



**CABI**

in review

23

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 Links to open access materials

# 13.6m

farmers reached through the  
CABI-led PlantwisePlus  
programme-supported  
activities in 2023

# 169

staff publications  
published in 2023

# Over 15m

records published on  
CABI Digital Library (cumulative)



# Foreword from the Chair

I am delighted to have been elected to Chair the CABI Board and honoured to be the first holder of this post from an African country, as well as the first female Chair.

At the start of 2023, we began work to implement our newly agreed Medium-Term Strategy 2023-2025. This seeks to address some of humanity's greatest challenges: poverty, hunger, climate change, gender inequality, and biodiversity loss. Working in partnership has always been critical to CABI's approach. We maintained a high level of engagement with our Member Countries through 2023 – seeing this as vital to deliver the Medium-Term Strategy, as well as our Joint Action Plans with individual Member Countries. Thirty-five of these action plans are now in place from among our 48 Member Countries. We also expanded our partnerships with a wide variety of local, national, regional and global organizations that work within our Member Countries and beyond. These included notable new collaboration agreements with the Food and Agriculture Organization of the United Nations (FAO), highlighted in our recent receipt of the FAO Partnership Award 2024, and Imperial College, which will soon become the host of our UK research centre.

To advance our growing portfolio of work, we have expanded our team to over 500 people. I would like to thank everyone in that team for their ongoing hard work on our programmes, projects, products and services. In 2023, we achieved another strong set of results from our annual staff survey, with an engagement score of 81%, compared with 72% for 'best practice organizations' in Gallup's 'State of the Global Workplace 2023 Report'. To support the delivery of our Medium-Term Strategy, we have developed a complementary plan for hiring, training and development – the CABI People Plan 2023-2025.

CABI's Board has continued to evolve. I would like to thank my predecessor as Chair, Roger Horton, for his dedicated service to CABI over seven years. During 2023, Paulus Verschuren and Andrew Jack completed their terms as Directors. We thank them for their significant contributions to the organization. Also in 2023, we welcomed to the Board Simi Kamal, an expert on gender and water, based in Pakistan. Change has continued into 2024, with our Chief Financial Officer Rob Sloley retiring and being replaced by Leonard Kimutai, who is based at our Nairobi office. Leonard joins us after a successful career in the private sector, including senior finance and strategy roles. Long-standing Audit Committee Chair Akhter Mateen is also standing down shortly and will be replaced in this role by Gary Ernest, a UK-based finance expert. I'd like to thank both Rob and Akhter for their important work in ensuring a secure financial future for CABI despite some major challenges such as COVID-19 during their tenures. I am pleased that HE Vishnu Dhanpaul, High Commissioner of Trinidad and Tobago in the UK, has been elected to serve a second year on the Board by the Executive Council of our Member Countries.

During 2024, we will continue to work closely with our Member Countries, donors and partners to increase our worldwide impact. The CABI Board will also maintain a strong focus on governance and risk management, in particular overseeing the development of a new valuation and recovery plan for our legacy UK pension scheme. I want to extend our appreciation and thanks to all our stakeholders for their continuing support of CABI and its vital work.

**Chileshe Kapwepwe**, Chair



# Foreword from the CEO

Last year remained turbulent across many parts of the world. The World Meteorological Organization confirmed 2023 as the hottest year on record, and the war in Ukraine, combined with the lasting impact of the COVID-19 pandemic, continued to impact global food security.

However, against this challenging backdrop, an important positive development was increased recognition of the vital links between food systems and climate action, reflected in the UAE Declaration on Sustainable Agriculture, Resilient Food Systems and Climate Action signed at COP28. CABI contributed to global meetings critical to this agenda, including the G20 Agricultural Chief Scientists' Meeting in India, the Africa Food Systems Forum 2023, the UK's Global Food Summit, GLAST-7 (Global Leaders in Agricultural Science and Technology) in China, and COP28 itself.

2023 may also be remembered as the year in which generative artificial intelligence became a widespread reality, with large language models coming to influence many technologies, products and services. Equitable access to the benefits that AI offers will be a vital concern for CABI as we seek to harness its exciting powers.

CABI's work in 2023 comprised an expanding portfolio of programmes, projects, products and services aligned with the demands of our Member Countries, as captured in our new Medium-Term Strategy. Our flagship food security programme PlantwisePlus successfully completed its proof-of-concept phase, gaining renewed donor support after an independent review of progress. Work now advances to a scale-up phase involving

collaboration with at least 27 countries and expected to take the cumulative reach of the programme to around 75 million people.

We also expanded our effort to support evidence-informed decision-making across development policy and practice. In particular, we worked with partners to develop the JUNO Evidence Alliance for the food security and climate arenas. In addition, we took the first steps with Member Countries and funding partners to develop a new initiative in the area of integrated landscape management. This is a highly participatory approach designed to foster collaboration between different land-users across a landscape in ways that improve livelihoods and sustainability.

Our knowledge products and services were boosted by migration of our resources onto the new CABI Digital Library. This provides a much-enhanced user experience and has led to a marked increase in visits. We have continued to broaden our offering, with new books, journals and information resources, many of which are open access. The quality of our products was recognized when our journal CABI Agriculture and Bioscience received a high impact factor of 3.9 in its first assessment. Meanwhile our digital learning resource, the CABI Academy, attracted a large number of users, with over 50,000 learning sessions completed in 2023.

We have continued CABI's strong output of original research, with 132 peer-reviewed papers published by our team across relevant science and social science disciplines. We are also pleased to be

acting as the secretariat of the new UK CGIAR Centre (see page 19), which is designed to enhance co-operation between the CGIAR, UK scientists and researchers across the Global South.

Awareness raising and disseminating results are critical parts of our work. In 2023, CABI attracted over 1,700 items of broadcast and online media coverage, with an estimated reach of over 68 million. Furthermore, content from our news organization, SciDev.Net, was seen or heard 750 million times, with 200,000 views of our podcast episodes on YouTube. The CABI 'Script' curricula in science communication were embedded into four African universities, with thousands of students now using it as part of their degrees.

Reflecting the further expansion of our international development work and continuing strong performance in our Knowledge Business, our 2023 financial results show significant growth in revenues to well over £40m. We continued to generate a modest operating surplus.

Looking ahead, the key priority for CABI in 2024 is to continue positive engagement with Member Countries to deliver our Medium-Term Strategy. We will continue to grow our international development portfolio and build on the opportunities to enhance our products and services provided by the CABI Digital Library and the application of generative artificial intelligence. We express gratitude to our Member Countries, donors and stakeholders for their steadfast support, and we look forward to further collaboration to advance our mission and achieve our impact together.

**Dr Daniel Elger**, CEO





Daniel Elger. © Fergus Burnett for CABI.

