throws at you.

🌐 To discover more about floating farms, visit: practicalaction.org/smallworld



Genaro is diversifying for success



For 150,000 smallholder farmers in the hills of Peru, growing coffee is a way of life. But coffee farming is highly vulnerable to the changing climate. Quality coffee beans require cool temperatures, so as the world gets hotter, farmers

are struggling to grow enough to survive. Many are forced to grow their crops higher and higher up the hills, where the temperature is cooler. But this leads to deforestation, and mountain forests are vital for local biodiversity. We're working with smallholders like Genaro Pérez to develop more sustainable farming techniques.

Genaro is now using an innovative farming method called layer farming, which is developed from traditional shade-growing techniques. By planting five crops that grow at different heights together, Genaro has diversified his crop, boosted production, and he has a more reliable income.

“My greatest pride is the quality of my product,” Genaro says. “Thanks to the technical training program provided by Practical Action, I’m making a bigger profit. Almost all my coffee has been of good quality and I have had good returns even in difficult times.”

Half of Peru’s smallholder coffee farmers are living in poverty right now, but we’re working with regional and national government in Peru to get this planet-friendly farming approach adopted into national policy. This means many more farmers like Genaro will be able to make farming profitable again, while protecting the amazing biodiversity around them.

Your support helps more farmers like Genaro in overcoming the challenges of climate change. Make a gift today at: practicalaction.org/smallworld

From the sky to the soil, how layer farming works

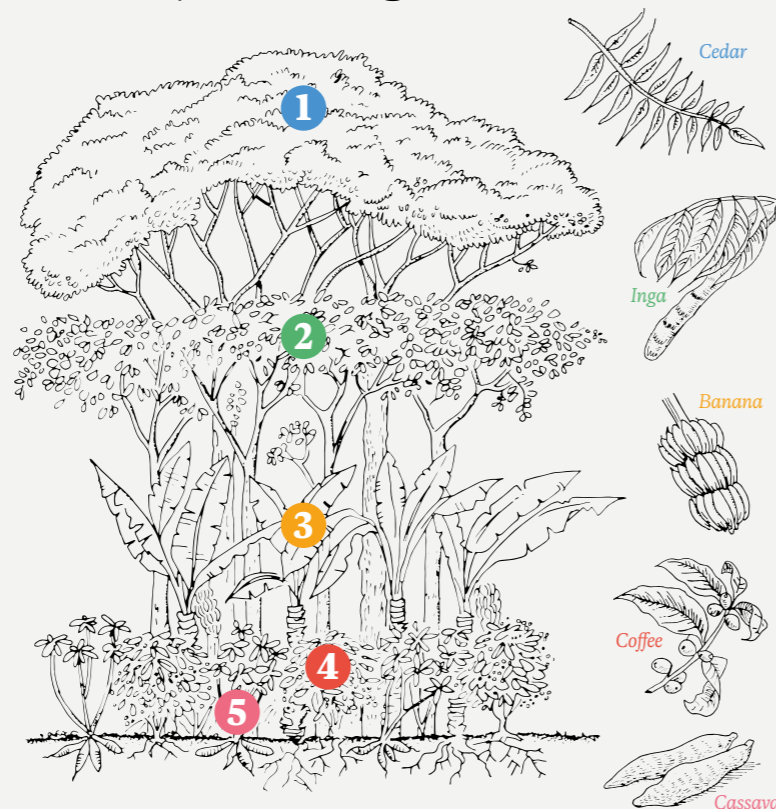
1. Cedar trees grow to 40 metres and form the tallest layer. They provide shade for the plants below, and when mature can be felled for timber.

2. Inga trees provide shade, and they produce nutritious seeds and boost soil fertility.

3. Banana plants grow long leaves that protect the coffee plants from the sun as they mature. Banana crops can also be sold or eaten.

4. Coffee plants take four years to mature, but grown in among beneficial crops they produce some of the best (and most valuable) coffee in the world.

5. Cassava plants produce edible roots from the first year and they also nourish the soil for the other crops.



Mina is thriving with circular farming



Severe cold, heat and droughts are creating challenging conditions for smallholder farmers in Nepal. And it's made worse by the country-wide problem of degraded farm soil that contains little organic matter. In

partnership with Jersey Overseas Aid, we're working with farmers like Mina Bohara to create a circular farming system using a combination of crop and cattle farming.



“As a single woman, the days were very difficult before I started cattle farming,” Mina says. “I had to provide for my family with what I could grow in our field.”

Mina has introduced Jersey cows to her farm and now sells their milk through a local co-operative, which has been strengthened with our support. This provides a stable income for when food crops fail. She uses manure

from the cows to fertilise her soil and improve vegetable yields, and she grows nutritious, climate-hardy feed for her animals, boosting their health and productivity.

