

Small WORLD

Issue 79 **May 2023**



Small is still beautiful

**Practical
ACTION**

Big change starts small

SMALL IS STILL BEAUTIFUL, 50 YEARS ON

One of the things that drew me to work at Practical Action is summed up in our strapline: “Big change starts small”. The ambition, practicality and possibility contained in that simple line really appealed. It’s something I seek to achieve in my own community, by championing practical solutions that can help to tackle the global climate challenge.

The origin of “big change starts small”, and of Practical Action, is in the work of our founder, E.F. Schumacher, whose influential book *Small is Beautiful* is filled with radical ideas that remain a compass for our work today.

“

At present, there can be little doubt that the whole of mankind is in mortal danger, not because we are short of scientific and technological know-how, but because we tend to use it destructively, without wisdom.”

E.F. Schumacher

This year we’re celebrating the 50th anniversary of *Small is Beautiful*. It’s a time to reflect on Schumacher’s legacy, and what he might have thought if he was around today. I feel sure that, like us, he would be passionate about finding solutions to the climate crisis, focussing on the impact to individuals.

Schumacher was already aware of the deep connection between communities and the environment they live and work in. The climate crisis makes this connection more important to our mission than ever before – especially in our work on regenerative agriculture.

On pages 4–6, Chris Henderson, our farming expert, will introduce you to the principles of this world-changing practice. In the special feature that follows, you’ll see some of the techniques of regenerative agriculture in more detail. We’ll also introduce you to some of the people putting them into action.

We believe sustainable farming can help make a world that works better for everyone, and we’re thrilled that our work in this area is in the running for an Earthshot Prize (page 13).

If Schumacher were alive today to see the work you make possible with your support, the thing that might impress him most would be the *scale* of it.

Our work with communities is now linked to changes in government and business policies, practices and investments, so that improvements can be sustained and scaled. We create change in the *systems* that shape lives, positively impacting more people than we could ever work with directly. Now, we are really seeing the power of small actions to make big changes.

Our powerful movement for global change has never been needed more. Thank you for being part a vital part of it.

With best wishes



Sarah Roberts
Chief Executive Officer

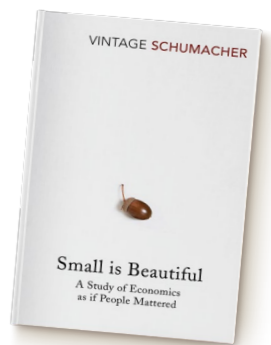


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From small beginnings

Discover how E.F. Schumacher’s book began a revolutionary movement, which led to the practical action you support today: practicalaction.org/smallworld



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On pages 7–11, see how young farmers are using regenerative agriculture to create successful farms.

Farming that RESTORES LIFE

Practical Action is turning farmers around the world onto the benefits of regenerative agriculture. We talk to Chris Henderson, our Head of Agriculture, about this revolutionary way of producing food, and the benefits for people and planet.



What is regenerative agriculture?

Regenerative agriculture is a way of growing food that restores health to the soil.

It is a sustainable alternative to using chemical fertilisers and pesticides, which degrade the health of the soil.

What challenges are smallholder farmers facing?

Around the world, farmers are struggling to grow crops in soils that have become degraded. Why? Well, there are multiple reasons.

One of the biggest is that farmers have come to rely on chemical fertilisers and pesticides. This is because the chemicals can help ensure a successful harvest. But there is a cost. The more these chemicals are used, the poorer the soil becomes, and so the more the chemicals *need* to be used. It's a vicious circle. As Schumacher would say, *"It means solving one problem by shifting it to another sphere - there to create an infinitely bigger problem."*

But there are other factors at play, especially for the communities that we work with.

The climate crisis is biting especially hard for farmers around the world. In Zimbabwe and

Kenya, I've seen for myself how the long-term droughts and flash floods are making it even harder for farmers to grow crops.