# Partnerships for success

International development succeeds when it leverages collective expertise, diverse perspectives and shared resources. Last year, we worked with an array of stakeholders to address some of the biggest issues facing humanity – hunger, poverty, gender inequality, climate change and biodiversity loss. Collaboration, working in partnership and combining complementary skills and perspectives allows us to leverage and achieve more.

## New partnerships

In October, CABI signed an Memorandum of Understanding (MoU) with the FAO to work together and improve the livelihoods of 500 million smallholder farmers while easing the global food crisis. The partnership will see CABI and the FAO work together more closely in areas of sustainable plant production and protection, evidence-based policy advice, research on extension approaches and science communication.

Also in October, CABI signed an MoU with Imperial College in the UK to foster further collaboration in research and teaching. The partnership focuses on fragile ecosystems, sustainable agriculture and the environment, including how to sensitively manage the world's biodiversity threatened by climate change.

And on 20 November, then UK Prime Minister Rishi Sunak announced the launch of the UK-CGIAR Centre at the Global Food Security Summit in London. The Centre is part of a strategic collaboration between the UK Government, UK science, CGIAR and CABI, geared towards

achieving transformational change in agriculture around the world (see separate story on page 19).

## Collaboration with our Member Countries

CABI's partnership with its 48 Member Countries is central to the success of the organization's programmes and projects worldwide. We greatly value collaborating with our Member Countries, which represent almost two-thirds of the world's population.

Engaging with our Member Countries in Africa, in September, we attended the Africa Food Systems Forum 2023 (also known as AGRF 2023) held in Dar es Salaam, Tanzania. CABI CEO, Dr Daniel Elger, was on hand to talk about building resilient food systems and good plant health.

*“The Africa Food Systems Forum was a valuable opportunity to engage with diverse partners on how to ensure that development initiatives are both scalable and sustainable. This is important to our work with our Member Countries across Africa as they seek to empower their smallholder farmers – particularly women and youth – to improve their livelihoods and generate sustainable food security.”* – Dr Daniel Elger.

In September, four Member Countries – Ethiopia, Kenya, Malawi and Tanzania – played a key role

in a workshop to plan our major new initiative in Integrated Landscape Management. The workshop lays the foundation for a new global collaborative initiative in 2024 (see separate story on page 18).

In Asia, in March, CABI signed an MoU with the Vietnam Academy of Agricultural Sciences. This collaboration will strengthen food security and the development of a sustainable food system in Vietnam.

And in November, our high-level visit to China further strengthened partnerships that support sustainable food security and celebrated 15 years of the Chinese Ministry of Agriculture and Rural Affairs (MARA)-CABI Joint Laboratory for Biosafety (Joint Lab).

And finally, focusing on the Americas, in July, we conducted a two-week visit to our Caribbean Member Countries of Guyana, Jamaica and Trinidad and Tobago.

Here, we strengthened strategic partnerships with stakeholders in the region, discussing work to safeguard food security and biodiversity in these three countries and the wider Caribbean region.

*“Partnerships help us expand to more locations and areas of work, and are therefore key to CABI's ambition to increase its impact, recognition and influence.”*

– Janny Vos, Partnerships Development Director, CABI.





Phyllis Engifu Ombonyo, Director of Strategy and Engagement,  
CABI, AGRF Tanzania.



Daniel Elger, CEO, CABI, AGRF Tanzania.



Maryanne Gichanga, CEO, AgriTech Analytics, AGRF Tanzania.



# 2023 NEWS HIGHLIGHTS

addressing global challenges





## JULY



CABI visit to Caribbean strengthens strategic partnerships to help safeguard food security and biodiversity

Invasive non-native species cost UK economy an estimated £4bn a year, new CABI-led study reveals

Apple snail invasion could be “disastrous” for rice production and food security in Kenya, study reveals

## AUGUST



CABI and EW Seed join hands to improve information accessibility in agriculture

Leading CABI science contributes to CABI Agriculture and Bioscience journal's first impact factor

CABI Academy launches free course and certifications on bioprotection products

## SEPTEMBER



CABI highlights support for climate-resilient food systems at the Africa Food Systems Forum

Fresh tack needed to save landscapes hit by climate crisis

CABI's expertise in biological control of weeds in Latin America highlighted during Science Summit at UNGA78

## OCTOBER



CABI and FAO collaborate to help improve livelihoods of smallholder farmers and ease the global food crisis

CABI and Imperial College London to collaborate on research regarding ecosystems and the environment

Construction of world-leading UK Crop Microbiome Cryobank now complete

## NOVEMBER



China visit strengthens partnership for sustainable food security

CABI's expertise in the sustainable control of crop pests and diseases highlighted at Global Food Security Summit – launch of new UK-CGIAR Centre

CABI shares expertise at FAO's Global Symposium on Sustainable Fall Armyworm Control

## DECEMBER



Developing a dynamic approach using earth observation technology to improve pest risk modelling

Silver fly could reduce pest threat to Europe's €1.5bn Christmas tree industry





# OUR STORIES



# PlantwisePlus successfully completes proof-of-concept phase

2023 was a significant year for PlantwisePlus, ending a three-year proof-of-concept phase that demonstrated the programme's core principles and scalability. The Netherlands Royal Tropical Institute's assessment found PlantwisePlus to be a highly relevant, efficient programme, well-aligned with national priorities and CABI's core strengths.

Last year, the programme reached an estimated 13.6 million farmers. It achieved many successes while working with 280 partners across the 27 PlantwisePlus countries spanning Africa, Asia and the Americas. Achievements showcased the programme's positive impact on plant health systems, enabling farmers to produce more and safer food using sustainable crop production practices.

Highlights include PlantwisePlus gathering evidence that the release of the classical biocontrol agent, *Acerophagus papayae*, a parasitic wasp, caused significant reductions to invasive papaya mealybug populations in Kenya. Nearly 350 farmers, extension officers and crop inspectors were informed about biocontrol and how to manage crops without harming the agent, such as by reducing chemical pesticide use. Furthermore, construction commenced for two new rearing facilities in Pakistan and Bangladesh for the biocontrol agent, *Trichogramma*, another parasitic wasp. Each facility is expected to supply to at least 200 farmers.

PlantwisePlus-facilitated advocacy for sustainable pest management and biopesticides in Pakistan led to the government approving a biopesticide registration guidance document. And through the Ukulima True campaign on the safer use of pesticides in Kenya, PlantwisePlus reached over 890,000 people through radio and other media.

PlantwisePlus collaborations included gender-focused work to address the barriers facing women in crop production. Youth service providers were linked to farmer cooperatives and business development services. Collaborations also included social and behaviour change campaigns, and capacity building in integrated pest management.

## CABI CENTRES

Global

## DONORS

Australian Centre for International Agricultural Research (ACIAR)  
Directorate-General for International Cooperation (DGIS), Netherlands  
European Commission Directorate-General for International Partnerships (INTPA, EU)  
Foreign, Commonwealth & Development Office (FCDO), UK  
Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA)  
Swiss Agency for Development and Cooperation (SDC)

## PARTNERS

We gratefully acknowledge the support of our national and international partners who make the global implementation of PlantwisePlus possible.