“Since the training from Practical Action, I am following improved farming practices for my cattle. I can now prepare good quality feed at my home, which has helped me minimise the cost. I am planning to increase my herd size to increase my income and improve the livelihood of my family.”

By reintroducing traditional mixed farming systems like this, remote rural communities can make a decent, dependable income and boost the health of their land. As well as providing for their families, farmers like Mina are making a big contribution to Nepal's 20-year vision to restore soil health to the country's farmed landscape.

Work like this is only possible with your generous support. Please make a gift today at: practicalaction.org/smallworld



Farmers produce their own nutritious cattle feed.

Thank you for helping TURN THE TABLES



Thanks to your generous support, our project to re-green desert in North Darfur has begun. Mutaz Eltayeb, our project manager in Sudan, has the latest news.



North Darfur is one of the most drought-prone areas in Sudan. Severe degradation of the land and lack of access to water has left farmers and pastoralists struggling to survive and competing for the little resources they have.

The project has got off to a flying start. We began by setting up the conditions for success. This meant getting everyone involved together to discuss ideas and agree priorities. Community leaders and members, government and partners all listened to each other. **It was vital to make sure everyone was on board, and the community leading the way, before we set off!**

Addressing this challenge was the focus of our *Turning the Tables in Sudan* UK Aid Match campaign in 2020. The campaign was a terrific success, raising £3.15 million. This includes £1.48 million of match funding from the UK government, which will go directly to support our work with communities in North Darfur to beat the drought and flourish.

Together we will create a future of possibility through careful water management, solar irrigation stations, planting community forests, regreening pastureland, and building new skills in farming and business.

We've already begun building the community's farming skills through a series of training sessions. For the pastoralists, we trained up 11 community Animal Health Workers. They learned how to recognise and treat the most significant diseases that affect their animals. The training included how to share their new knowledge. The trainees have now become ambassadors for animal health in the community, and they are raising awareness of livestock health and hygiene practices through weekly events. We're already seeing the difference this is making.



Together, the community is taking the first steps to bringing the desert back to life.



YOUR IMPACT

35,600 PEOPLE from 19 villages will build successful livelihoods and adapt to climate change.

500 ACRES of grassland will be rehabilitated.

5 COMMUNITY FORESTS will be created.

Building dams like this will mean water is available for generations to come.

For 48 agricultural farmers in the community, we ran a five-day training workshop. They learned climate-adaptive farming skills and how to improve their yields. This included irrigation and drainage techniques, as well as harvesting and pest control. Again, part of the training was in how to spread these skills to their fellow farmers so the knowledge can reach many more people.

Of course, Covid-19 has been a big challenge throughout. To help the communities protect themselves, we set up 27 hand-washing stations, provided PPE to 50 local vendors, and worked with the state Ministry of Health to create and share advice on how to stay safe.

The next steps for the project are to create five dams and two solar water pumping stations, as well as hand pumps for watering livestock. This will allow communities to retain rainfall when it comes and be able to irrigate crops and care for their animals even during dry spells.

We'll also expand our farming field schools to train a further 1,500 farmers and pastoralists. We'll begin broadcast seed spreading to rehabilitate pastureland, and we'll create community tree nurseries, which is the first stage in creating five new forests. The forests will provide shelter and help maintain soil moisture, so crops can be grown successfully once more.

Despite the pandemic, the *Turning the Tables on Climate Change in Sudan* project has been able to get off to an amazing start. We're all really proud of what we've been able to achieve so far and are excited and eager as we begin the next stage.

Once again, thank you for making this work possible through your generosity. I wish you could see it in action for yourself. But in the meantime, we will keep you updated through your *Small World* magazine.

To help more communities adapt to climate change, please make a gift today at: practicalaction.org/smallworld

TEAM POSSIBLE

As a Practical Action supporter, you are part of a global collective effort to make a world that works better for everyone. Meet some of your fellow supporters making big change possible in their own way.

David sets a cycling challenge

Inspired by the fundraising efforts of Captain Sir Tom Moore, David Post wanted to do something to support a cause close to his heart. As a Practical Action supporter, David feels passionate about helping the people most affected by climate change. And so he has created a cycling challenge for himself to raise funds for Practical Action and two other charities.

While in his 70s, Reverend Post cycled the 1,029 miles from Land's End to John O'Groats twice to raise money for charity – earning himself the nickname “the pedalling parson”. Now in his 80s, he wants to challenge himself to complete the same distance again, but around his local area. He's already well on his way, having cycled 500 miles since the start of the year. He hopes to complete the challenge by October. Thanks to David for his amazing efforts!