Deforestation is another big problem. In Sudan, shade-giving trees have been removed for fuel, and now the desert is encroaching on farm land.

If farmers can't grow crops, they experience extreme hardship. It threatens their very survival. But through our work with rural farmers in all these places and more, we've discovered that even in the most extreme drought conditions, farmers can use regenerative agriculture to restore health to the soil and grow food.

“In agriculture and horticulture, we can interest ourselves in the perfection of production methods which are biologically sound, build up soil fertility, and produce health, beauty and permanence. Productivity will then look after itself.”

E.F. Schumacher

How does regenerative agriculture benefit the communities we work with?

I could take you to Bulilima district, in one of the driest areas of Zimbabwe, and introduce you to farmers who are living through the most devastating drought, and yet managing to grow crops. By introducing organic compost to the soil, they are increasing the soil's ability to retain water. When they add solar-powered irrigation pumps to the mix, they create a powerful solution with a big impact. It means an end to hunger for families and improved health. It means they can thrive, despite the challenge of the climate crisis. (See more on our work in Zimbabwe on page 12.)

What kinds of regenerative agriculture techniques are we working with communities to introduce?

There are many different techniques, each tailored to the community and their individual situation. Often these techniques work together in a circular system, where the output of one process or part of the farm is the input for another. That's when regenerative agriculture becomes really powerful.

So, for example, we've been working with young farmers in Kenya to create circular farming systems. They use manure from livestock to fertilise the crops. They combine manure with waste from the crop and breed worms in it. These worms in turn produce

a nutritious natural crop fertiliser. Some of the farmers we've worked with are now running successful circular farms involving cattle, poultry, rabbits, fly larvae and vegetables where nothing goes to waste and everything feeds life into the system. (See our work with farmers in Kenya in more detail in the feature on pages 7–11.)

Can regenerative agriculture be applied in other types of environment?

Yes, absolutely! The principles can be applied in every kind of farming environment. We're working with rural farmers in Nepal, which traditionally has very fertile areas like rice paddies for growing crops. But intensive farming in these countries is reducing soil organic matter.

Continued overleaf...

Rice-ducks in Nepal boost crop yields and provide additional income.



Xavier is a refugee farmer in Rwanda, using regenerative agriculture techniques to provide food and income.



There we've introduced the novel solution of releasing ducks into the paddy fields. These "rice ducks" swim among the growing rice plants, eating all the harmful insects and weeds. It means the farmer doesn't need to use any chemical pesticides. The ducks' poo fertilises the crops, so the farmer doesn't need to use chemical fertilisers either.

Farmers we've worked with are finding that rice ducks are boosting their crop yields by 20%. In addition, because no chemicals are used, the crops are organic, so they can be sold for a higher price at market. Again, regenerative agriculture is a win-win for people and planet.

Can you explain more about the benefit of regenerative agriculture for the planet?

Agriculture has become one of the most damaging and polluting things humans do. So if we're going to stop the climate crisis, we have to change the way we farm.

Chemical fertilisers and pesticides take a lot of energy to produce, and that energy comes from fossil fuels, producing a lot of CO². These chemical inputs are toxic to nature, damaging the ecosystem and biodiversity. It makes the natural world poorer with every crop. Regenerative agriculture on the other hand works with nature, instead of trying to control it.

This year, Practical Action is celebrating the 50th anniversary of our founder E.F. Schumacher's book, *Small is Beautiful*. How do his principles line up with this new regenerative farming approach?

I'm impressed by the constant relevance of Schumacher's wisdom. He knew the important role that smallholder farmers play in the food and farming system. He knew that to make a better system, we've got to make agriculture accessible to the majority of people who live in rural areas.

It's because we follow his principles that our work with communities does not stop at introducing communities to regenerative agriculture. This is just the beginning in fact.