PlantwisePlus Plant Doctor promoting the benefits of natural pesticides to a farmer in Cambodia. © Thomas Cristofolletti for CABI.

A farmer and extension worker who are part of the Ukulima True campaign. © CABI.





# PlantwisePlus pest risk tools help protect Ghana's biosecurity

Pests can have a devastating impact on agricultural production, but horizon scanning and pest risk analysis can help to identify and prevent them. In 2018 and 2019, CABI launched two innovative decision-support tools to help with exactly this. Now part of PlantwisePlus, the Horizon Scanning Tool and Pest Risk Analysis (PRA) Tool help users, especially those working in plant protection, to identify potential pest threats.

Since their introduction, CABI has been keen to understand how countries have been using the tools. Throughout 2021 and 2022, surveys were conducted about their usage. This led to a 2023 working paper, which revealed how the tools had impacted policy development and trade in Ghana.

Ghana's Plant Protection and Regulatory Services Directorate (PPRSD) has used the PRA Tool since 2018 in collaboration with its partners from national universities and research institutes. Since then, it has become the organization's main tool for commodity pest risk assessments. In 2021, PPRSD conducted a PRA on tomatoes imported from Morocco into Ghana. The results revealed that an invasive pathogen, tomato torrado virus, posed a risk. The government took action, placing a ban on tomato imports from Morocco to prevent the introduction of the disease into Ghana.

CABI's Horizon Scanning Tool and Pest Risk Analysis Tool were launched in 2018 and 2019, respectively, and have since undergone enhancements to improve their design, usability and technical content in response to user needs.

However, during this process, the authorities discovered that tomatoes had been imported without valid permits. This finding led inspectors to receive training at all border entry points to help them identify illegal commodity imports. In addition, since 2021, PPRSD has conducted PRAs on 14 other pests identified as priorities for the country's agriculture through horizon scanning activities. The pests include Asian citrus psyllid, banana bunchy top virus and vegetable leaf miner.

PPRSD now plans to use the PRA Tool to regularly update the country's quarantine pest list. Based on empirical evidence, the PRA Tool offers staff a robust method of updating pest risk data and an effective means of addressing pest risks.

## CABI CENTRES

Global

## DONORS

Australian Centre for International Agricultural Research (ACIAR)  
Directorate-General for International Cooperation (DGIS), Netherlands  
European Commission Directorate-General for International Partnerships (INTPA, EU)  
Foreign, Commonwealth & Development Office (FCDO), UK  
Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA)  
Swiss Agency for Development and Cooperation (SDC)

## PARTNERS

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# Joint plant-livestock clinics reap One Health benefits for farmers in Kenya and Uganda

Integrating human, animal and environmental health is a relatively new concept and, traditionally, joint health services have remained underexplored. However, clinics modelled on Plantwise, which combine plant and livestock health, are starting to put One Health into action. The benefits include better incomes and food security for farmers.

PlantwisePlus clinics give crop health advice to farmers. However, a 2016-17 survey revealed that smallholders often asked questions about animal health during clinic sessions. In 2021-22, CABI launched a pilot of 'joint' crop-livestock clinics in

Kenya and Uganda. In 2023, almost 1,400 farmers, over a third of whom were women, attended the clinics, raising nearly 1,000 queries covering everything from maize and tomato pests to cattle and poultry, and even domestic pets like cats and dogs.

In 2023, feedback revealed how the joint clinics addressed complex interdisciplinary issues such as antibiotic resistance, pesticide poisoning and rabies infection. Furthermore, farmers reported how they solved problems by combining crop and livestock farming. They learnt about the interconnectedness of animal, crop, environmental and human

health, which was not the case before the clinics' introduction.

Farmers even created new enterprises based on joint clinic advice. A chicken and goat farmer turned her attention to vegetable production. Her yam harvest earned her UGX600,000 (\$165) for the very first time. Another farmer used the advice to earn more and pay for their child's school fees. Wider communities benefited from good farming practices as the clinic attendees improved local food supply.

At the joint clinics, farmers received information about government regulations, market trends and threats to their outputs, which added value to their farming. Joint clinics have now integrated environmental, fisheries and public health officers to address One Health challenges. The initiative aims to reach 11,650 smallholders in Kenya and Uganda by 2024.

## CABI CENTRE

CABI in Africa

## DONORS

Biovision Foundation  
WTS Welttierschutzstiftung

## PARTNERS

Makerere University, Uganda  
Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Uganda  
Selected District Local Governments in four districts of Uganda  
Self Help Africa

Cattle in Kenya, Baringo district. © Sven Torfinn, PANOS for CABI.



# Boosting the **role of agro-input dealers** for sustainable pest management

Across the world, crop pest threats are on the rise. To address them, farmers are turning to chemical pesticides. However, these synthetic products can harm both environmental and human health. PlantwisePlus is working to support pesticide risk reduction by training agro-input dealers – the people who sell inputs such as pesticides to farmers – in safer pesticide use and use of natural alternatives such as biopesticides.

In Bangladesh, agro-input dealers are a main source of information for smallholders on pesticides and non-chemical alternatives. However, many lack the technical knowledge and skills to give effective and safe advice. PlantwisePlus is playing a critical role influencing Bangladesh's Ministry of Agriculture

to adapt its regulations around the licensing of agro-input dealers.

A new regulation will soon be adopted in Bangladesh to introduce mandatory levels of education and obligatory participation in training courses for the country's newly registered agro-input dealers. Throughout 2023, CABI collaborated with local experts to develop the curriculum, manual and materials for the country's new agro-input dealer training scheme. This work will continue into 2024 as the new regulation comes into effect.

In Uganda, PlantwisePlus and its partners have set up an agro-input programme, training over 200 youths in various agricultural skills, including safe

pesticide handling and use. Covering 10 districts in central and west Uganda, the initiative has taught these young people how to diagnose plant health problems and give recommendations to solve them, in particular using natural, sustainable pesticide alternatives.

The knowledge has enabled young people to create agro-input businesses and offer complementary services such as advisory services and spray services, benefitting their communities. With certification in hand, they are now qualified to provide products and services to farmers, which they do as part of the PlantwisePlus plant clinic network.

## **CABI CENTRE**

CABI in Africa

## **DONORS**

Australian Centre for International Agricultural Research (ACIAR)  
Directorate-General for International Cooperation (DGIS), Netherlands  
European Commission Directorate-General for International Partnerships (INTPA, EU)  
Foreign, Commonwealth & Development Office (FCDO), UK  
Ministry of Agriculture and Rural Affairs of the People's Republic of China (MARA)  
Swiss Agency for Development and Cooperation (SDC)

## **PARTNERS**

### **Bangladesh**

Bangladesh Crop Protection Association (BCPA)  
Bangladesh Ministry of Agriculture (MoA)  
Department of Agriculture Extension (DAE)  
Plant Protection Wing of the Department of Agriculture (PPW)

### **Uganda**

Ministry of Agriculture, Animal Industry and Fisheries (MAAIF)  
Mountains of the Moon University  
Makerere University  
Rubanga Cooperative Society  
Zimbabwe Agri-business and Training Association (ZABTA)



An agro-dealer in Bangladesh gives advice on agricultural inputs. © CABI.





