CABI in review 17

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Front cover image: CABI's Better Cotton project in Pakistan © Asim Hafeez

Philip Walters, MBE, Chair

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Foreword from the Chair

The past year has been a challenging one for the organisation but one in which significant progress has been made in a number of areas. Overall, the financial results were disappointing with a slight decline in total net revenue and a reduction in operating surplus relative to the prior year, both of which were below our original targets. Nevertheless, a lot of hard work and careful control of costs by the management team and staff meant that the organisation has built a stronger pipeline of forward revenue opportunities, has remained in good financial health, and looks poised for a stronger year in 2018.

In 2016, the Board had been particularly concerned about CABI's core Publishing business which had shown a downturn in sales. I am pleased to report that good work by the salesforce, coupled with the launch of the new CAB Direct platform, helped to bring about a turnaround such that we saw 7% overall growth, 3% organic after stripping out the benefits of exchange rates. We also undertook a major strategic and financial review of CABI's overall Knowledge Business to identify the key levers and opportunities towards creation of stronger growth and greater future value in this area.

In International Development, donor funding and government budgets were also much tighter and this led to protracted decision-making from partners in some cases. However, by the end of 2017 we had been able to secure renewed funding commitments to Plantwise and other programmes up to 2020 from key donors such as the UK Department for International Development (DFID), the Swiss Development Cooperation (SDC), the Netherlands Ministry of Foreign Affairs (DGIS) and the Australian Centre for International Agricultural Research (ACIAR). In particular, we were delighted to secure support from DFID and DGIS for the new Action on Invasives programme which is targeting major pest and disease problems affecting agriculture in Africa and Asia.

A particular highlight of the year, and one which had not been part of our original plan, was the acquisition of and merger with SciDev.Net, an organisation offering news, analysis and information about science and technology for global development including agriculture, environment, health, governance, and more.

The integration of two organisations of very different scale and background can often be problematic but the Board was impressed at how smoothly this went – underpinned by both sides having strong shared values in independent, objective, science-based analysis. The combined power and intellect from the merger is already opening up exciting new business opportunities.

The ongoing process of Board renewal has continued in 2017 with Mr Roland Dietz stepping down after two terms of 3 years and Madam Xiangjun Yao stepping down at the end of her first term due to the demands of her full-time commitments with FAO in Bangkok. We were pleased to welcome Mr Andrew Jack, a journalist with the Financial Times of London and a SciDev.Net trustee, to the Board as part of the merger as well as Mr Roger Horton, former CEO of Taylor and Francis, the well-known commercial academic publisher. We continue to search for a replacement for Mme Yao who will help us maintain the gender and geographic balance of the Board. At the end of 2017, each of the Non-Executive Directors gave a short video interview to highlight their views of the way in which CABI is playing its part in helping the world achieve the Sustainable Development Goals (SDGs). These are available on the CABI website and I would encourage you to take a look at them if you have not already done so.

Finally, it is with some sadness that I have to inform you that I will be stepping down from the Board after the next meeting in June, having completed 7 interesting and enjoyable years as a Non-executive Director, the last 3 of them as Chair. However, I am pleased to say that Roger Horton has agreed to take over from me and I am confident that he will continue to take the organisation forward. It has been a great pleasure and a privilege to have served CABI over that period, getting to know more about the fantastic work it does and meeting the committed and enthusiastic members of staff from around the world. CABI is a very special organisation, and I have every confidence that it will continue to flourish going forward. I wish it and all those involved with it all the very best for the future.

Foreword from the CEO

2017 was the first year of our latest Medium Term plan covering the period to 2019. It is fair to say that the situation we faced at the beginning of the year was rather different from what we envisaged when the plan was written! It has been a tough year for the organisation as we have faced headwinds from a number of political, economic and social trends particularly in relation to tight funding for academia, questions over the effectiveness of overseas development assistance, and significant changes in government focus in both Northern and Southern hemispheres. These challenges meant that we fell short of our financial targets, albeit still delivering a healthy surplus. Despite this, we have already delivered, or are on track for, 84% of the milestones that we set ourselves in the Medium Term Plan so CABI has come through the year well and had significant successes leaving us in a stronger position at the beginning of 2018.

Our plan was very clearly framed around delivery of the Sustainable Development Goals (SDGs) and this year's CABI In Review has been structured around case studies which show how CABI is contributing to the global achievement of the SDGs. Our investment in staff with sociology and economics backgrounds has given us much greater capability to assess the long-term outcomes and impacts of our programmes and I am delighted that we can now report progress in terms of the changes we are bringing to lives around the world, not just to CABI's finances.

SDG 1 (No Poverty) is at the heart of development and CABI's focus is very much upon improving market access for farmers so that they can improve their incomes by trading more of their output at better prices. Sometimes, farmers struggle with a lack of physical infrastructure to allow them to get their crop to market but the most pernicious barriers are often invisible – they are the result of rules and regulations that may be difficult for farmers to identify, understand and comply with. An important part of our work is to help smallholders to overcome these non-tariff barriers and also, at the policy level, to encourage countries to harmonise approaches and standards. This aspect of our work also links closely to themes from **SDG 12 (Sustainable Production)** where we look at ways in which farmers adopt integrated practices of plant, seed and soil health so as to improve the long term quality, quantity, safety and climate resilience of their crops and the land on which they are grown.

SDG 2 (Zero Hunger) is very much at threat from the clear and present danger from invasive species worldwide, but no more so than in Africa and Asia where smallholder farmers have limited resources and little access to environmentally-friendly means of controlling the threats to their crops or livestock. During 2017, we were supported by DFID to assess the significant threat to food security in Africa arising from the arrival of fall armyworm, a newly-arrived pest from the Americas. The results were shocking but unfortunately proved correct as large swathes of maize and other crops were devastated by this pest. We are extremely grateful that the threat has now been recognised by multiple agencies and that DFID and DGIS have provided significant funding to help CABI take positive action on the ground. These efforts are driven through our new flagship programme, Action on Invasives, which draws on CABI's many years of expertise in this area, covering both developing and developed country problems – all of which contribute to **SDG 15 (Life on Land)**.

SDG 4 (Quality Education) is addressed throughout CABI's core Publishing products and it is welcome to see this range coming back into stronger growth again as a result of a renewed focus in 2017. At the end of the year, we were sorry to lose Andrea Powell. She had been with CABI for 26 years, and successfully led the business for the last 12, during which she oversaw the transition to the digital age. Nevertheless, we are delighted to have recruited a very strong successor – Dr Andy Robinson – who I am confident will be able to lead the business forward to further success. Our case studies for this CABI In Review focus on the way in which we are contributing to lifelong learning and knowledge sharing beyond the university, building upon the wealth of information in our databases through the development of advanced education tools and by using the newly acquired capabilities of SciDev.Net to train researchers and journalists to communicate about science more effectively.

Addressing **SDG 17 (Partnerships for the Goals)** is very much at the heart of CABI's strategy. None of our work would be possible without the commitment and support of many partners around the world – particularly the national agricultural research institutions of our member countries. Nowhere is this more important than in Plantwise. In 2017, Plantwise continued to grow, bringing in new partners and extending collaboration with existing partners. In total, CABI worked with 172 different in-country organisations and departments to implement Plantwise activities in 34 countries. While government departments (mostly extension and plant protection services) form the largest proportion of partnerships, NGOs and a growing number of private sector partners also came on board with 28 farmer-based organisations, agro-input suppliers and other companies listed as active participants in 2017.

I hope you enjoy reading this review and learning more about the variety of work that CABI delivers. We can show that CABI makes a positive difference to millions of lives worldwide through improved livelihoods, greater food security and better education. It remains a tremendously exciting and enjoyable place to work and thanks to the hard work and self-sacrifice of everyone here it achieves far more than many organisations of much greater size – I am proud to be a part of that!

2017 in review

CABI awarded £6.38M funding to develop pest risk information service

JANUARY

CAB Direct highly recommended by CHOICE magazine

FEBRUARY

CABI-led Plantwise programme wins the 2017 Bond Development Award for Innovation

MARCH

Plantwise wins the 2017 St Andrews Prize for the Environment

APRIL

CABI's Nature vs Invader exhibit wins gold at Chelsea

MAY

CABI scientist receives the International Friends Award from the Chinese Academy of Agricultural Sciences

JUNE

CABI–SciDev.Net merger creates stronger organisation for sustainable development

JULY

Sci Dev Net

The widely acclaimed CAB Thesaurus has received a major update

AUGUST

Africa faces permanent US$2 billion+ maize deficit if fall armyworm poorly managed

SEPTEMBER

CABI calls for collaboration to boost use of biocontrol by smallholder farmers

OCTOBER

CABI's Dr Kuhlmann highlights importance of digital technology at G20 Agricultural Chief Scientists meeting

NOVEMBER

CABI publishes practice brief on climate-smart pest management

DECEMBER

CABI–SciDev.Net merger creates stronger organisation for sustainable development

In 2017, **CABI** and **SciDev.Net** – the world's leading source of reliable and authoritative news, views and analysis about science and technology for global development – merged, creating a stronger and more diverse combined organisation to help boost both organisations' shared missions of improving lives around the world.

Reaching **100 million readers every year**, with the assistance of core funding from SIDA, SciDev.Net produces news and feature articles, opinion pieces, multimedia packages and data visualisations in English, French, Arabic and Spanish. Its specialist journalists, based in hubs in the Middle East, Africa, Latin America and Asia, generate articles shared by over 460 outlets.