What really makes Practical Action different is that we think beyond the individual farmer. We know that by working together, farmers can create reciprocal benefits for each other. We help to connect smallholder farmers with each other and with local markets. By working together like this, they create thriving rural economies, providing healthy, local food for people in nearby towns and villages. Everyone wins. And regenerative agriculture is at the heart of it all.

Read on to discover the regenerative farming techniques we're developing with young farmers in Kenya.

To learn more...

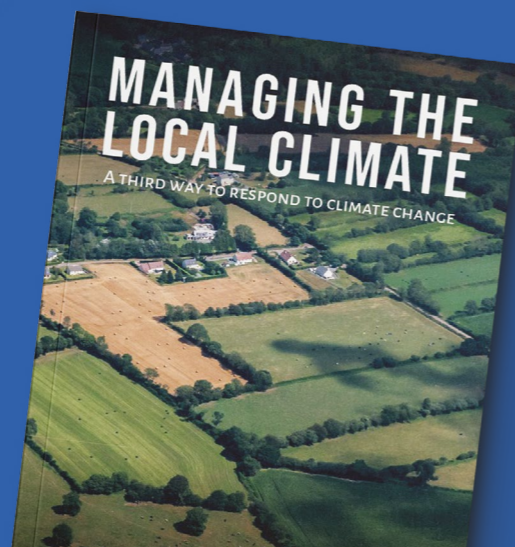
If you'd like to dive deeper into the fascinating topic of regenerative agriculture, try these recommendations from some of the team at Practical Action. **You'll find links to all of them at: practicalaction.org/smallworld**

Article: *No soil, no food*

A story in the Kathmandu Post, recommended by Menila Kharel, Thematic Lead of Sustainable Agriculture and Markets.

Book: *Managing the local climate: a third way to respond to climate change*

Rosanna Denning from Practical Action Publishing recommends our new book, which sets out a novel way of approaching the climate change challenge, using small-scale land management to influence local climates.



A GROWING ECONOMY

Our ambitious programme to encourage young "ecopreneurs" in Kenya puts regenerative agriculture at the heart of thriving new local economies.

Despite high youth unemployment in Kenya, few young people consider farming a viable livelihood option. They know the climate crisis is making it harder to grow crops successfully. Erratic rainfall and ongoing droughts mean many farmers struggle to grow enough to feed their families, let alone earn an income. On top of this, young Kenyans have too little money to invest in the seeds and equipment they'd need to start up, and less access to land, which is a particular challenge for women. It's no wonder that many young Kenyans are leaving their rural homes to look for work in cities.

Making farming work for young people

Our Transforming Rural Economies and Youth Livelihoods programme (TREYL) is founded on our belief that with ingenuity and collaboration, farming can work for people and planet, creating opportunity and income.

In partnership with the IKEA Foundation, we are working with 6,000 young people over three years, to introduce new skills in regenerative agriculture. By also increasing their business skills, these young farmers can turn their farming efforts into successful enterprises, and work with other "ecopreneurs" to scale-up what they do. This provides opportunities for even more young people.

Together we are using regenerative agriculture to transform lives and local economies, with an impact that grows and grows.

In this feature, we'll explore some of the regenerative agriculture techniques the young farmers are using, and then meet three of them to see how they're putting these techniques into action. Thank you for helping make work like this possible through your support.



We're working with young farmers like Martha to make farming a successful, sustainable livelihood.

Welcome to the regenerative farm

Here is a snapshot of some of the regenerative farming techniques that we are putting into action with young farmers in Kenya. The goal of these techniques is to help farmers produce food cheaply, in a small space, and in a way that protects the local environment and biodiversity.



Cone gardens

Cone gardens are a space-saving way to grow healthy, nutritious leafy vegetables. They are particularly useful for families with limited land. The structure of the gardens makes it easy to manage pests and remove weeds. The gardens are filled with sandy soil and organic compost. These gardens require no chemical fertilisers or pesticides.