# Data access project prompts creation of new **data-sharing law in Ethiopia**

Over the years, Ethiopia's authorities have collected and mapped data on the country's soils. This kind of data can give valuable insights into soil health and support effective decision-making in agriculture, ultimately benefitting farmers. In 2018, it became clear that the expected benefits of data collection were not being fully realized. A key hurdle was a lack of national-level policy detailing the terms under which data could be shared. Informal connections were being made between departments and individuals, but more formal ways to share data were unclear.

A group of soil data experts in Ethiopia's research community recognized this issue. They came together as a 'coalition of the willing' and formed a basis for national soil data sharing. They raised the issue with donors, and through them, CABI was invited to facilitate the creation of a soil data sharing policy directive. CABI brought together a wide range of stakeholders to review the challenges preventing effective data sharing and find a lasting solution. Challenges included low

capacity and a lack of data sharing skills. CABI used the FAIR framework as a tool upon which to build the directive, helping to make data findable, accessible, interoperable and reusable.

CABI's work focused on facilitation and following best practices in data sharing. From the bottom up, the team-built consensus and identified the processes and resources needed to plug data-sharing awareness and skill gaps. They promoted the adoption of good policies countrywide. Other departments started to adopt FAIR practices and the benefits spilt over. The initiative gave decision-makers the practical tools they needed to implement better data management. Through this work, the project ignited a culture change around agricultural data sharing in Ethiopia. In 2023, the Ministry of Justice ratified the Ministry of Agriculture directive into law, opening the gates to the publication of the National Soil Information System of Ethiopia (NSIS).

## **CABI CENTRES**

CABI in Africa and the UK

## **DONORS**

Bill & Melinda Gates Foundation  
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)  
Ministry of Agriculture, Ethiopia

## **PARTNERS**

Ministry of Agriculture, Ethiopia  
The Open Data Institute (ODI)



A cattle farmer in Ethiopia.  
© Panos Pictures/Zacharias Abubeker for CABI.





# Empowering women in Pakistan:

## A story of entrepreneurship and transformation

Women's empowerment is a core part of CABI's mission. Last year, we supported projects that put female entrepreneurship front and centre in Pakistan. The Better Cotton Growth & Innovation Fund (Better Cotton GIF) is a fund that goes beyond cotton farming. Among other things, it helps women in cotton-growing communities to set up small-scale businesses. As an implementing partner, CABI trained women in agriculture and sewing. And under the small-scale potato growers project, CABI trained female farmers in potato production. These initiatives have empowered hundreds of women entrepreneurs in Pakistan.

### **Sewing skills initiative: Breaking barriers in Matiari**

CABI recognizes the power of skills training in women's empowerment. Under Better Cotton GIF, CABI delivered a sewing entrepreneurship programme in Matiari. This is a remote, rural district in Pakistan where rural women receive no formal education. The programme aimed to break the cycle of poverty and empower women economically and socially.

The programme set up eight sewing centres, distributing machines and supplies. Through a 'chain of empowerment', master trainers trained 10 women in each village. This fostered a community of skilled entrepreneurs. The impact has been profound. Using their new sewing skills, women have gained economic independence, contributing to their families' well-being. They also expressed newfound confidence and leadership skills. These female rural business leaders are creating a positive environment in which other women can upskill and develop even more entrepreneurial skills.



Women learn how to stitch at a sewing centre in a village in Pakistan. © CABI.

## Meghi's journey: From monsoon disaster to farming entrepreneur

In 2022, devastating monsoons in Pakistan wreaked havoc on vegetable crops. They left families like Meghi's in Began Hingorjo grappling with food insecurity. Meghi, with her husband and eight children, faced food shortages. Better Cotton GIF emerged as a lifeline offering Meghi, and dozens more women, kitchen gardening training. In 2023, CABI equipped these women, who had come from disadvantaged backgrounds, with the skills to cultivate nutritious food at home.

Female trainers played a crucial role. They showed women how to prepare the soil and plant vegetable seeds for the best yields. Meghi, empowered by this knowledge, transformed half an acre of land into a thriving vegetable garden. Beyond meeting her family's needs, she began selling her harvest to local shops. This generated income to support her children's education. Meghi has transformed her life. She has gone from a housewife to an independent female entrepreneur. And she now contributes financially to her household.



Through the potato production project, Bashiran Bibi enhanced her skills to grow her own potato crop. © CABI.

## Potato value chains: Redefining gender roles in agriculture

Women constitute two-thirds of Pakistan's agricultural labour force, but gender norms hinder their access to agricultural knowledge. While they often work in potato production, few earn a good income from it. However, a [potato value chains project](#) challenged gender norms. The initiative empowered almost 200 women farmers and labourers.

CABI delivered training sessions on various aspects of potato farming, from Integrated Pest Management to seed potato cultivation. Empowered with new knowledge, women started to actively participate in all stages of the potato value chain. They now connect with input providers and supervise field activities. This has led to improved produce and better market opportunities. The project has increased women's earnings and positioned them as leaders in their communities. Women now train other women to build sustainable businesses.



Through the potato production project, women farmers enhance their skills to grow their own potato crops. © Mohsin Jamal for CABI.

These projects have dispelled gender stereotypes and fostered entrepreneurship. The initiatives have transformed individual lives. But they have also contributed to the prosperity of whole communities. Through empowering endeavours, women are becoming architects of their own success. Together, they are rewriting the limitations they faced into stories of resilience and achievement.

### CABI CENTRE

CABI in Pakistan

### DONORS (Better Cotton project)

Better Cotton Growth & Innovation Fund (BC GIF)

### DONORS (Small-scale potato growers project)

Netherlands Enterprise Agency (RVO)

### PARTNERS (Small-scale potato growers project)

Agriculture Extension Department, Punjab

Pakistan Agriculture and Research Council

University of Agriculture Faisalabad

Wageningen University & Research





# Co-creating a new approach for **preserving healthy landscapes**

Biodiversity loss, climate change and land degradation are some of the biggest challenges facing smallholder farmers today. Many other stakeholders who rely on the natural world for their livelihoods are also impacted. The threats they face are interconnected. As such, they need solutions that cut across and transcend national and sectoral boundaries. One promising approach is Integrated Landscape Management (ILM).

This approach refers to long-term collaboration among diverse stakeholders to foster natural resource resilience at the landscape level. Across a mosaic of human-nature interactions, it provides equitable and sustainable livelihoods, while at the same time aiming to enhance biodiversity conservation and improve ecosystem goods and services.