CABI is an international not-for-profit organisation that improves people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment. Aligning its strategy with the Sustainable Development Goals (SDGs), one of CABI's priorities is putting scientific knowledge into people's hands, which the merger with SciDev.Net helps it to achieve.

Already, the merger is leading to innovations in the way research is published and shared, contributing to better development communications and extension.

In collaboration with the Robert Bosch Stiftung, SciDev.Net is creating a science communication training facility to help journalists access research and help researchers communicate science.

With support from The Rockefeller Foundation, SciDev.Net is helping to enhance the discussion about science and development through thematic residency programming at The Rockefeller Foundation Bellagio Center.

And recently, SciDev.Net received an award from the Egyptian Government for helping to found and support Egyptian Science Week.

"We are delighted to have joined with SciDev.Net, and at the smooth merging of our two organisations. It will help further boost our shared track records of impact in providing information, advice and expertise to improve sustainable development."

Dr Trevor Nicholls, CEO, CABI

Young girl in a market in Ghana ©Evans Ahorsu

1 NO POVERTY

END POVERTY IN ALL ITS FORMS EVERYWHERE

Today, 836 million people still live in extreme poverty. Many depend on small-scale farms for their livelihoods.

Without adequate knowledge about plant health or access to regional markets, farmers remain trapped in a cycle of poverty, struggling to control crop pests and satisfy the demands of food quality and safety standards. It is vital that they have access to the knowledge and resources they need to grow more, sell more and ultimately raise themselves out of poverty.

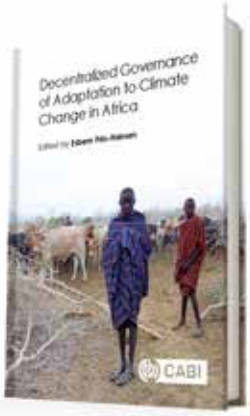
500 million smallholder farmers stand to gain from trading high-quality produce locally, regionally and internationally. In so doing, they will also sustainably feed the world's growing population.

Helping small-scale farmers lift themselves out of poverty

CABI works to increase the movement of food from 'field to fork' by collaborating with people and organisations across the supply chain. We do this by breaking down barriers in agricultural trade and helping small-scale farmers to build successful and viable businesses so they can ensure their own sustainable incomes.

We share practical knowledge with farmers and provide training to improve the quality of what they grow, enabling them to receive a fairer price for their produce. We also help them to understand the needs and expectations of markets, and link them with food manufacturers and retailers.

2017 saw us working with farmers and people in the food supply chain all over the world, from individuals to governments. Over the page are two of our projects.



Vegetable exports from Ghana worth US$15M start again

CABI's work in partnership to improve **Ghana's food safety** – or phytosanitary – systems means vegetable exports worth US$15 million a year have started again following the lifting of a ban imposed by the EU in 2015.

Trade was suspended because of concerns about the management of quarantine pests. The ban's removal means Ghana is once more exporting valuable chilli peppers, eggplants and gourds to Europe.

One farmer benefiting from the lifting of the ban is Ernest Joe Agidi of Ada Irrigation Co-operative Farmers Association, who has a 12-acre farm.

"[This] will allow me to start producing chillies and Asian vegetables for export again. I will be able to make more income to pay my workers, my children's school fees and also invest in other ventures."

As part of a €1.8 million project – part-funded by the Netherlands Ministry of Foreign Affairs, the CABI Development Fund and the private sector – CABI and partners are helping to protect the livelihoods of Ghana's vegetable growers by improving their food safety know-how throughout the horticulture supply chain.

Work includes streamlining inspection and export certification, enhancing horticulture production procedures, improving sorting, inspection and packing facilities, promoting good agricultural practices, and training farmers in quarantine pest surveillance.

"The project has improved the shortcomings in the phytosanitary export certification system in Ghana. The current phytosanitary safeguards are sufficient to ensure that Asian vegetables from Ghana destined for the EU will be free from harmful organisms."

Ebenezer Aboagye, Head of Crop Pest and Disease Management Division at the Plant Protection and Regulatory Services Directorate (PPRSD) of Ghana's Ministry of Food and Agriculture.

CABI's Project Manager in Ghana, Walter Hevi, says that the partnership has brought improvements to the country's phytosanitary systems.

"An important step in CABI's overall mission to help end poverty as part of the UN Sustainable Development Goals (SDGs)."

Donors and Partners

DONORS
Netherlands Ministry of Foreign Affairs

PARTNERS
Plant Protection and Regulatory Services Directorate (PPRSD) of the Ministry of Food and Agriculture, Ghana
Ghana Association of Vegetable Exporters (GAVEX)
Quarcoo Initiatives (Quin Organics)
EOSTA B.V.

CABI CENTRES
CABI in Africa and Europe

A chilli farmer in Ghana harvests his crop. ©Evans Ahorsu

Opening Pakistan's fruit and vegetable produce to global market

Funded by USAID via the United States Department of Agriculture (USDA), the project has already helped **improve papaya production by 22%** and led to a **15% increase in the income of papaya farmers** in Pakistan's southeast province of Sindh.

CABI and partners have implemented an online **SPS training programme** to teach people how to model an agricultural import-export system, while the 'Go to Market' tool kit is being used to analyse the performance of food value chains. This ensures the production of high quality fruit and vegetables and increases production per acre, making more food available for trade with global markets.

The CABI team has helped national partners survey crop pests and rear and release natural enemies of pests, like insects, to help control infestations. Called 'biocontrol agents', these natural enemies reduce the spread of pests and, because they provide an alternative management tactic to toxic chemicals and pesticides, ensure farmers have safe food to eat and to trade.

So far, the team has established six laboratories for mass rearing natural enemies, developed 14 technologies to tackle pests of concern, and released 40 million biocontrol agents to control the spread of pests like papaya mealybug, fruit flies, apple codling moth, and spider mites.

Muhammed Sohail Mazhar, CABI's project manager in Pakistan, says:

"Biocontrol is a sustainable way of tackling pests on a wide scale. In total, we have trained 4,035 farmers and 1,031 technical experts on biocontrol and SPS compliance."

Future work will include developing links with markets. This will ensure Pakistan's trading system is streamlined to integrate with international markets, improving opportunities to export produce and increasing the livelihoods of the country's many smallholder farmers.

Donors and Partners

DONORS
USAID via United States Department of Agriculture (USDA)

PARTNERS
Pakistan Agricultural Research Council (PARC)
Department of Agriculture, Sindh
Department of Agriculture, Balochistan
Department of Agriculture, Gilgit Baltistan
Southern Zone Agricultural Research Centre
All Pakistan Fruit & Vegetables Exporters, Importers and Merchants Association (PFVA)
Rice Exporters Association of Pakistan (REAP)

CABI CENTRES
CABI in Pakistan

A chilli farmer in Ghana harvests his crop. ©Evans Ahorsu

795 MILLION PEOPLE

GO HUNGRY EVERY DAY

when crops fail, subsistence farmers are left with nothing

Farmer in Ghana ©Evans Ahorsu

2 ZERO HUNGER

END HUNGER, ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE

Today, 795 million people go hungry. By 2050, we will need to find food for an estimated 2 billion additional people. With 80% of food consumed in developing regions grown by small-scale farmers, we must find a sustainable food system that works for smallholders.

Achieving zero hunger presents an enormous challenge at both the individual and global levels. With food demand expected to grow by more than 70% by 2050, but with food production not set to keep pace, how do we feed the world?

Investing in the world's 500 million smallholders in developing countries is vital for increasing food and nutritional security while supplying local and global food markets.

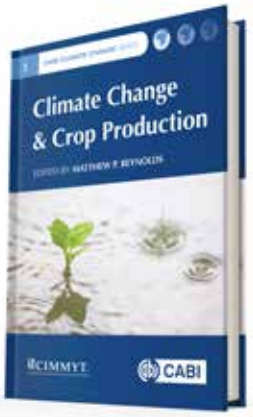
To end hunger, major challenges that must be overcome include the control of crop pests – responsible for up to 40% of crop losses – and raising awareness of agricultural best practice and nutritional information.

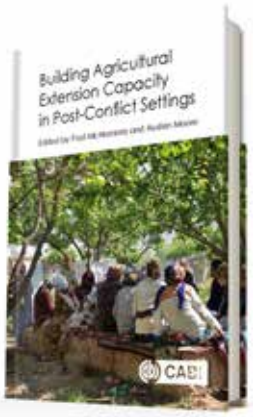
Tackling food security at all levels

CABI addresses food security by supporting smallholder farmers and improving their crop yields, tackling pests and diseases, and finding alternatives to pesticides. We improve access to better seeds and planting materials, and encourage efficient and effective use of organic fertilisers, combined with good agricultural practices.

In 2017, the **GSMA mNutrition** initiative concluded, delivering over 12,000 messages about agriculture and nutrition by mobile phone to poor people in 12 countries in Africa and Asia.

Over the page, read how CABI is helping to identify and tackle crops pests – like fall armyworm and *Tuta absoluta* – that are destroying Africa's staple crops.





Tackling fall armyworm to safeguard Africa's food security

The **fall armyworm** is devastating crops in Africa, and farmers are struggling to grow enough food to eat and sell.

"All along we have been lacking information to fight the armyworm."

"My fellow [farmers] were crying because of this worm."

"I have been struggling to kill [the armyworm] but without succeeding."

More than 200 million people rely on maize as a staple crop in their diet in Africa, yet the presence of fall armyworm is threatening to destroy this vital food source with potential yield losses of up to 60%.