Hydroponics

Hydroponics is the process of growing plants in water, rather than soil. It is a highly efficient and cheap way to produce crops to feed livestock. Compared to conventional field growing, hydroponics produces animal food 10 times faster, using 5% of the land, with less water, no chemical fertilisers and no waste – the animals eat everything. Plus, the system requires less labour from the farmer.



Vermiculture

Vermiculture is the process of breeding worms to produce compost. Worms eat half their own weight in manure and organic waste every day. Every kilo of worms produces more than 10 kilos of nutrient-rich compost each month. This compost removes the need for chemical fertilisers for growing crops. It also helps the soil retain water, and improves the taste of vegetable crops.



Larvae farming

Breeding black soldier flies is a profitable and sustainable way to produce manure and food for livestock. The growing larvae eat organic waste. Within two weeks they are mature and can be sieved from the soil. The larvae are a cheap, high-quality source of protein for chickens, which help boost their health and their growth rate. The manure-rich soil they matured in can also be used to fertilise crops.



The enterprise builder

Martha Anyango's farm started out small. She used chemical pesticides and fertilisers, but people complained about the taste of her crops. When the opportunity came to work with Practical Action and learn about regenerative agriculture, she knew it could make a big difference to her life.

Martha now uses hydroponics to grow crops for her chickens. She uses vermiculture to create fertiliser, and she uses urine from her rabbits to make a natural pesticide for her leafy vegetable crops.

'Previously, my agriculture work was not serious. I reared 50 chickens and sold two a month. Now I rear 500 and can sell 300 a month. I no longer spend

money on chemicals, and I am also making more money from my crops.'

Martha has plans to double the size of her poultry farm and wants to employ other young people to help her. Already she is mentoring 15 young farmers starting out.

“

I am empowered. Before I worked with Practical Action, farming was just a pastime. Now it is an enterprise. Members of my family and neighbours come to me for knowledge.”



Martha uses urine from her rabbits as a natural pesticide.



Collins breeds larvae to sell as chicken feed to local farmers.

'The larvae guy'

Collins Ochieng started out as a chicken farmer. But when the price of chicken feed became too expensive, he started searching around for cheaper alternatives. A friend introduced him to the process of breeding black soldier fly larvae, and his life was changed.

With support from a local mentor and Practical Action, Collins has developed new business skills and built his larvae breeding enterprise. He now employs two people, and they have over 550 larvae basins, each holding a kilo of larvae. Every week they produce and sell around 30kg of larvae to local chicken farmers.

Collins has big ambitions for the future. He wants to work with local government to use organic waste

from markets to feed the larvae and grow the business further. As well as protein, the larvae farm produces lots of manure, which could help regenerate soil health for local crop farmers.

“

Around here they call me the larvae guy. People are really starting to appreciate me. They notice the difference when their chickens eat the larvae. They grow fast and are more resistant to disease.”

The mentor



Kennedy is inspiring many more young people to become farmers.

Since we started working with **Kennedy Ojwang**, he has transformed his farming business and so much more. He has become a mentor to many young farmers and is making a community-wide impact.

Kennedy has embraced regenerative farming techniques and has created a circular farm. Using vermiculture and hydroponics, he creates low-cost, high-nutrient food for his chickens. His worm compost fertilises his corn crops, and his crops help feed his livestock.

“

In three years of working with Practical Action, my income has gone up. A tenfold increase.”



Kennedy's farm has grown so much that he employs three people full time. But using his mentor training from Practical Action, he also encourages local young people to take up regenerative farming. He advises them to get together and create Youth Loan and Savings Associations. Members of these associations contribute some of their income, and the larger pool

of money is used to create regular loans for members who need financing to grow their business. Essentially, they loan to each other and the interest on the loan is distributed among them.

Kennedy works with around 60 local farming groups, each with around 30 members. And with his wife, has become a champion of gender equality. Together they talk to families and young couples and encourage equality. As a result, couples are sharing work and chores evenly, and more girls are being educated at school.