CABI's work on biocontrol of the invasive *Opuntia stricta* cactus (prickly pear) has contributed to a significant reduction of this plant, helping to restore native biodiversity in Laikipia, Kenya. This is work conducted under the framework of TNC's CHEF Programme with the aim to transform Kenya's Central Highlands Ecoregion into a regenerative foodscape.

In 2023, CABI convened an ILM workshop in Nairobi, Kenya, bringing together stakeholders from countries including Ethiopia, Malawi, Kenya and Tanzania, and sectors such as agriculture, conservation, environment, forestry and livestock to start to put ILM into action. Participants responded positively, supporting a holistic and participatory approach with the long-term aim of creating and preserving healthy landscapes.

Long-term collaborations that empower local communities are central to ILM. They safeguard the interests of local stakeholders alongside those of state actors, NGOs and the private sector.

Interventions should create a win-win situation where sustainable approaches benefit everyone with a stake in the landscape.

CABI offers a unique contribution to the ILM approach by leveraging scientific expertise and on-the-ground partnerships. Through our work in invasive species management, we have experience of bringing people together to address cross-cutting challenges. We share knowledge, skills and technology to help local stakeholders restore degraded landscapes and protect natural ecosystems.

In 2024, we will work with our four focal countries in Africa to continue the co-creation process and development of an ILM programme.

## **CABI CENTRES**

CABI in Africa, Switzerland and the UK

## **DONOR**

Biovision Foundation



Farmers in Laikipia, Kenya. © CABI.

# UK Prime Minister announces launch of UK-CGIAR Centre

In 2023, the **UK-CGIAR Centre** was launched, an initiative funded by the Foreign, Commonwealth and Development Office (FCDO).

Hosted by CABI, the Centre will work towards tackling the twin challenges of global food security and climate change by strengthening ties between the best of UK science and CGIAR, the world's largest global agricultural innovation network.

The launch of the UK-CGIAR Centre was announced at the **Global Food Security Summit** in London in November 2023. At the event, then UK Prime Minister, Rishi Sunak, gave the launch address, emphasizing the UK's commitment to driving advances in agricultural science, benefitting millions globally and at home.

CABI has over a century of experience in bringing stakeholders together, working on the ground to enable partnerships to have an impact at a local level.

When looking for a Centre host, the FCDO emphasized practical international development expertise, close connections with partners in-country and an ability to ensure that agricultural research has an impact at the smallholder level. CABI stepped up to the role.

The Centre has created four research projects: two that build on existing ties between leading UK science institutes and CGIAR, and two new partnerships. In 2024, the Centre will begin its second round of commissioning and establish a fifth project.

## **CABI CENTRE**

CABI in the UK

## **DONORS**

Foreign, Commonwealth & Development Office (FCDO), UK

## **PARTNERS**

CGIAR

Foreign, Commonwealth & Development Office (FCDO), UK  
Biotechnology and Biological Sciences Research Council

*"We've already helped develop crops that are drought-resistant and even richer in vitamins now feeding 100 million people across Africa. And we're going further ... launching a new UK CGIAR Science Centre to drive cutting-edge research."*

UK Prime Minister (2022-2024), Rishi Sunak

The Prime Minister Rishi Sunak opens the  
Global Food Security Summit at Lancaster House.  
© Simon Walker / No 10 Downing Street.





# CABI Digital Library – the new unified home for all CABI content

Last year was a milestone for [CABI Digital Library](#). With the relocation of more than 15 million records, 2023 saw the completion of the final steps of the platform's migration from CAB Direct. Today, CABI Digital Library is the new home for all CABI content, bringing together our resources into one unified platform for the first time.

This exciting digital library offers students, researchers and practitioners a single place of knowledge and scientific discovery to support study, research and practice. The new platform was designed around the needs of our users following extensive feedback over the course of several years.

With enhanced functionality, including advanced search options and built-in search engine optimization, CABI Digital Library is an essential platform for unified discoverability. It allows users to search across all open and subscribed content at the same time. This improves how users discover information as well as saves them time, while supporting complex searches across resources for expert systematic reviews.

## Key features:

- Advanced search functionality with up to 64,000-character limit to create targeted, precise searches.
- New facets, including grey literature and evidence-based research facets, to allow users to quickly and easily find hard to find research and support systematic reviews as well as help support evidence-based decisions, important for practitioners and policy-makers.

- Bulk exports of up to 100,000 citations at a time. This makes creating systematic reviews easier and supports discoverability of research gaps and topics.
- CONNECT sign on, giving users a single point of sign on to access all subscribed and open content.

## Launching new resources

In 2023, we also expanded the resources available on CABI Digital Library. Towards the end of the year, we launched two new case study resources – [Animal Science Cases](#), and [Food Science and Nutrition Cases](#). Written by leading international practitioners and academics, and peer-reviewed to ensure quality, [CABI Cases](#) is a growing collection of practical, educational case studies. These valuable educational tools support study, research and practice in subjects from animal behaviour to tourism.

Also in 2023, we launched two new [CABI Compendium](#) channels – [Food Safety and Quality](#) and [Seedborne Pests](#). CABI Compendium combines data and research across species, pests and diseases into one comprehensive resource. It includes images, maps, diagnostics and links to decision-support tools, and now comprises eight channels. A leading scientific knowledge resource, CABI Compendium supports study, research and practice in environmental and agricultural production, health and biosecurity.



Tumsifu Lucas Sanga texts other farmers to discuss what she and a colleague have seen in the soybean field. © Bartay 2017.



## Growing our collection of journals

Last year, CABI's flagship journal, *CABI Agriculture and Bioscience*, achieved an inaugural impact factor of 3.9, positioning it in the top quartile of the Agriculture Interdisciplinary category in the Emerging Sources Citation Index (ESCI).

This marks the first impact factor for any CABI journal, with significant contributions from CABI scientists, affirming the journal's positive impact on research.

## Expanding our book partnerships

In 2023, CABI also forged a new partnership with the Royal Entomological Society to publish future editions of its much-loved series, *Handbooks for the Identification of British Insects*. This collaboration includes print and eBook production, marking the first digital availability of the handbooks.

CABI has also converted 32 of the existing print backlist to eBooks, fostering global accessibility. The initiative aims to enhance the handbooks' impact and contribute to the Society's strategic goal to advance insect science worldwide.



Farmers in Cambodia. © Thomas Cristoforetti for CABI.





# SciDev.Net reporting on critical issues, influencing policymaking

It has been another year of achievement for *SciDev.Net*, the world's leading source of reliable and authoritative news, views and analysis about science and technology for global development. *SciDev.Net* content was seen or heard 750 million times in 2023, with articles re-published by The Guardian and Sky News and 200k podcast episode views on YouTube.