In 2017 CABI confirmed the spread of fall armyworm from the Americas to Africa. CABI has since confirmed that the pest is now a permanent agricultural challenge for over 30 African countries and could spread even further.

CABI is working with governments in Africa, the Food and Agriculture Organization of the United Nations (FAO) and other public and private sector organisations to fight back against the threat of fall armyworm.

1.3m

Radio listeners to radio campaigns and call-in shows

Farmers are seeing the benefits:

"This worm has disturbed me for a very long time. Through the radio programme on Radio Kitara … I have learned a lot, which I am going to put into practice so that I achieve more.

We have seen how to use the chemicals and which ones will help us to kill that worm. As of now, I have tried and things are working so I am very thankful for the radio programme and sponsors of that programme."

Deo Mutekanyiza, Farmer, Labondo village, Uganda.

Educational campaigns have been an important part of CABI's work. Take a look across the page to see how CABI is helping smallholder farmers protect their crops.

DONORS
UK Department for International Development (DFID)
The Directorate General for International Cooperation (DGIS, Netherlands)
The Swiss Agency for Development and Cooperation (SDC)
The European Commission Directorate-General for International Cooperation and Development (DG DEVCO)
Irish Aid
The International Fund for Agricultural Development (IFAD)
The Australian Centre for International Agricultural Research (ACIAR)
The Ministry of Agriculture and Rural Affairs of the People's Republic of China

CABI CENTRES
CABI in Africa and UK

40,500

Posters printed and displayed at local focal points

Farmers checking their crops for fall armyworm. ©Daniel Adjokatcher

Fall armyworm. ©Daniel Adjokatcher

How is CABI addressing the fall armyworm threat to farmers?

Evidence note

In an evidence note funded by the UK's Department for International Development (DFID), CABI now estimates that fall armyworm could cost just 12 of the continent's major maize–producing economies a total of US$2.2bn to US$5.5bn a year in lost maize harvests if the pest is not properly managed.

Recommendations included in the evidence note are now being implemented. CABI has given farmers advice on the identification and control of the pest through Plantwise plant clinics running in the affected countries.

Educational materials

CABI has disseminated posters and leaflets to many affected countries and developed radio and TV programming to help identify and manage the pest. The radio programming is estimated to have reached 1.2 million farmers so far and the TV programming nearly 140,000.

Working in partnership

In Ghana, a national stakeholder planning and response workshop organised by CABI and the Ghanaian government led to the creation of a national task force to tackle fall armyworm. In Uganda, CABI supported plant health rallies, reaching over 6,000 people.

10,687

Factsheets downloaded from Knowledge Bank

Fall armyworm: Life cycle and damage to maize

The fall armyworm life cycle includes egg, 6 growth stages of caterpillar development, pupa and moth.

After approximately **14 days** the fully grown caterpillar will drop to the ground.

DAY 6-14

LARVAL GROWTH STAGES 4-6

By stage 4 the caterpillar will be bigger and have reached the whorl, where it does the most damage, resulting in ragged holes in the leaves. Feeding on young plants can kill the growing point, resulting in no new leaves or cobs developing.

If the plant is older and has already developed cobs, then the caterpillar will eat its way through the protective leaf bracts into the side of the cob, where it begins to feed on the developing kernels (seeds).

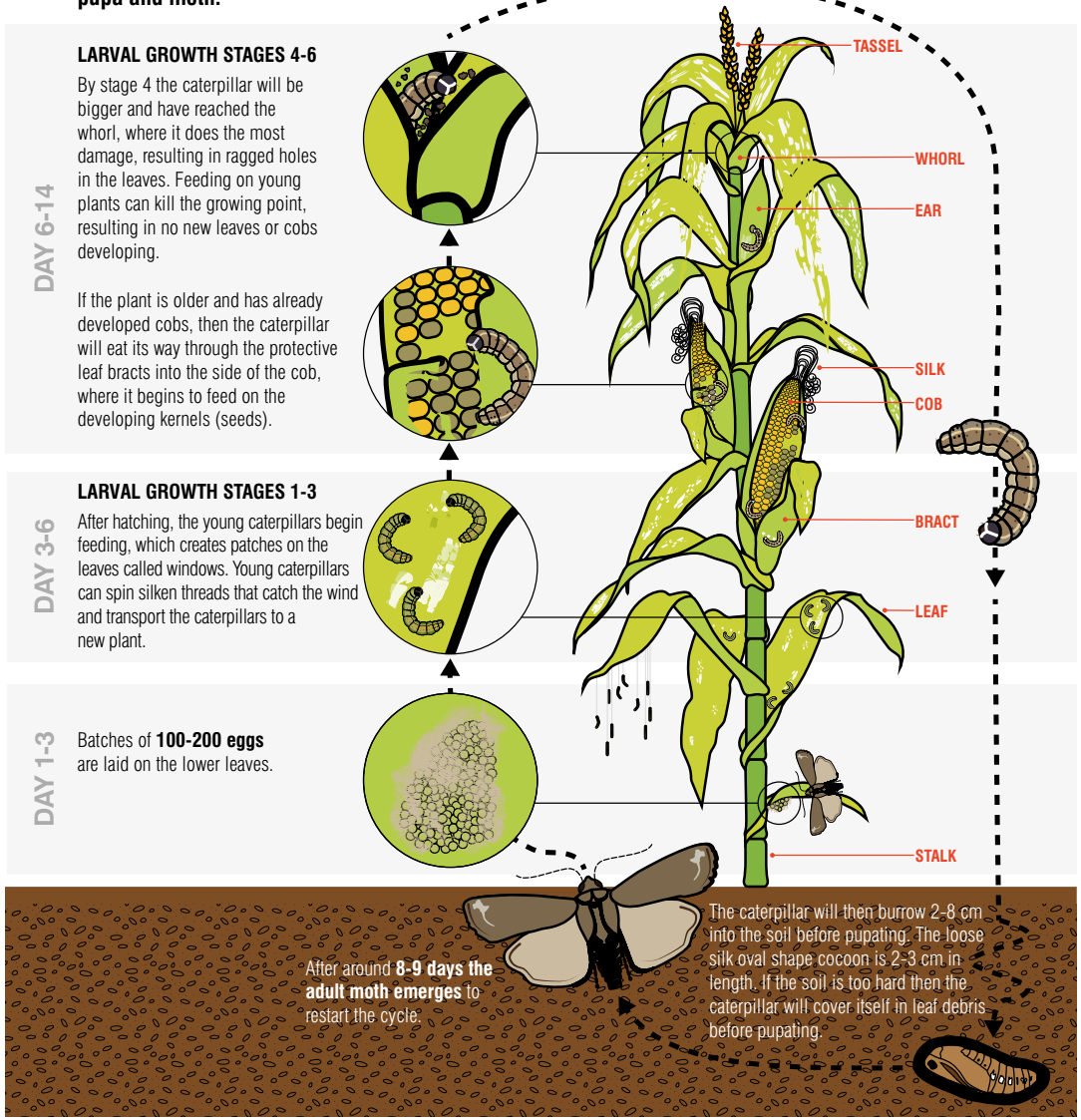
DAY 3-6

LARVAL GROWTH STAGES 1-3

After hatching, the young caterpillars begin feeding, which creates patches on the leaves called windows. Young caterpillars can spin silken threads that catch the wind and transport the caterpillars to a new plant.

DAY 1-3

Batches of **100-200 eggs** are laid on the lower leaves.



Helping farmers fight tomato pests, earn better incomes and build brighter futures

Geoffrey Omollo is a smallholder farmer in Nyaraha village, western Kenya. He has been growing kale and tomatoes on his farm for the last six years to make money to support his family and educate his children. Crop pests, and a lack of know-how about how to tackle them, mean he struggles to get good harvests.

Most of the world's food is grown by smallholders like Geoffrey. Perhaps surprisingly, small-scale farmers in developing countries tend to be those most badly affected by food insecurity.

They grow crops not only to eat, but also to sell. With their incomes, they buy the food they cannot grow. When crops fail, both their own food production and income are affected.

In Nyaraha, Geoffrey put aside most of his farm to grow tomatoes. Several years ago, a tomato pest (*Tuta absoluta*) ravaged Africa, decimating crops. It reached Kenya and affected most tomato farms in Geoffrey's area. His livelihood was under threat.

At the time, other smallholder tomato farmers in Kenya, like Elias Kamuga, were reporting massive crop losses.

"I have suffered [crop] losses amounting to 90%. I have no other source of income apart from tomato farming. I was relying on this crop to feed my family."

Elias Kamuga, Farmer, Kenya

That same year, Geoffrey's two children were taking their final school exams; their continued education would cost money. With the tomato pest looming, times looked tough.

But Geoffrey had heard about the **Plantwise plant clinics** and his life was about to change. In 2016, he sought the advice of local plant doctors and, with the pest management recommendations they gave, not only saved his tomatoes but also, for the first time in his life, harvested a bumper crop of 65 crates of tomatoes, selling them for KSh 325,000 (US$3,500).

With this income, he took care of his household and farm and also built a new house, paid for one child to go to secondary school and the other to go to university. Standing in front of his new house in 2017, Geoffrey now preaches the benefits of plant clinics to neighbours saying plant doctors 'oyawo wang'a', meaning plant doctors have opened his eyes. He now believes good farming can change lives.