Newlyweds Ellie and Maxwell donate their wedding gifts



We were touched to hear from young couple Ellie and Maxwell. They decided that rather than ask for gifts for their wedding, they would ask people to make a gift to support our work with communities.

Ellie said: “I heard about Practical Action via the Radio 4 appeal and immediately decided to support their work. Climate change is something that concerns us all, but I had previously been unaware of the massive challenges it is causing in developing countries and the knock-on effect on communities.”

Thanks so much to Ellie and Maxwell for their selfless generosity.

A Golden anniversary gift from Richard and Karen

Practical Action supporters Richard and Karen Ryder have set up a fundraiser to celebrate their 50th wedding anniversary.

Richard said: “Our relationship with Practical Action goes back a few decades as we have asked relatives whether they would be happy to receive a donation in lieu of a Christmas present for 30 years or so and this is what we have done for our anniversary too.”

We're so grateful for their amazing dedication.



Meet the Change-Makers

This issue we talk to two people who have seen the impacts of climate change with their own eyes and been driven to make a difference. Meet Maria from Practical Action in Peru, and Steven from our partner, EKOenergy.



María Claudia Valdivia

Forestry Engineer, Practical Action

What do you do at Practical Action?

I lead our agriculture strategy in Peru and with the team here I help ensure the changes we make with communities are sustainable. I also make sure learnings from the field are applied in future projects.

What inspired you to work with us?

I got and keep getting inspired by our bottom-up approach. Looking to develop changes in communities, putting communities' needs first and valuing everything farmers can give to make changes possible is really inspiring for me.

What's the best thing about working with farmers?

What most excites me about working with smallholder farmers is everything I learn from them. They really understand the ecosystem they live in, and they have such valuable knowledge that has been passed through generations.

Why is this work important to you personally?

I have seen the negative impacts of climate change on communities; and with the pandemic I have seen how easily food systems are disrupted; it is so clear that urgent action needs to take place.



Steven Vanholme

Program Manager, EKOenergy

What is EKOenergy?

EKOenergy is a non-profit ecolabel for renewable energy. We work for a world where energy is generated and consumed sustainably.

How did you come to work with us?

With the contributions we receive from EKOenergy-labelled renewable energy usage, we finance new solar energy projects in developing countries. Recently, four Practical Action projects have been awarded a grant from our Climate Fund.

Why is this work important to you personally?

Climate change and the collapse of biodiversity are the main environmental challenges of our time. I have been involved in nature conservation work over the past 25 years and have observed that climate action is linked with many aspects of nature conservation. We need climate action now and choosing environmentally friendly renewable energy is an easy step we all can take.

What drives you?

There are so many things each of us can do to make this planet a better place for all of us. I want to do what I can. I enjoy being involved in a project at the crossroads of renewable energy, climate action, nature protection and international solidarity.

🌐 Feeling inspired to make big change possible in your own way?
Visit practicalaction.org/smallworld for ideas.

🌐 Read more about our team members and people we work with at:
practicalaction.org/smallworld

A BIG THANK YOU from Nepal



Thank you so much to everyone who supported our *Turning the Tables on Climate Change* in Nepal appeal. Together, you raised an incredible £3.46 million, including £1.6 million in match funding from the UK government.

Your generosity will support our work with communities around the world. And the match funding you unlocked will support 35,000 people in rural Nepal to adapt to climate change through new farming skills, water availability and business skills.

We'll let you know how the project is progressing in a future issue of *Small World*.



Hot houses and cool solutions

A new partnership to make farming work again for women in Malawi.



We're excited to be combining our skills with those of two amazing partners to support women farmers in Malawi in creating successful farming businesses. Practical Action Consulting will work with renewable energy developer

African Mini Grids, and social enterprise Modern Farming Technologies to create an innovative new approach for profitable, climate-adaptive farming.

Right now, farmers in Malawi face the challenges of erratic rainfall, lack of access to markets, plus as

much as 50% of the crop perishing before it can be sold. The new approach will use a combination of greenhouse farming, solar powered irrigation, and solar powered refrigeration to boost crop yields and ensure that produce reaches new markets in perfect condition for sale.

Atusaye Kayuni, Modern Farming Technologies Director, said: "We are delighted to work in partnership with Practical Action. We aim to demonstrate that this approach can be taken to scale and empower many women in Northern Malawi and beyond."

Joanna Gentili, from African Mini Grids added: "This project is an incredible opportunity to help create food security and employment for people in Northern Malawi. We have created one of the most energy efficient, solar powered refrigerated containers on the market. We are excited to take this innovation to the field."



Take the floating garden challenge

A fun and inspiring activity for young people.