From agriculture to the environment, *SciDev.Net* is helping to shape policies around critical issues, including one issue of global importance – health. In 2023, *SciDev.Net* was one of only a few outlets covering health in South Sudan, for example. Doctors without Borders and the World Health Organization reported that our stories helped them to develop interventions in this war-torn country. Nigeria's national coordinator for HPV vaccination said that our podcast coverage on this subject increased vaccine uptake among the nation's girls. Our story on air quality in Burkina Faso's capital, Ouagadougou, caused authorities to asphalt over several key roads in this city of almost 2.5 million people, reducing pollution. And after reading our coverage, authorities in Yemen installed solar-powered ovens in the capital Sanaa, providing thousands with fresh bread, a staple for food security.

Last year, our programmes and projects went from strength to strength. We successfully concluded the Robert Bosch-funded Script project, which embedded science journalism training into four African university journalism and mass communication curricula. Thousands of university students are now training using Script as part of their degree each year. We also

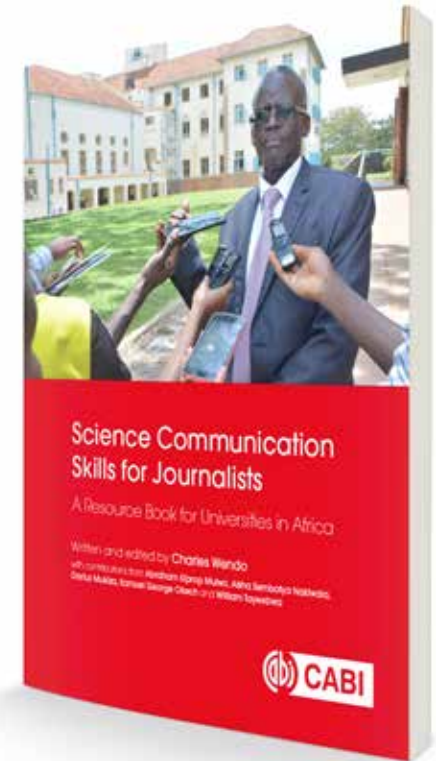
delivered year one of the Science Granting Councils Initiative programme, exceeding the donors' expectations, which has led to negotiations for additional funding.

A year of securing new funding puts us in a solid position to continue our work, bringing evidence-based science stories to millions, including the decision-makers who shape the policies in many of the countries from which we report.

## DONORS

Sida  
IDRC  
Bill & Melinda Gates Foundation

*SciDev.Net's Science Communication Skills for Journalists: A Resource Book for Universities in Africa* – CABI's most downloaded book between October 2022 and May 2023



In 2023, *SciDev.Net* secured new funding worth over

# £3 million



# A year of scientific discovery

Putting our Medium-Term Strategy into practice, in 2023 we focused on expanding the reach, application and impact of science in agriculture and the environment. As a science organization, we blend a unique combination of research, publishing, independent journalism and digital expertise to share evidence-based agricultural approaches with farmers, and the people who support them, worldwide.

In 2023, CABI produced 169 publications, 132 of which were published in peer-reviewed journals, and 98 of which were published in journals with an impact factor greater than two. Of the 132 publications, 109 were open access.

Below are the highlights from our 2023 CABI-led studies.

In the UK, our study revealed how managing invasive non-native species such as Japanese knotweed, and plant diseases such as ash dieback, costs the British economy an estimated £4bn a year – a 45% increase in comparable costs since 2010.



Our 2023 CABI-led study highlighted how invasive apple snail could be “disastrous” for rice production and food security in Kenya and beyond. The snail has reduced net rice income by 60% for farmers experiencing even moderate levels of infestation.



In Kenya, our research on the papaya mealybug pest uncovered smallholder farmers’ knowledge, attitudes and practices towards biocontrol. Farmer perceptions are highly important for influencing on-farm pest management decision-making, including biocontrol.



In Pakistan, our 2023 study analyzed gender differences in adopting the biocontrol agent *Trichogramma chilonis* to control tomato pests. Results showed that direct communication with women about the control method increased its uptake in farming households.



And finally, our 2023 study demonstrated how early warning pest alerts and Integrated Pest Management advice on managing the invasive fall armyworm pest have contributed to the food security of smallholder maize farmers in Ghana.



Invasive apple snail could be “disastrous” for rice production and food security in Kenya and beyond. © CABI.





# THANK YOU

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

**Your ongoing support has enabled us to help...**



 **UK International Development**  
Partnership | Progress | Prosperity



...their family



Ministry of Foreign Affairs of the Netherlands



...her farm



...her yield



...his food security



...his plant health



...his business



Australian Government  
Australian Centre for  
International Agricultural Research



...his market garden



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Agency for Development  
and Cooperation SDC



...her career



...his livestock

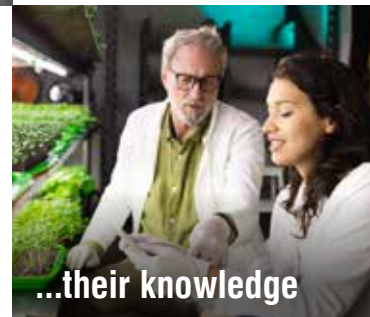


...their education



...their training

BILL & MELINDA  
GATES foundation



...their knowledge

STDF | STANDARDS and TRADE  
DEVELOPMENT FACILITY



...their village



...his soil health



...their future



# Governance

## CABI Board

The Governing Board oversees CABI's programmes and guides management on operational and strategic issues.

## EMT

CABI's Executive Management Team (EMT) is responsible for managing the organization's core business operations.