Donors and Partners

DONORS
UK Department for International Development (DFID)
The Swiss Agency for Development and Cooperation (SDC)
The European Commission Directorate-General for International Cooperation and Development (DG DEVCO)
The Directorate General for International Cooperation (DGIS, Netherlands)
Irish Aid
The International Fund for Agricultural Development (IFAD)
The Australian Centre for International Agricultural Research (ACIAR)
The Ministry of Agriculture and Rural Affairs of the People's Republic of China

PARTNERS
www.plantwise.org/clinicpartners

CABI CENTRES
Global

Geoffrey inspecting his tomato crops for signs of pest damage

Geoffrey and his wife Mercilline in front of their old house

Geoffrey and his wife Mercilline in front of their new house in 2017

A Plantwise plant doctor advises a farmer at a plant clinic in a Kenyan market

QUALITY EDUCATION

QUALITY EDUCATION NEEDS QUALITY KNOWLEDGE AND INFORMATION

Naheed Babar teaches best practice to local cotton pickers in the village Khudabad Chandia in Mityari, Sindh, Pakistan ©Asim Hafeez

4 QUALITY EDUCATION

ENSURE INCLUSIVE AND QUALITY EDUCATION FOR ALL AND PROMOTE LIFELONG LEARNING

To solve the world's biggest challenges, we must ensure inclusive and quality education for all and promote lifelong learning. By opening up and sharing information with the people who need it, and by applying the knowledge they gain, issues like climate change and food security can be addressed.

Connecting the dots: bringing together education, learning, resources and development projects

CABI produces key scientific publications, including CAB Abstracts and Global Health (world-leading databases covering applied life science). We also publish internet resources, compendia, books and eBooks aiming to further science and its application to real-world problems.

We gain synergy from combining our work in academic publishing with our work in international development, investing surpluses from our publishing business back into our development projects. The knowledge we collate is put to practical use by our scientists in the field, working in developing countries and helping to improve livelihoods worldwide.

In 2017, CABI launched the **Horticulture Compendium**, a new encyclopedic, mixed-media resource for information on horticultural food crops.

Last year, the CAB Direct platform, which provides a single point of access to all of CABI's databases, won a CHOICE magazine '**Outstanding Academic Title**' award 2017.

In 2017 CABI …

published
74
new books

had a total of
8,870,060
abstracts in its
CAB Abstracts database

had a total of
2,959,927
abstracts in its
Global Health database

Masters degree heralds next generation of agricultural experts

Purnima Chhetri belongs to the next generation of agricultural experts. One of 12 graduates of the **Masters of Advanced Studies (MAS) in Integrated Crop Management (ICM)**, Purnima is ready to apply her education and help farmers in her home country of Nepal put sustainable agricultural best practice into action. Purnima says:

"My home country, Nepal, wants to increase agricultural exports. Through the MAS in ICM, I studied plant protection policies and the importance of aligning policies with international agreements to improve trade. I aim to implement my learnings in my job back in Nepal, sharing my knowledge with colleagues and friends."

Coordinated by CABI and the University of Neuchâtel, the MAS in ICM is part of CABI's vision for meeting SDG 4: Quality Education. This higher education degree aims to enhance the knowledge of students from around the world about sustainable agriculture and empower them to pass on that expertise to national institutions and, ultimately, farmers back home.

Purnima and fellow students from Cambodia, Ghana, Kenya, Malawi, Sri Lanka, Uganda and Zambia have learned how to help farmers in developing countries protect and increase crop yields, having studied modules that included examining soil management, crop nutrition, and pest and landscape management, and are keen to put their knowledge into action.

CABI's Executive Director, Global Operations, Dr Ulrich Kuhlmann, believes we will need an estimated 70% global increase in food production to try to feed a growing population expected to hit nine billion by 2050. This is a considerable challenge.

To address this, the Masters course aims to teach the next generation of crop experts the benefits of integrated crop management, an approach to sustainable agriculture that combines biological, environmental, land management, economic and social considerations. Now being run for the fourth time, the MAS in ICM opens for applications in June 2018.

Donors and Partners

DONORS
Swiss Agency for Development and Cooperation (SDC)
Canton of Jura
Co-financed from Plantwise funds

PARTNERS
University of Neuchâtel

CABI CENTRES
CABI in Switzerland

Purnima Chhetri from Nepal graduated with a Masters of Advanced Studies in Integrated Crop Management. ©Alban Kakulya, PANOS

Power of the pen helps drive education and food security policy

The power of the journalist's pen can be an invaluable tool in equitable and sustainable development targeted at the world's 795 million people who do not have enough to eat.

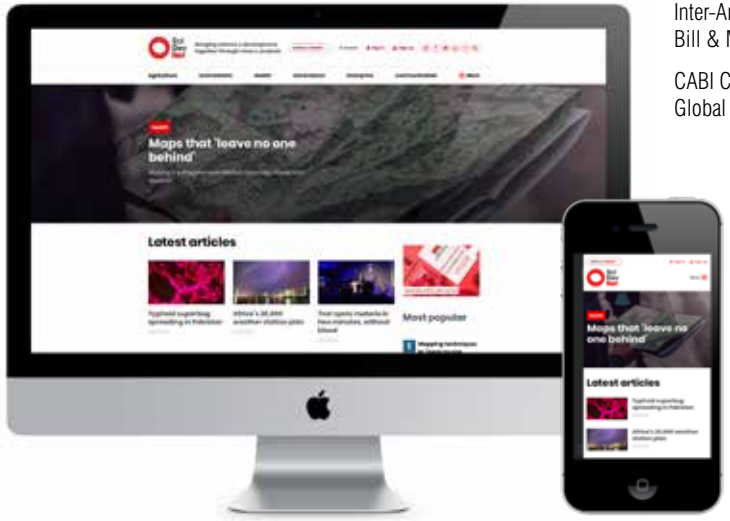
CABI's news website SciDev.Net – the world's leading source of reliable and authoritative news, views and analysis about science and technology for global development – has an important mission as part of its commitment to putting science at the heart of the global development agenda.

By disseminating fact-based stories from people working in development and science, including policymakers, researchers, the media and informed public, SciDev.Net's work is already making a difference, supporting SDGs like Zero Hunger and Quality Education.

Within a week of publishing ***Farmers in Africa should switch to biopesticides***, Manuele Tamò – country representative of the International Institute of Tropical Agriculture in Benin – was contacted by the International Development Research Centre through its regional representative in West Africa. The Centre invited him to write a concept note for a project of up to US$500,000 exploring ideas expressed in the article, looking at ways in which policymakers can do more to promote biopesticides and increase crop yields in Africa.

SciDev.Net is also an important resource for educators and students. Grace T. Bengwayan works at Benguet State University in the Philippines and teaches part-time under the Rural Development programme.

SciDev.Net is also an important resource for educators and students. Grace T. Bengwayan works at Benguet State University in the Philippines and teaches part-time under the Rural Development programme. She explains that when she reads SciDev.Net, it's like enrolling in a class – it educates, informs and motivates. She encourages her students to register at SciDev.Net to learn from the articles and use them as reference materials for their research.



"Good authoritative, reliable and trustworthy science journalism that really gets under the skin of the issues affecting global development is an invaluable tool to place science at the heart of policy making."

Ben Deighton, SciDev.Net's Managing Editor

See **www.scidev.net** for the latest news.

Donors and Partners

DONORS
Swedish International Development Cooperation Agency (Sida)
São Paulo Research Foundation (FAPESP)
Robert Bosch Stiftung
The Rockefeller Foundation
Inter-American Institute for Global Change Research (IAI)
Bill & Melinda Gates Foundation

CABI CENTRES
Global


To achieve
SUSTAINABLE FARMING
WE NEED TO SHARE science-based agriculture knowledge
©Lauren Brown, CABI

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS

Environmental degradation of farmland will increasingly threaten our ability to meet the global population's food and nutritional needs. To grow more from the same or less land, we must give smallholders the knowledge they need to easily introduce higher-yielding and environmentally responsible food production techniques.

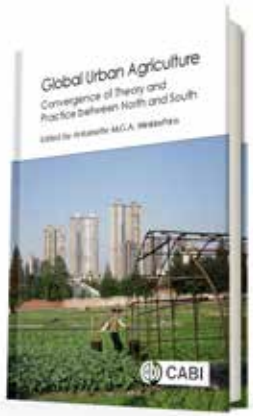
This is difficult to achieve in rural communities, particularly in developing regions, where agricultural knowledge is not always accessible.

Pesticides are the commonly used solution for tackling plant pests and maximising yields, even though these chemicals are often expensive and detrimental to the environment and human health.

Growing more and losing less in a sustainable way

Stimulating sustainable production is fundamental to CABI's work. Our integrated crop management programme is a key part of delivering a crop management system less dependent on harmful pesticides. By working directly with farmers to provide them with simple scientific know-how, they can reduce their reliance on chemicals. And by using modern communication technologies and embracing the mobile revolution, we can rapidly reach more farmers with practical farming know-how.

In 2017, after four years of dedicated work by scientists in 13 African countries, the **Fertilizer Optimization Tools** (FOTs) were launched to help farmers maximise their profits from investments in fertilizers.



Plant biosecurity partnership opens new markets for African countries

The **Australia-Africa Plant Biosecurity Partnership** (AAPBP) – of which CABI is a partner – has helped Tanzania to access new markets for mangoes in Oman and Saudi Arabia, and Zambia to sell bananas and grapes to South Africa.

A step in the direction of ending global poverty, the project's AUS$1.8 million investment is starting to pay dividends thanks to improving the knowledge and skills of plant biosecurity professionals in 10 African countries – Burundi, Ethiopia, Kenya, Malawi, Mozambique, Rwanda, Uganda, Tanzania, Zambia, and Zimbabwe.