He has a clear vision for the future of his community: *'We will have a much more secure community. A community that is gender sensitive, that is doing productive agricultural business. Stable families, with food on the table and money in their pockets.'*

None of this life-changing work is possible without you. Please make a gift today and help us work with more people like Collins, Kennedy and Martha: practicalaction.org/smallworld



Farmers in Zimbabwe are **PLANTING FOR PROGRESS**

Your support has helped rural farmers use regenerative agriculture to create sustainable livelihoods in one of the driest regions of Zimbabwe.



Solar water pumps allow farmers to irrigate their crops year-round.

In 2019, Practical Action supporters responded generously to our UK Aid Match appeal to fund new work in Zimbabwe. Together you donated over £1.65 million. This was matched by the UK Government with over £1.48 million, putting the ambitious Planting for Progress programme into action.

Over the last three years, we have worked with more than 1,000 farmers in Gwanda and Bulilima districts. Our shared goal was to help farmers overcome the challenge of the relentless drought, to grow abundant crops, and improve their livelihoods.

Thanks to your support, we have been able to make amazing progress together. With access to new boreholes, farmers have adopted solar-powered irrigation in their gardens. With new seed varieties that are better adapted to local weather conditions, alongside

new skills in regenerative farming, the community is seeing their parched land come back to life.

YOUR IMPACT

1,300 farmers are using new skills and solar irrigation to boost their crops

6,500 people have better livelihoods as a result

Sukoluhle Nleya, was one of the farmers we worked with in Bulilima. She said:

“The problem we were facing here is water, we had to travel more than 4km to get it. Now water challenges are a thing of the past as we have piped water. We are hoping to grow crops throughout the year, and we are being assisted to use the calendar in deciding the best crops to cultivate at a given time.”

As we come to the end of the three-year Planting for Progress programme, all the community solar gardens are producing crops such as cabbages, rape, carrots, chou moellier kale and onions – enough to feed farming families with extra to sell for an income, creating sustainable livelihoods.

It’s thanks to the efforts of the community and the team on the ground in Zimbabwe that Planting for Progress has been such a huge success, despite beginning just before the Covid-19 pandemic.

Akinyi Walendar, Practical Action’s Africa Director, said: *“The emergence of Covid-19 presented us with a challenge, but we worked hard to ensure that our project was not derailed despite the chaos it caused.”*

The impact of supporters’ gifts has been huge. Our work has helped farmers in Zimbabwe to double their food production and improved their livelihoods. We are grateful to you, and we hope you continue to support us in the future so that we can continue to reap these benefits.”

By making a gift today, you can put more work like this into action: practicalaction.org/smallworld

Earthshot Prize nomination

Practical Action is delighted to announce that our work introducing sustainable farming techniques to rural communities has been nominated for an Earthshot Prize.

The Earthshot Prize was designed to find and grow solutions that will repair the planet by 2033 or be in place within the next decade. The team behind the prize, which includes HRH Prince William and Sir David Attenborough, “believe in the power of human ingenuity to prove to us all that the seemingly impossible is possible”. We feel the same way! And we’re truly humbled that our work has been recognised in this way.

The Centre for Global Eco-Innovation Centre at Lancaster University put forward our work introducing sustainable farming techniques in Africa, Latin America and Asia for the Protect and Restore Nature Earthshot Prize. We couldn’t have done this innovative work without you.

The prize awards £1 million each to five winners so that they can scale up their solutions and create change on a global scale.