## 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.

## Liaison Officers

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

### CABI Board



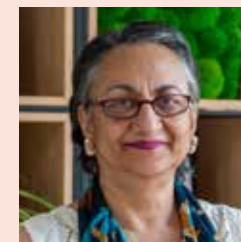
**Ms Chileshe Kapwepwe,**  
Chair



**His Excellency Vishnu**  
Dhanpaul



**Mr Christoph Chesher**



**Ms Simi Kamal**  
(joined Dec 23)



**Mr Andrew Jack**  
(stepped down Jun 23)



**Mr Akhter Mateen**  
(stepping down Aug 24)



**Ms Ann Tutwiler**



**Ms Marcy Vigoda**



**Mr Roger Horton**  
(Chair, stepped down Mar 24)



**Mr Paulus Verschuren**  
(stepped down Mar 23)



**Dr Lutz-Peter Berg**  
(stepped down Mar 23)



**Dr Daniel Elger, CEO**



**Mr Leonard Kimutai,**  
CFO (joined May 24)



**Ms Linda Copsey**



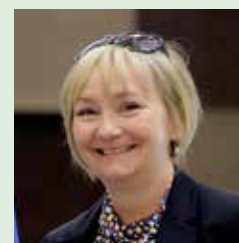
**Dr Ulrich Kuhlmann**



**Mr Rob Sloley (CFO,**  
stepped down Jun 24)



**Mr Neil MacIntosh**



**Ms Carol McNamara**



**Dr Dennis Rangi**



**Dr Andy Robinson**

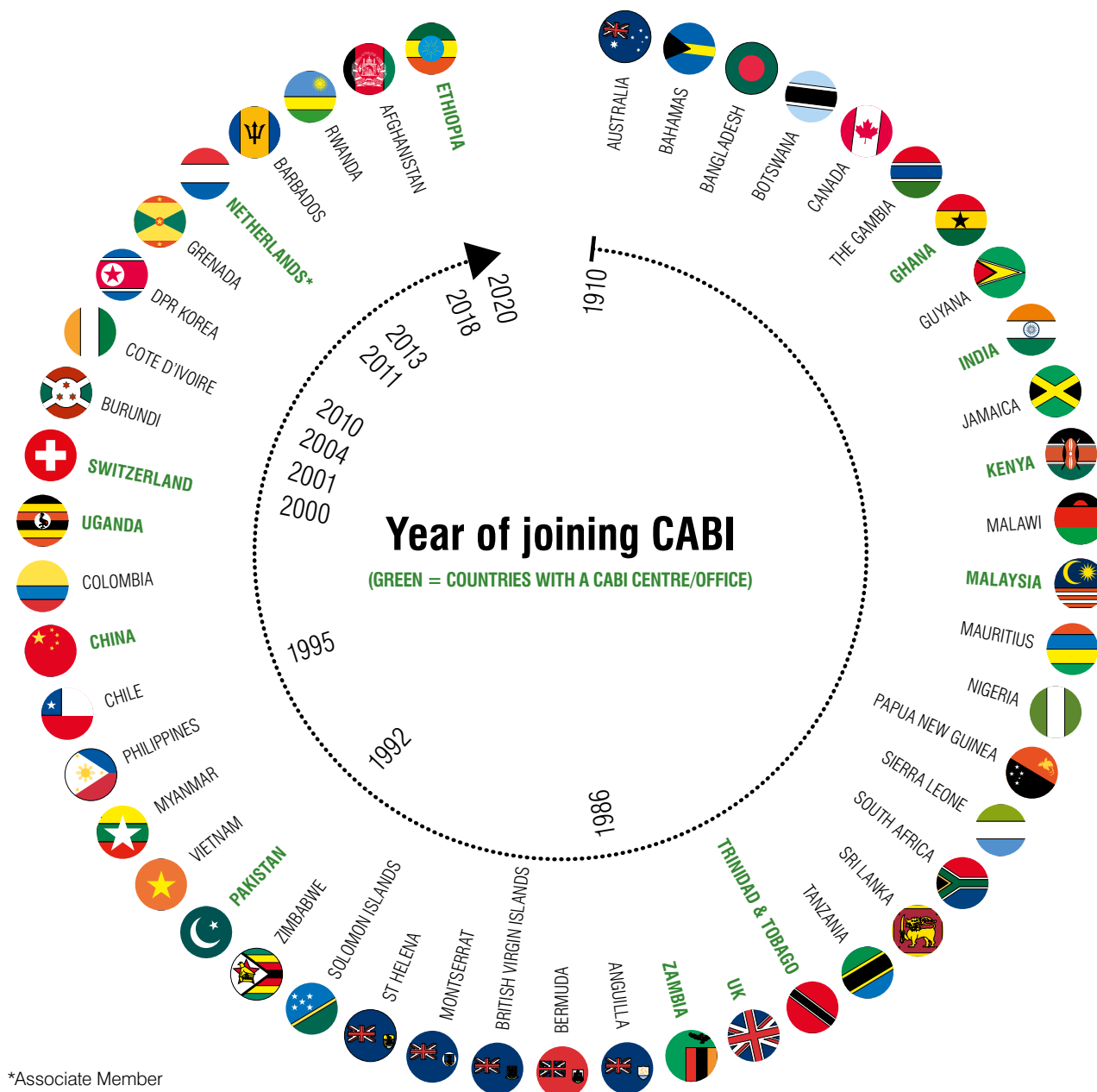
### EMT

# CABI's global role

CABI is an inter-governmental, not-for-profit organization governed through a UN-registered treaty-level agreement. We work with countries that represent over half of the world's population, or over four billion people. Many of these people are smallholder farmers, and much of our work focuses on them.

Each of our **48 Member Countries** has an equal role in the organization's governance, policies and strategic direction. Our membership structure enables us to deliver products, projects and programmes that complement and strengthen the existing national capabilities of our Member Countries and beyond. This helps us to deliver on our mission to improve people's lives worldwide.

Since its beginnings as an entomological committee in 1910, our organization 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.



\*Associate Member





**FINANCIALS**

## Statement of comprehensive income

for the year ended 31 December 2023

	2023	2022
	£'000	£'000
<b>Income</b>		
Sales and project income	38,558	32,999
Member Country contributions	2,528	2,339
CABITAX recovery	1,588	1,372
Miscellaneous income	116	142
	42,790	36,852
<b>Expenditure</b>		
Staff costs	(10,943)	(10,315)
Direct project costs	(24,023)	(19,666)
Production	(3,235)	(3,059)
Facilities and maintenance	(1,720)	(1,447)
Sales and distribution	(350)	(381)
Travel	(555)	(413)
Depreciation and leasehold amortisation	(713)	(691)
Impairment loss	(37)	
Consultants and freelancers	(573)	(528)
Restructuring costs	(36)	(38)
Expected credit losses from Member Country contributions	(377)	(210)
Associated company loss	4	(95)
Profit on foreign currency exchange	155	850
Other costs	(348)	(563)
	(42,751)	(36,556)
<b>Operating surplus / (deficit) before interest</b>	<b>39</b>	<b>296</b>
Interest receivable	268	62
	268	62
<b>Operating surplus/(deficit) for the year before exceptional items</b>	<b>307</b>	<b>358</b>
<b>Other comprehensive surplus/(deficit) items that may be subsequently reclassified to operating surplus/(deficit)</b>		
Cash flow hedges	172	(60)
Movement between funds	(250)	(325)
Other gains on defined benefit pension scheme	(3,642)	25,902
	(3,720)	25,517
<b>Total comprehensive (deficit)/surplus for the year</b>	<b>(3,413)</b>	<b>25,875</b>

## Financials

In 2023, a strong revenue growth of 16% was achieved with a total income of £42.8m exceeding the £40m level for the first time. As a result of that growth, CABI was again able to generate an operating surplus, reporting a figure of £307k. This surplus exceeded internal budget expectations, although there was a reduction on the prior year figure of £358k primarily because of a significant foreign exchange gain in 2022.

The growth in CABI's income was driven principally by the PlantwisePlus programme. Publishing sales (database and books) generated growth of 2.6% on the prior year (to £10.4m) with the increase arising from new product enhancements on database products and compendia, and royalties from the new open access CABI Agriculture and Bioscience journal.

Total costs increased in 2023 due in large part to the significant growth in project-related direct costs.