In Africa, the agricultural sector employs over 60% of the labour force and accounts for 30% of the GDP in many countries. Plant biosecurity is a major global issue, with invasive species estimated to cause US$400 billion of damage a year.

Funded by the Australian Centre for International Agricultural Research (ACIAR) and delivered by a consortium of partners, the AAPBP tackled the impact of pests on crops by highlighting the relationship between food security and plant biosecurity, overcoming regulatory challenges and sharing know-how.

To facilitate this, it established the Australia-Africa Plant Biosecurity Network comprising 45 Fellows, led by 15 Senior Fellows, with the aim of delivering technical biosecurity mentoring and training, forging relationships between African Fellows and Australian experts, and supporting national and regional biosecurity action.

"The Fellowship has been a fantastic experience. I am confident I can make a real difference to agricultural trade in and from my country, as well as helping our farmers directly."

Ephrance Tumuboine, Assistant Commissioner of the Phytosanitary and Quarantine Division, Uganda

"From my experience in Australia, I approached the Association of Mango Growers directly. We have now been able to negotiate market access for exporting mangoes to Oman and Saudi Arabia."

Katemani Mdili, Senior Agricultural Officer, Ministry of Agriculture, Food Security and Cooperatives, Tanzania

Donors and Partners

DONORS
Australian International Food Security Research (AIFSRC) within ACIAR
CABI Development Fund (CDF)

PARTNERS
Crawford Fund
Plant Biosecurity Cooperative Research Centre
Common Market for Eastern and Southern Africa (COMESA)
Australian Centre for International Agricultural Research (ACIAR)

CABI CENTRES
CABI in Africa

Ephrance Tumuboine, speaks out on plant biosecurity

CABI helps Pakistan's cotton industry reduce losses of around $350m a year

CABI is helping Pakistan's cotton industry to reduce annual losses of around $350m by training thousands of farmers and workers as part of the Better Cotton Initiative. The losses are caused by poor production, transport and storage practices.

Funded by the Better Cotton Initiative's Growth & Innovation fund, and working with a range of partners, including the Government of Sindh Agricultural Research Department, CABI has trained more than 22,000 farmers and 35,000 farm workers on ways of practising Better Cotton production.

Better Cotton practices have been applied to 90,000 hectares of cotton crop, from where nearly 96,000 metric tonnes of Better Cotton lint is produced.

In addition to this, more than 18,000 women workers have been trained on proper cotton picking, health and safety, female empowerment, and the prevention of child labour. CABI has enhanced the capacity of 840 medium-sized farmers to implement the Better Cotton Standard System with a focus on protecting crops from harmful pests and diseases and to conserve the natural habitats on the farms.

"We have been trying to instil on farmers good agricultural practices that will help them conserve limited resources and produce Better Cotton as a sustainable mainstream commodity.

It is hoped that through ongoing engagement with the Better Cotton Initiative we will encourage proper cotton picking to avoid contamination, better storage and transportation to markets and ginning mills where it is processed and thereby enable farmers to adopt a decent work strategy."

Rauf Ahmad Khan Laghari, Project Manager, CABI

Moving forward, it is hoped that the Better Cotton Initiative strategies will be implemented on a country-wide basis and reach out to more than 500,000 farmers who rely on cotton crop for their livelihoods.

Donors and Partners

DONORS
Sustainable Trade Initiative IDH (BCFT Fund) Better Cotton Growth & Innovation Fund (BCI GIF) Managed by: Sustainable Trade Initiative (IDH)

PARTNERS
Department of Agriculture Research, Sindh

CABI CENTRES
CABI in Pakistan


Invasive species cost
an estimated
US$1.4
TRILLION
TO THE GLOBAL
ECONOMY
every year
©Lauren Brown, CABI

15 LIFE ON LAND

PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS

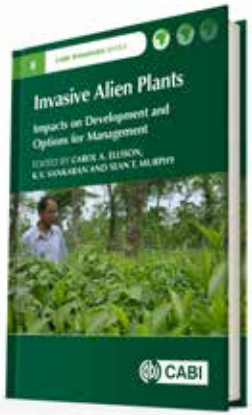
Invasive species cost the global economy an estimated US$1.4 trillion every year. These animals, diseases, insects and plants devastate crops, livestock and smallholder livelihoods by upsetting the delicate balance of native ecosystems including farmland. They are the second greatest threat to biodiversity after habitat loss.

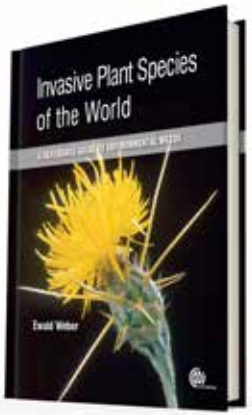
Tackling the threat of invasive species

CABI has been tackling **invasive species** for over 100 years, developing workable approaches to mitigate the biggest threats. With over 800 years of combined experience in our staff, CABI scientists are world leaders in the research of natural ways to control invasive species. In 2016, we received a mandate from our member countries to coordinate a comprehensive approach to help rural communities in the fight against invasive species. This approach includes wide-scale campaigns for the prevention, early detection/response and control of invasive species. We investigate some of the most problematic invasive species around the world and provide solutions. We advise governments on invasive species policy, and produce books and tools for environmental managers, researchers and farmers on this global issue.

In 2017, CABI helped lead the fight against a global pest – the brown marmorated stink bug – that has caused millions of dollars' worth of damage to hazelnut crops in Georgia and apple production in north-eastern regions of the USA.

In 2017, we also launched our *Action on Invasives* programme to help protect and improve the livelihoods of 50 million poor rural households impacted by invasive species. Read more over the page.





Protecting vulnerable rural communities, taking Action on Invasives

Millions of the world's most vulnerable people face problems with invasive weeds, insects and plant diseases, which are out of control and have a major impact on global prosperity, communities and the environment.

Developing countries are disproportionately affected. In East Africa alone, five major invasive species cause US$1 billion in economic losses to smallholder farmers each year.

In response, CABI has launched a unique, global programme with the aim to protect and improve the livelihoods of 50 million poor rural households impacted by invasive species. The DFID- and DGIS-funded **Action on Invasives** programme will champion an environmentally sustainable, cross-sectoral and regional approach to dealing with invasive species.

The programme brings together CABI's 100-year track record in invasive species management, putting invasives knowledge into the hands of everyone affected – from farmers to policymakers.

The ultimate goal is to enable developing countries to prevent, detect and control invasive species. This is in order to protect and restore agricultural and natural ecosystems, reduce crop losses, improve health, remove trade barriers, and reduce degradation of natural resources, infrastructure and vulnerable areas.

Tackling woody weeds in East Africa

CABI, as part of the **Woody Weeds project**, has been researching the effects that invasive trees like prosopis can have on water resources. In the Afar region of Ethiopia, the project found that prosopis absorbs 20-30 billion litres of water a day – about the same as the average daily rainfall in the invaded area.

In an already arid and drought-prone region, water shortages threaten the survival and well-being of local people. For millions of livestock farmers, competition over water resources is likely to hamper their resilience to adapting to a drier, hotter environment caused by climate change.

From 2018 to 2020, CABI scientists will develop, test and evaluate various options for managing woody weeds on a local and national scale.

Learn about Action on Invasives at
www.invasive-species.org

Learn about Woody Weeds at
www.cabi.org/woodyweeds

DONORS
Action on Invasives:
UK Department for International Development (DFID)
The Directorate General for International Cooperation (DGIS, Netherlands)

Woody weeds:
Swiss National Science Foundation
Swiss Agency for Development and Cooperation (SDC)

CABI CENTRES
Global

Odisyoso Bugayo, a smallholder farmer in Ethiopia, clears the invasive woody weed prosopis from his land

Helping Africa's farmers stop crop-destroying pests with space-based technology

CABI is leading a consortium funded by the UK Space Agency's International Partnership Programme (IPP) to develop a **Pest Risk Information Service (PRISE)**, using state-of-the-art technology to help inform farmers in sub-Saharan Africa of pest outbreaks that could devastate their crops and livelihoods. The service is active in Kenya, Ghana and Zambia, and was formally launched in December 2017 at the British High Commissioner's Residence in Lusaka, Zambia.

Plantwise data, along with earth observation and crowdsourcing data, are being used to spearhead the fight against pests that devastate an estimated 40% of the world's crops. The project will help farmers fight back against potentially disastrous pests such as the fall armyworm.

The technology better places CABI's Plantwise plant clinics to give timely advice and alerts to farmers in person, and to extension officers by smartphone and tablet, so they can respond more efficiently to the risks posed to their crops. Brian Siame, who runs a Plantwise plant clinic in Zambia, says:

"This application helps me to communicate with other plant doctors who are part of the group. Despite the long distance between us, we regularly share pictures of pests or diseases and help each other diagnose. A good example is when we had the outbreak of Tuta absoluta [tomato pest] and more recently the fall armyworm."

Fall armyworm's damage to maize in just 12 African countries could lead to losses of 8.3 to 20.6 million tonnes per year in the absence of control.

"We are delighted to be working with CABI to help transform the lives of farmers in sub-Saharan Africa. The £6.3 million of funding from the UK Space Agency will see CABI provide pest risk predictions in time for farmers to take vital preventive action and thus increase resilience to pest outbreaks."