After you've read about floating gardens on page 7, why not try out our floating garden challenge with a young person in your life? It's a fun and informative way to learn about life for farmers in Bangladesh, while testing your creative skills.

As you can see (left), Children from Charles Darwin Community Primary School in Cheshire had a great time making their own floating gardens.

🌐 You'll find everything you need, available to download for free, at: practicalaction.org/schools



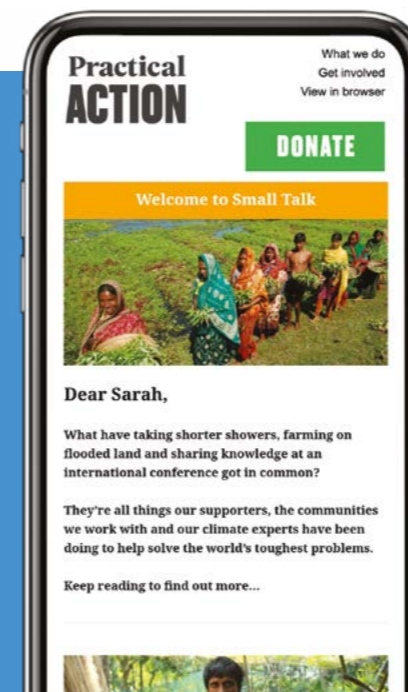
Get a great talk for your group



Our Speakers' Network is here to inspire your community.

Would you like one of our volunteer speakers to give your group a 30-minute whirlwind tour of Practical Action's work around the world? All kinds of groups, from parents to rambblers, have already taken up our offer and found it inspirational.

If you'd like to arrange an online talk for a group that you belong to, please contact: Holly.Hughes@practicalaction.org.uk or **call: 01926 634530.**



DON'T WAIT FOR THE LATEST NEWS...

Get it delivered straight to your inbox by signing up for our monthly e-newsletter, *Small Talk*. It's a quick and simple way to keep up to date on the latest stories and get closer to the amazing change you're making possible in communities around the world.

🌐 **Sign up today at practicalaction.org/smallworld**

We review and update our data privacy notice every year. You can read our privacy notice online at: practicalaction.org.uk/privacy or contact us at: privacy@practicalaction.org.uk

Yes, I'd like to help farming communities succeed

Giving online is quick, easy and secure at: practicalaction.org/smallworld

I would like to give a donation of: £ _____

I enclose a cheque / postal order / charity voucher made payable to **Practical Action**

OR please debit my: MasterCard / Visa / Charity Card

Card number:

Expiry date: /

Signature: _____ Date: _____

Tick here if you're happy to help us save on administration costs by NOT receiving an acknowledgement for this gift.

Please tick here to receive information about how to leave a gift to Practical Action in your Will.



Your donation will help communities around the world tackle tough challenges like the impact of climate change.

Maximising the impact of my gift

giftaid it

If you are a UK taxpayer, the value of your donation will increase by 25% under the Gift Aid Scheme – at no extra cost to you!

Yes, I would like Practical Action to treat this donation and any donations I make in the future or have made in the past 4 years as Gift Aid donations. I am a UK taxpayer and I understand that if I pay less Income Tax and/or Capital Gains tax than the amount of Gift Aid claimed on all my donations in the tax year it is my responsibility to pay the difference. Gift Aid will be used to fund all of Practical Action's work. **Date:** ____ / ____ / ____

Please note HMRC requires us to have your full name and address above to Gift Aid your donation.

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We will post you information about our work, fundraising activities and ways to get involved. If you are happy for us to provide this information by phone or email please provide your details:

Email: _____ Telephone: _____

We take protecting your personal information seriously. We will never sell or swap your details with another organisation. We aim to provide you with a great experience of Practical Action and to communicate with every supporter in the best way possible. To do this, we may analyse your data and obtain further information about interests, preferences and level of potential donations using publicly available sources. We sometimes ask carefully selected companies to do this for us. You can find out more about how we collect and use your personal information by reading our privacy notice at practicalaction.org/privacy. To change how we manage your personal information or opt out of receiving communications from Practical Action call us on **0800 389 1624** or email myprivacy@practicalaction.org.uk

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or give online at practicalaction.org/smallworld. You can also give by calling **0800 389 1624** (Mon-Fri, 9am-5pm)



Pass on the **POWER OF POSSIBILITY**

Create a positive legacy that makes the world work better

You have an amazing opportunity to pass on the power of possibility and make a better world for generations to come. Making a Will is the best way to ensure loved ones are looked after when you're gone, and to remember the good causes you've supported in your lifetime. Please consider making a gift in your Will to Practical Action.

Our useful guide can help you get started. Request your free Will guide at practicalaction.org/leave-a-legacy or email: Liz.Webb@practicalaction.org.uk