Akinyi Walendar, our Africa Director, said: *“We’re thrilled to be nominated. As you’ll have read in the special feature on pages 7–11, soil degradation is a serious problem, with one-third of the world’s soil being moderately to severely degraded. This greatly impacts farmers’ incomes, food production and rural economies. In Kenya alone, more than 48% of the land is agricultural, but many young people and men are leaving rural communities in search of jobs in cities. This has a profound effect on food production. We are working to reverse this trend, revive traditional farming practices that improve soil fertility, increase incomes and build a thriving rural economy in Kenya and beyond.”*

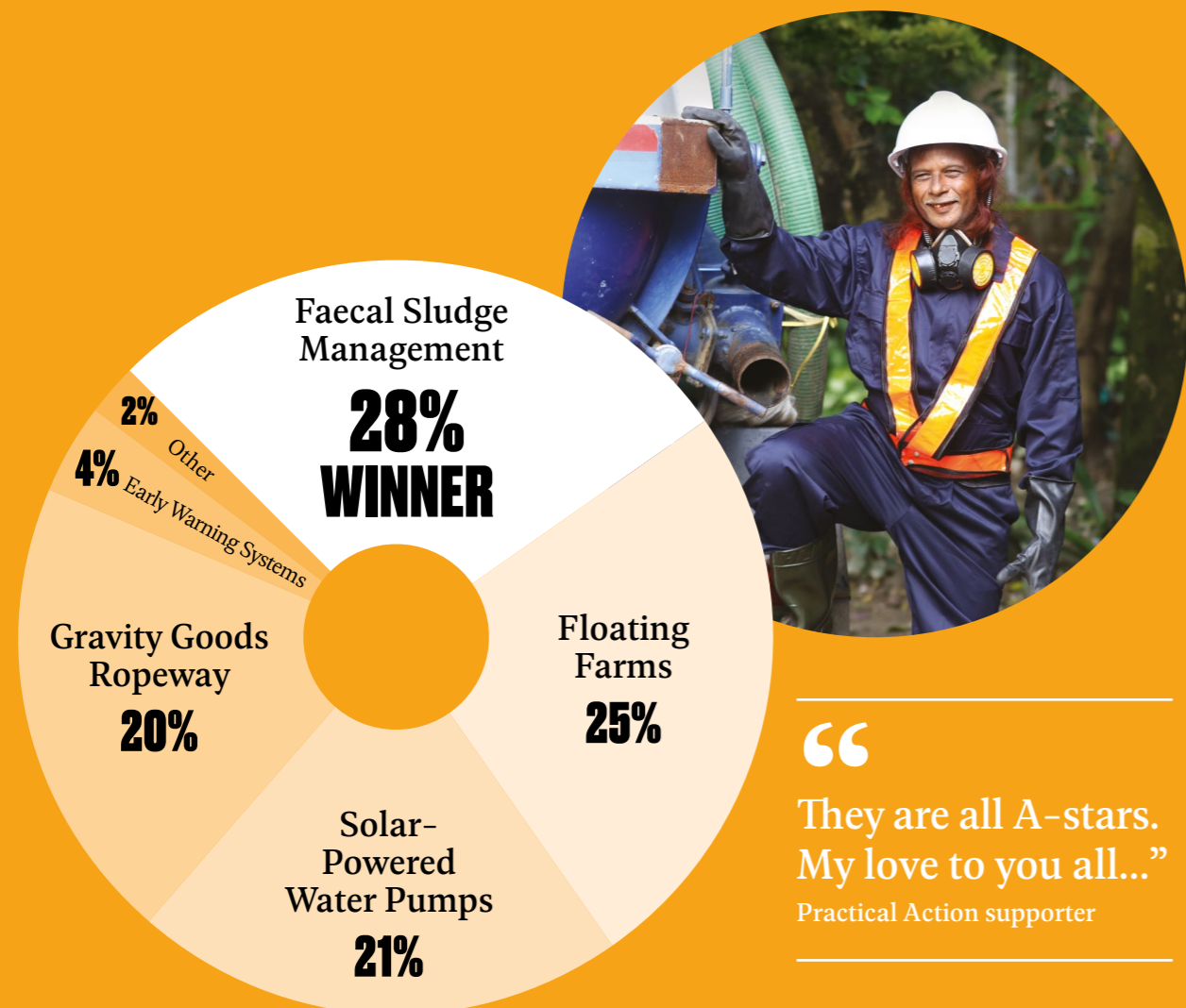
The Earthshot Prize team, led by Chair, Christiana Figueres, will select 15 finalists – three for each Earthshot category. Finally, five winners will be announced at the awards ceremony in December. Whatever the outcome, getting this far and being recognised feels great. Thank you again for making this work possible with your support.