Ray Fielding, Head of International Partnership Programme, UK Space Agency

Donors and Partners

DONORS
UK Space Agency
Co-financed from Plantwise funds

PARTNERS
Assimila
King's College London
Centre for Environmental Data Analysis
Plant Protection & Regulatory Services Directorate (PPRSD) Ghana
Kenya Agricultural & Livestock Research Organization (KALRO)
Ministry of Agriculture, Livestock and Fisheries, Kenya
Zambia Agriculture Research Institute (ZARI)

CABI CENTRES
CABI in Africa and UK

Farmer produces 30 percent more crops with help of Plantwise e-clinic

Vegetable farmer Mohammad Rafiz Uddin Mollah from Bangladesh is just one of millions of smallholder farmers around the world losing less of what they grow thanks to the technological innovation being pioneered by CABI's Plantwise programme.

Plantwise plant clinics deliver plant health knowledge to millions of smallholders. And now, newly rolled out e-plant clinics are providing even more timely expert advice on pest and disease management for healthier and more profitable crops.

The e-plant clinics are equipped with tablet computers which allow plant doctors to access the Plantwise Knowledge Bank, even offline, and communicate with other plant doctors to ensure that farmers get the best possible recommendations for their produce. Mohammad has benefitted from a 30 percent increase in production.

"When we see insect attacks in our fields, we send an SMS to the plant doctors. Because of the availability of the e-plant clinic we benefit. We can send them a message any time during the week and they will send us the diagnosis of the problem and how to treat it by SMS. We benefit from the advice about insect control and fungus control."

Mohammad Rafiz Uddin Mollah

The tablets feature apps which generate prescriptions that are forwarded to farmers, and can be easily shared between farmers, extending the reach to many more than those who have interacted with a plant doctor directly. Messaging apps and social media enable plant doctors to communicate with each other and CABI's Diagnostic Advisory Service.

Data collected from the e-plant clinic makes remote consultation possible and allows CABI to track the spread of pests across the plant clinic network in real time.

"Instead of waiting 100 days to hear what's happening on the ground, we can now get that information in two days from tablet to the central repository."

Claire Beverley, Head of Plantwise Knowledge Bank

You can see the new CABI Plantwise video 'Plantwise e-plant clinics' here: **https://youtu.be/GHHVF_7Zdbs**

Donors and Partners

DONORS
UK Department for International Development (DFID)
The Swiss Agency for Development and Cooperation (SDC)
The European Commission Directorate-General for International Cooperation and Development (DG DEVCO)
The Directorate General for International Cooperation (DGIS, Netherlands)
Irish Aid
The International Fund for Agricultural Development (IFAD)
The Australian Centre for International Agricultural Research (ACIAR)
The Ministry of Agriculture and Rural Affairs of the People's Republic of China

PARTNERS
www.plantwise.org/clinicpartners

CABI CENTRES
Global

Winning gold: leading the fight against invasive plants

Invasive weeds not only cost governments and other authorities around the world hundreds of millions of pounds to control, but also seriously threaten work towards SDG 15: Life on Land.

In the UK alone, **Japanese Knotweed** costs the British economy £165 million a year. It is notorious for pushing through asphalt, building foundations, concrete retaining walls, and even drains, causing significant damage.

However, CABI, thanks to the support of its donors and collaboration with expert scientists in Argentina, Australia, Brazil, the Netherlands, India and the UK, is fighting back to conserve biodiversity and ecosystems, and improve the prevention and management of invasive species in river systems.

The **UK Department for Environment, Food and Rural Affairs** (Defra) continues to fund CABI's work around the EU Water Framework Directive, to limit the damaging effects of Australian swamp stonecrop, floating pennywort, Himalayan balsam and Japanese knotweed. This is on top of our privately funded work on controlling water fern.

Central to CABI's work is the search and safety testing of biological controls to protect waterways where chemical and mechanical control options are impractical or too expensive.

Winning gold at Chelsea Flower Show

In 2017, CABI was honoured with a **gold medal** for its educational display entitled *Nature vs Invader* at the prestigious **RHS Chelsea Flower Show** in the UK.

CABI scientist Suzy Wood, in collaboration with the CABI communications team, developed the display showcased in the 'Discovery Zone' to show the impact of invasive weeds on the UK's environment and infrastructure, including Japanese knotweed on property prices, buddleia on British railways and Himalayan balsam on riversides, together with the natural solutions to combat them.

The display featured an area dedicated to invasive plants affecting livelihoods in developing countries, giving the audience an opportunity to hear more about this global problem via our **Green Invasion** video.

CABI CENTRES
Global

CABI wins gold at Chelsea Flower Show for its educational display, *Nature vs Invader*

THROUGH PARTNERSHIP

we can achieve the Sustainable Development Goals

©Lauren Brown, CABI

17 PARTNERSHIPS FOR THE GOALS

STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALISE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT

A perfect storm is brewing. The world's population is growing. Food production may not be able to keep up with demand. Effects of climate change are increasingly tangible. Agricultural and natural resources are being stretched. No organisation on its own can solve the complex and interconnected global challenges that humanity faces today.

When the scale of the challenge is this big, a collective international response is essential. Organisations must develop and enhance partnerships to find the best and most sustainable solutions.

Addressing global challenges through partnerships

CABI believes that when individuals and organisations, countries and regions work together, the best solutions to difficult problems will be found. This is why we instil an ethos of partnership in everything we do.

In 2017, CABI continued to play a key role in the Association of International Research and Development Centres for Agriculture (AIRCA) and support important initiatives like the Tropical Agricultural Platform (TAP). We continue to host the secretariat of Global Open Data on Agriculture and Nutrition (GODAN), which has grown to over 650 partners.

CABI is strengthening its working relationship with the International Tropical Fruits Network (TFNet) with plans to further collaborate on projects related to the management of pests and diseases.

Throughout 2017, CABI worked in all major regions of the world with hundreds of donor and partner organisations to solve problems in agriculture and the environment.

AIRCA
Association of International Research and Development

Plantwise: building a network, reaching more farmers

With over 168 partners, **Plantwise** is led by CABI, but it is only through building and strengthening linkages that the programme can reach its goals of improving livelihoods and increasing food security worldwide.

In 2017, the Plantwise programme focused its efforts on demonstrating the outcomes and impact of its work since its launch in 2011. To date, the programme has provided plant health knowledge to 18.35 million farmers in 34 countries, through its network of 2,842 plant clinics, plant health rallies and mass media campaigns on radio and television.

The results from our monitoring and evaluation (M&E) studies demonstrate improved yields and household incomes, which contribute to reducing smallholders' poverty levels. While farmers in Malawi and Rwanda reported higher costs as they adopted new practices learnt at plant clinics, their yields and net incomes increased at a higher rate compared to non-users of clinics, making their farms more productive.

A few years ago, I would make ZMW 5,000 per year. Last year I got 15,000. I have never missed any plant clinic session. I've been very committed, very faithful, because I have seen the benefits.

Kenny Mwansa, Farmer, Rufunsa District, Zambia.

Plantwise continues to be at the cutting edge of championing digital innovations to improve agricultural productivity. The rollout of tablet computers at plant clinics is now established in over half of all Plantwise countries. With the increasing use of ICT tools, data processing has become more efficient. Over 60,000 plant clinic records have been submitted digitally and over 5,000 images have been shared via communication apps. This has made diagnosis and data collection nearly 'real time', enabling prompt action on emerging pests.

The programme's innovations and impact are now widely recognised. In March 2017, Plantwise won the Bond Development Award for Innovation 2017. This was followed in April by the St Andrews Prize for the Environment 2017, an initiative by the University of St Andrews and ConocoPhillips celebrating significant contributions to environmental conservation. In May 2017, Al Jazeera broadcast a documentary of Plantwise work on tomato leafminor (*Tuta absoluta*) a new pest in Nepal, to a global audience.

Donors and Partners

DONORS
UK Department for International Development (DFID)
The Swiss Agency for Development and Cooperation (SDC)
The European Commission Directorate-General for International Cooperation and Development (DG DEVCO)
The Directorate General for International Cooperation (DGIS, Netherlands)
Irish Aid
The International Fund for Agricultural Development (IFAD)
The Australian Centre for International Agricultural Research (ACIAR)
The Ministry of Agriculture and Rural Affairs of the People's Republic of China