In 2023, at £3.7m, the other comprehensive deficit was driven by an increase in the liability on the UK defined benefit pension (arising from a decrease in UK bond yields). This followed a significant reduction of £25.9m in the liability in 2022.

The end of year total cash balance, at £7.0m, reduced over the year (from £9.6m in 2022) because of a further increase in disbursements related to the high level of project activity, and a one-off contribution to the UK Pension Scheme which formed part of the recovery plan agreed with the Scheme Trustee. However, the relatively healthy cash balances through the year, together with increases in UK bank interest rates, enabled a substantial increase in interest income on cash held on deposit to £268k.

Image opposite: Potato farmer in Pakistan. © Mohsin Jamal for CABI.



## Statement of financial position

for the year ended 31 December 2023

	2023 £'000	2022 £'000
<b>Assets</b>		
<b>Non-current assets</b>		
Land and buildings	9,740	14,924
Plant and equipment	1,397	1,167
Intangibles	603	691
Intangibles – goodwill	113	113
Investments accounted for using the equity method	635	631
	12,488	17,526
<b>Current assets</b>		
Inventories		
– books	323	221
– projects	2,920	2,357
Contract receivables, net of provisions:		
– sales receivables	1,692	2,096
– sums owing by project sponsors	448	1,424
Amounts receivable from Member Countries	84	98
Other financial assets:		
– derivative financial asset	41	-
– cash and cash equivalents	7,024	9,606
Property held for sale	5,210	-
Other receivables	1,382	1,171
	19,124	16,973
<b>Total assets</b>	<b>31,612</b>	<b>34,499</b>
<b>Equity and liabilities</b>		
<b>Equity</b>		
Revaluation reserve	(3,145)	(3,145)
Cash flow hedges	(41)	131
Designated fund	(100)	(75)
Investment fund	(250)	(450)
Accumulated deficit	61,180	57,595
<b>Total equity</b>	<b>57,644</b>	<b>54,056</b>
<b>Liabilities</b>		
<b>Non-current liabilities</b>		
Post-employment benefits	(77,782)	(75,140)
Lease liabilities	(29)	(31)
	(77,811)	(75,171)
<b>Current liabilities</b>		
Sales income received in advance	(2,994)	(3,252)
	(683)	(848)
Sums held on behalf of project sponsors	(3,880)	(5,683)
Trade and other payables:		
– trade payables	(1,628)	(1,104)
– other payables	(2,260)	(2,366)
Other financial liabilities:		
– derivative financial liability	-	(131)
	(11,445)	(13,384)
<b>Total liabilities</b>	<b>(89,256)</b>	<b>(88,555)</b>
<b>Total equity and liabilities</b>	<b>(31,612)</b>	<b>(34,499)</b>



Sweet pepper growers in Jamaica. © Noah Friedman-Rudovsky for CABI.

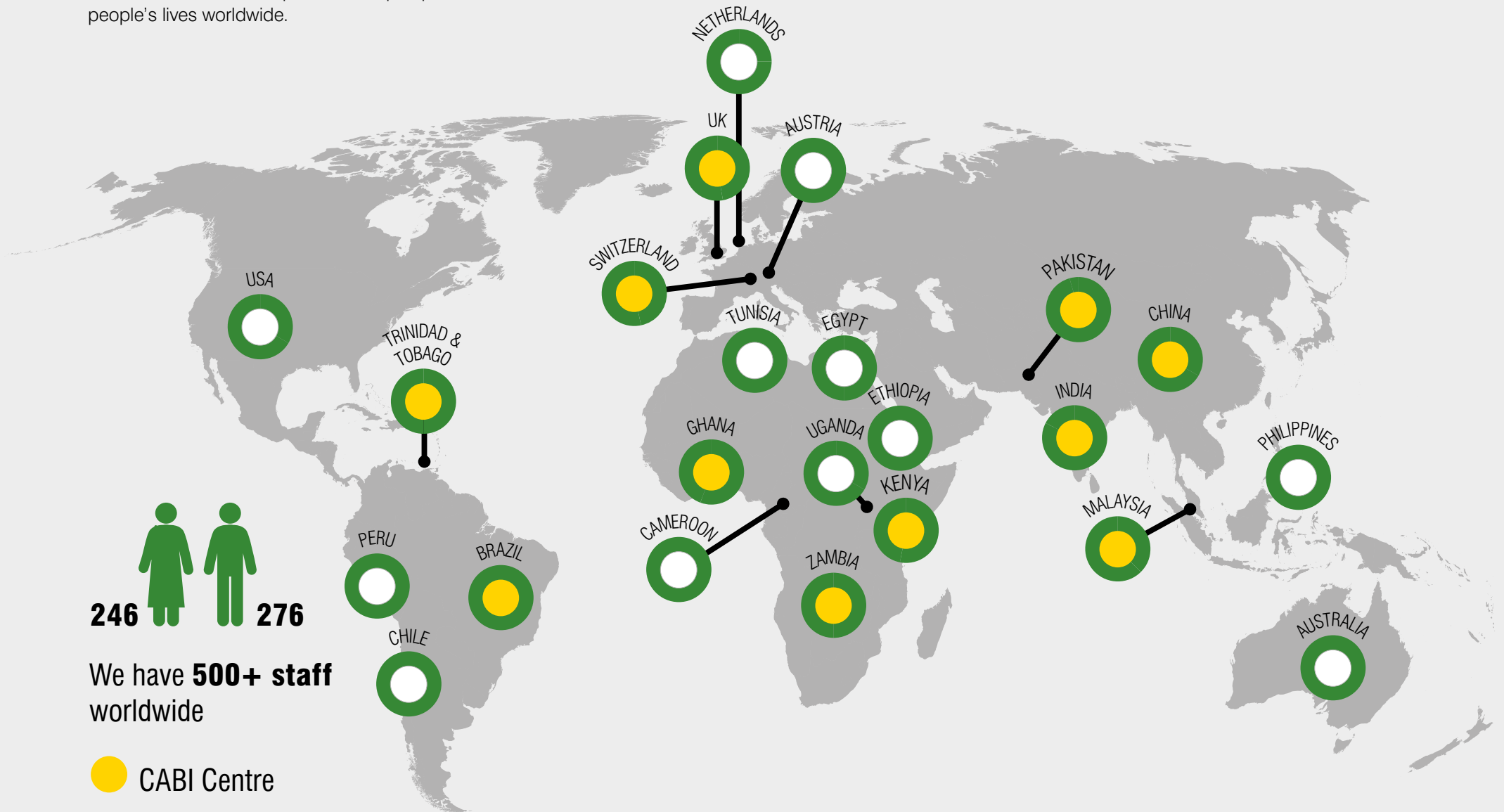





**CABI STAFF**



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.




# Staff publications


 Available open access


**CABI authors** in bold; corresponding authors (where named) underlined.


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*Phthorimaea absoluta* in Isinya, Kajiado County, Kenya © CABI.



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