Sign up to our email newsletter, Small Talk, and you’ll be among the first to know if we make it to the next round: practicalaction.org/smalltalk



YOUR FAVOURITE SOLUTION

After decades of working with communities to overcome their greatest challenges, we've created some ingenious solutions together. **In the last issue of Small World, we asked you to vote for your favourite. And here are the results.**



“They are all A-stars. My love to you all...”
 Practical Action supporter

Thank you for taking part, and for the lovely messages of encouragement and support you sent. Most of all, thank you for your gifts, which make all of these solutions, and many more, possible.

If you'd like to read more about them, visit practicalaction.org/smallworld

Hot Bolivian breakfast

We asked our teams around the world to share recipes that you might like to try. Here's a delicious recipe from Monica Cuba in our office in Bolivia.



Ingredients

- 1 litre of water
- 1 cup quinoa
- 3 cinnamon sticks (or ½ teaspoon cinnamon powder)
- 4 cloves
- 4 tablespoons of cornflour
- Sugar to taste
- Milk to taste
- 1 apple, peeled and grated.

Method

- 1 Add the quinoa to 1 litre of water with the cloves and cinnamon. Bring to the boil and then simmer for 10-15 minutes until it is cooked.
- 2 Dissolve the cornflour in half a cup of cold water. Add this to the pan of simmering quinoa and stir while it boils and thickens (if you want it thicker, add one or two more spoonfuls of cornflour).
- 3 Add the sugar and grated apple. Bring to a final boil. Serve in cups or glasses and add a splash of milk to taste. Enjoy when it's cool enough to drink!

Women's Day fundraiser at Wahaca

Thank you to Wahaca restaurants for choosing Practical Action as their charity of choice for International Women's Day.

Leyla Kazim – a Practical Action ambassador and presenter on BBC Radio 4's award-winning *The Food Programme*, joined Crystelle Pereira, finalist on *The Great British Bake Off* in 2021, and Wahaca co-founder, Thomasina Miers for "Plates Shared": a supper club to mark this year's International Women's Day.

of gender equality is inspiring, making them a brilliantly-placed charity for us to be working with to mark this very important day."

The trio hosted the event with guests enjoying a specially created five-course menu at Wahaca in Shoreditch, London. Together they raised a brilliant £2,000 for Practical Action.

Beth Palmer, Senior Brand Management for Wahaca said, "We are delighted to be supporting Practical Action with our International Women's Day supper club this year. Their work empowering women and in the advancement



Share your fundraising story with us, and you might see yourself in a future issue of Small World. **You'll find all our contact details on page 3.**

My gift to make more ingenious solutions possible.

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: _____

If we have your email address we will email you an acknowledgement for this gift, alternatively we will post a letter of acknowledgment. **Tick here if you're happy to help us save on administration 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 (below).

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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

Please return in the envelope provided: Practical Action, The Robbins Building, 25 Albert Street, Rugby CV21 2SD
or give online at practicalaction.org/smallworld. You can also give by calling **0800 389 1624** (Mon-Fri, 9am-5pm)



Write something small

CHANGE SOMETHING BIG

When our founder, E.F. Schumacher, wrote *Small is Beautiful*, he could never have imagined the huge impact it would make, and continues to make today.

By writing or amending your Will to include a gift to Practical Action, you can make a huge impact too, improving countless lives in the communities that need your help most of all.

Would you like to get our free Wills guide, explaining why a gift in your Will is perhaps the most important gift you could make in your lifetime?

Email: Liz.Webb@practicalaction.org.uk today,
or visit: practicalaction.org/leave-a-legacy