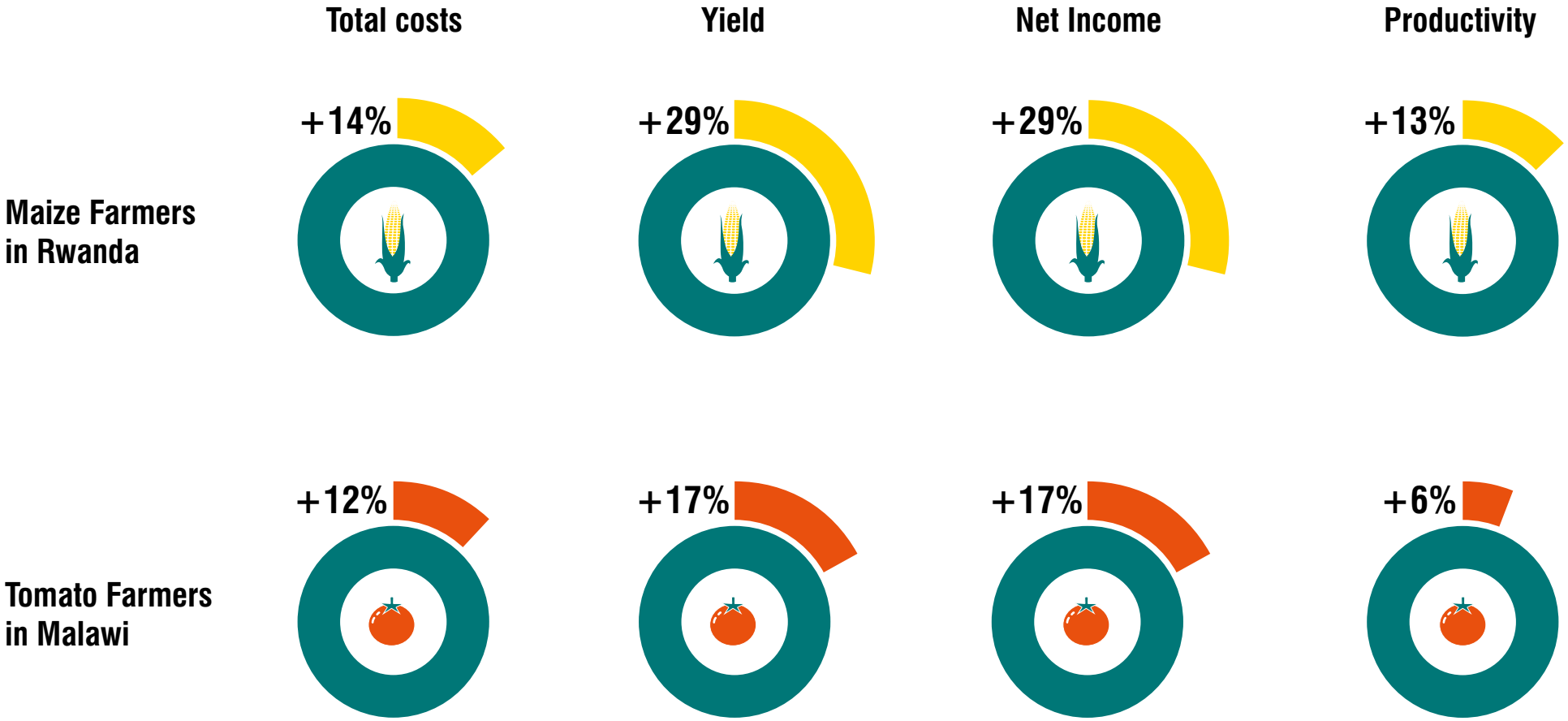
PARTNERS
www.plantwise.org/clinicpartners

CABI CENTRES
Global

Learn about the **Plantwise Knowledge Bank**, a global resource to help combat plant health problems at **www.plantwise.org/knowledgebank**

See the **Plantwise Annual Report 2017** for more information about this programme: **www.plantwise.org/annualreport2017**

Farmers who use Plant Clinics are more productive



THANK YOU

CABI's ability to improve lives worldwide is made possible by the generous contributions of the many members, donors and partners we work with. For this, we want to say a big thank you.

Your ongoing support has enabled us to help…

Training session for the Better Cotton project in the village Khudabad Chandia in Mityari, Sindh, Pakistan ©Asim Hafeez

UKaid
from the British people

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC

USDA

Ministry of Foreign Affairs of the Netherlands

UK SPACE AGENCY

BILL & MELINDA GATES *foundation*

USAID
FROM THE AMERICAN PEOPLE

defra
Department for Environment Food and Rural Affairs

Ministry of Agriculture and Rural Affairs (MARA)
People's Republic of China

idh
the sustainable trade initiative

Australian Government
Australian Centre for International Agricultural Research

Science & Technology Facilities Council

IFAD

JURA CH
RÉPUBLIQUE ET CANTON DU JURA

Governance

Review Conference

CABI's high-level governing body is the Review Conference of member countries, which reviews CABI's work programmes and determines its broad policies and strategies.

Executive Council

Representatives from each member country meet to monitor CABI's affairs and implement Review Conference resolutions. The council approves the annual budget, the admission of new members, appointment of auditors, and key policy decisions.

Liaison Officers

Each member country has at least one Liaison Officer. Their role is to provide a crucial link between their country and CABI.

The CABI Board

The 13 members of the governing board (see right) oversee CABI's programmes and guide management on operational and strategic issues.


Mr Philip Walters (Chair)


Dr Trevor Nicholls (CEO)


Dr Lutz-Peter Berg


Mr Rob Sloley


Mr Roland Dietz


Prof Dame Anne Glover


Mr Akhter Mateen


Professor Ruth Oniang'o


Mr Paulus Verschuren

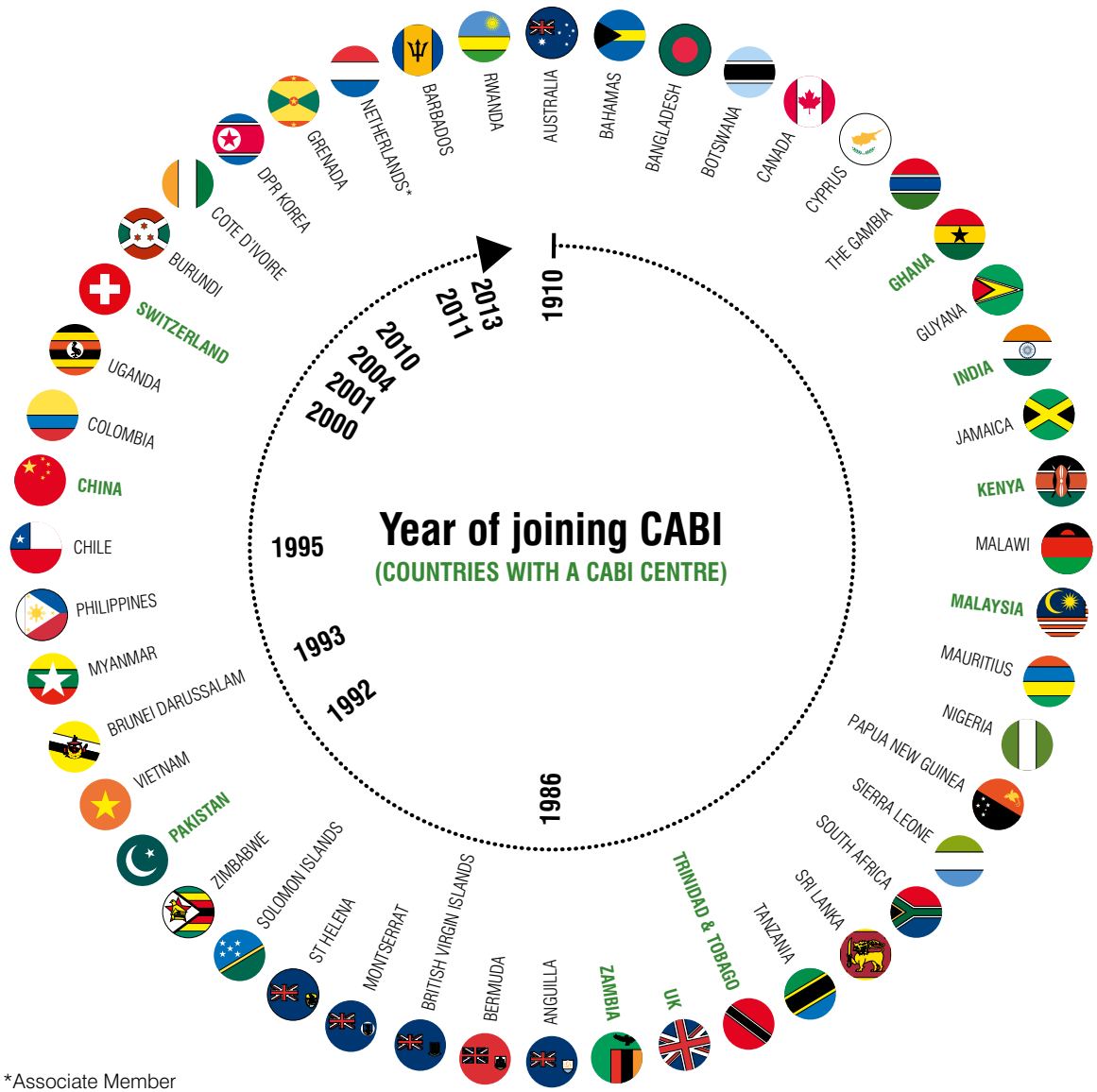

Dr Prem Warrior


Madam Xiangjun Yao


Mr Roger Horton


Mr Andrew Jack

CABI's global role



*Associate Member

CABI is an inter-governmental, not-for-profit organisation governed through a United Nations treaty-level agreement. We work with countries that represent over half of the world's population, or over four billion people. Many people in developing countries are smallholder farmers.

Much of our work focuses on them. Each of our **48 member countries** has an equal role in the organisation's governance, policies and strategic direction.

Our membership structure means that CABI's work delivers development and research projects and scientific publishing products that strengthen and complement existing national capabilities, helping to improve people's lives worldwide.

Since its beginnings as an entomological committee in 1910, our organisation has grown to the Commonwealth Agricultural Bureaux in 1947, to CAB International in 1987, to its present structure today. The diagram shows when members have joined throughout our long journey.

FINANCIALS

Farmer in Ghana ©Evans Ahorsu

Statement of comprehensive income

for the year ended 31 December 2017

	2017 £'000	2016 £'000
continuing operations		
income		
sales and project income	33,358	34,850
member contributions	1,303	1,303
CABITAX recovery	1,248	1,310
miscellaneous income	51	74
	35,960	37,537
expenditure		
staff costs	(9,945)	(9,709)
direct project costs	(17,465)	(19,548)
production	(3,321)	(3,176)
facilities and maintenance	(1,697)	(1,645)
sales and distribution	(632)	(531)
travel	(702)	(768)
depreciation and leasehold amortisation	(882)	(825)
consultants, freelancers	(567)	(429)
restructuring costs	(171)	(248)
provision for arrears of member country contributions	27	(99)
associated company profit	189	69
course of construction impairment	441	(441)
other costs	(781)	411
	(35,506)	(36,939))
operating surplus / (deficit) before interest	**454**	**598**
interest receivable	5	54
	5	54
operating surplus / (deficit) for the year	**459**	**652**
other comprehensive income / (deficit) items that may be subsequently reclassified to operating surplus / (deficit)		
cash flow hedges	342	(157)
movement between funds	(100)	(100)
other losses on defined benefit pension schemes	(9,917)	(36,045)
	(9,675)	**(36,302)**
total comprehensive deficit for the year	**(9,216)**	**(35,650)**

Financials

After many years of consistent growth, 2017 was a demanding year for CABI financially with a slow first half of the year for income generation. Total sales and project income at £33,358k (2016: £34,850k) reduced by 4% in 2017 with declines in project revenue from both the Knowledge Business and International Development. However, publishing product sales grew by 7% driven by a mix of organic growth and foreign exchange. International Development project revenue declined after years of continuous growth as a result of delays in donor funding. However, additional contract income secured for major Programmes in the second half of 2017, together with significant funding committed for work to be led by the CABI office in Pakistan, means the prospects for growth in International Development in 2018 are good.

At the end of March 2017, the charity SciDev.Net, widely recognized as a world leading source of original news and analysis on scientific and technological innovation, was acquired by CABI. The acquisition has created opportunities for CABI to grow and develop capabilities in the development communications sector and in 2017, over nine months operating as part of CABI, SciDev.Net contributed £561k of income and a £50k surplus to the consolidated financial performance. Significant revenue growth is anticipated in 2018 and beyond.

Total operating surplus decreased in 2017 to £459k (2016: £652k) although the prior year financial performance was boosted by significant foreign exchange gains arising from the post-Brexit weakening of the British pound. Looking to 2018, a return to income growth is anticipated driven by the strong pipeline for CABI's major Programmes and projects.

The UK Defined Benefit Scheme pension deficit remains a major challenge for the organisation and has required increasing contributions to be made by CABI. The results of the next formal valuation, taken as at 31 December 2017, will become available in 2018 and an increase in the deficit is highly probable. In its approach to the UK pension deficit, it remains the case that the CABI Board continue to balance the need to manage this long-term (estimated) liability whilst continuing to invest in growth and the delivery of objectives set out in the medium term strategy.

Robert Sloley, CFO

Statement of financial position

for the year ended 31 December 2017

	2017 £'000	2016 £'000
assets		
non-current assets		
land and buildings	12,430	12,144
plant and equipment	1,592	1,789
intangibles	555	577
intangibles - goodwill	113	–
investments accounted for using the equity method	727	537
	15,417	15,047
current assets		
inventories	1,195	1,755
trade and other receivables, net of provisions:		
– sales receivables	2,593	2,736
– sums owing by project sponsors	3,543	2,016
– from member countries	222	–
other financial assets:		
– derivative financial asset	86	–
– cash and cash equivalents	6,481	7,104
other receivables	1,273	1,086
	15,393	14,697
total assets	**30,810**	**29,744**
equity and liabilities		
equity		
revaluation reserve	(4,255)	(4,255)
cash flow hedges	(86)	256
designated fund	(100)	(100)
accumulated deficit	96,637	87,079
total equity	92,196	82,980
liabilities		
non-current liabilities		
post-employment benefits	(108,271)	(98,354)
	(108,271)	(98,354)
current liabilities		
sales income received in advance	(3,859)	(3,790)
member contributions in advance	(9)	(7)
sums held on behalf of project sponsors	(7,131)	(7,401)
trade and other payables:		
– trade payables	(1,590)	(1,007)
– other payables	(2,146)	(1,909)
other financial liabilities		
– derivative financial liability	–	(256)
	(14,735)	(14,370)
total liabilities	(123,006)	(112,724)
total equity and liabilities	**(30,810)**	**(29,744)**

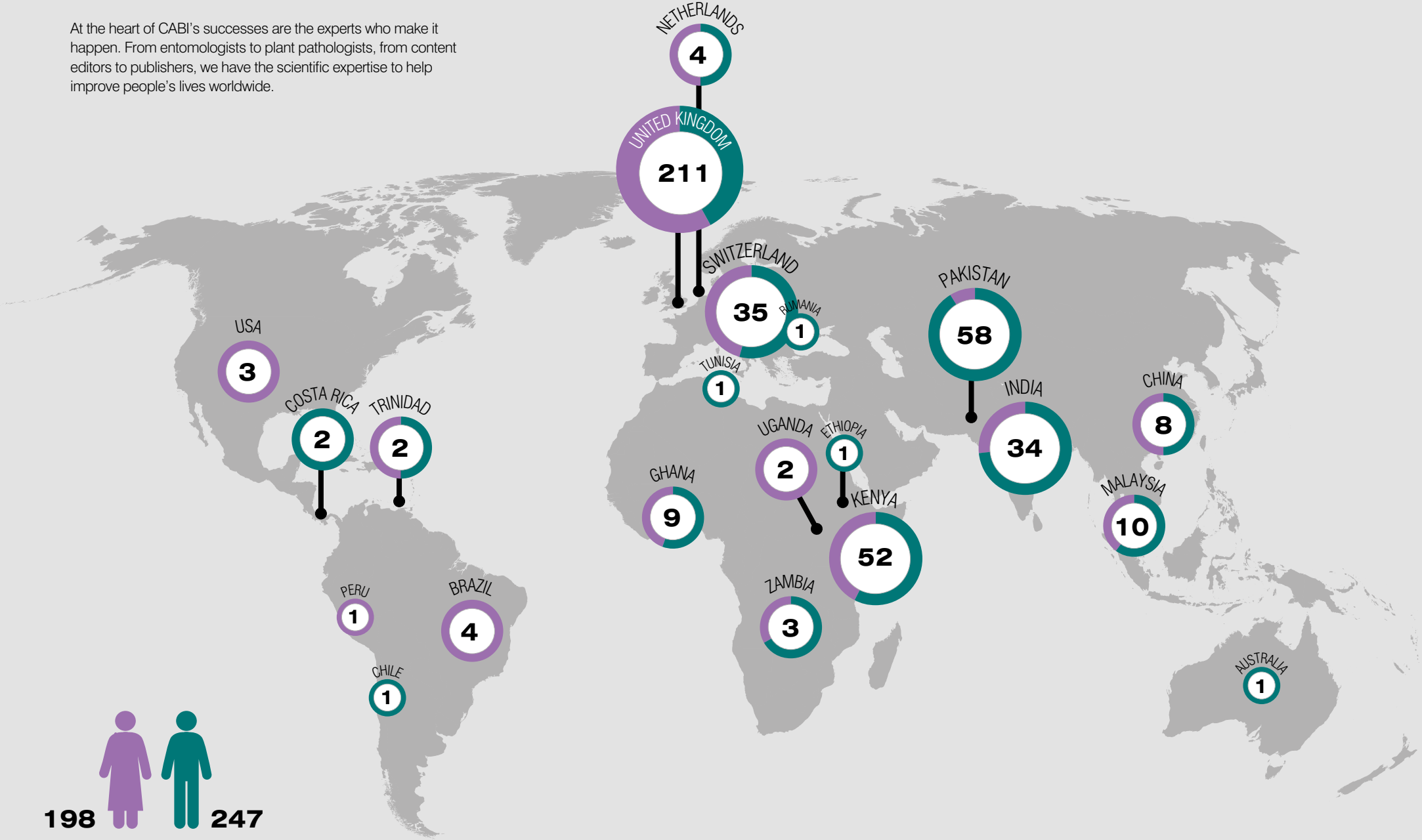
Statement of cash flows

for the year ended 31 December 2017

	2017 £'000	2016 £'000
cash flows from operating activities		
cash generated from / (used in) operating activities	436	(2,980)
net cash generated from / (used in) operating activities	436	(2,980)
cash flows from investing activities:		
payments to acquire tangible fixed assets	(903)	(595)
payments to acquire intangible assets	(48)	(215)
interest received	5	54
acquisition of subsidiary, goodwill	(113)	–
net cash used in investing activities	(1,059)	(756)
net decrease in cash and cash equivalents	**(623)**	**(3,736)**
NOTES TO THE CASH FLOW STATEMENT		
(i) reconciliation of operating surplus to net cash inflow from operating activities		
operating surplus before interest	354	448
depreciation charges	882	825
share of associated company (profits)	(189)	(69)
loss on disposal of property, plant, equipment	2	–
decrease/(increase) in inventories	560	10
increase in trade and other receivables	(1,606)	(1,059)
increase/(decrease) in trade and other payables	820	(789)
decrease in income in advance	(199)	(2,974)
(increase)/decrease in other receivables	(188)	628
cash (used in) / generated from continuing operations	436	(2,980)
(ii) movement in net cash during the year		
net cash at 1 January	7,104	10,840
net cash at 31 December	6,481	7,104
movement in net cash during the year	**(623)**	**(3,736)**

CABI staff

At the heart of CABI's successes are the experts who make it happen. From entomologists to plant pathologists, from content editors to publishers, we have the scientific expertise to help improve people's lives worldwide.



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