



CABI
in review

13

Mission

CABI improves people's lives worldwide by providing information and applying scientific expertise to solve problems in agriculture and the environment

Membership

CABI is an inter-governmental, not-for-profit organization that was set up by a United Nations treaty level agreement between our Member Countries. Our mission and direction are influenced by our 48 Member Countries, who guide the activities we undertake.

Partnership

The world we live in today faces challenges that require concerted efforts to resolve. Global problems are often too complex or too interconnected to be addressed by any one single organization. That is why partnerships are at the heart of everything we do.

We work together with policy makers to help develop strategies to support agriculture and the environment and improve livelihoods.

Our project teams around the world work together with local and international research partners, private companies and NGOs to implement their work. Our publishing team works with authors, content providers and partner organizations to develop our information services.

We work in partnership with extension workers, governments and development partners, giving trusted advice and sharing knowledge to support smallholder farmers.

We partner with smallholder farmers to ensure they lose less of their crops to pests and diseases, improve crop quality and yield, and get better prices for their produce.

We believe that real answers are found when organizations and individuals, countries and regions, work together to solve problems and build sustainable livelihoods.

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2013 was another strong year for CABI and I am pleased to announce our fourth year of robust performance. Revenue showed a solid increase from last year, in contrast to most of the environment in which we operated. We grew rapidly, flourishing in both International Development and Publishing.

The contribution made by International Development has increased to its highest level ever and Publishing achieved strong sales figures with good profitability. The people working for and with CABI are to be commended for an outstanding year of achievement.

We have seen Plantwise move quickly to a new level from its beginnings in 2011. This year, Plantwise reached a cumulative total of over 600,000 farmers. It is being mainstreamed into agricultural policy by a growing number of countries, as the programme becomes increasingly sustainable. We were delighted to win the UK National Engineering Foundation award for innovation; an award that recognized Plantwise for its unique approach to improving food security.

Plantwise has not only been a success in its own right, but also a thriving model of partnership that we are beginning to adopt in other areas of our work. CABI is now taking its trade knowledge and combining it with information from complementary partner organizations. Building upon stronger plant health systems stimulated by Plantwise, CABI is using its experience of trade regulation and supply chains to help smallholder farmers in Member Countries to access more valuable domestic and export markets.

In order to tackle global issues, such as securing access to food and nutrition and protecting biodiversity from the threat of invasive species, international organizations must work more closely than ever before. Embracing partnership, 2013 saw CABI operate in an even more multi-functional, multi-level manner. While working in this fashion is not without its challenges, greater efficiencies and synergies can be gained, and therefore greater rewards for our clients. It is a model that we will continue to embrace as we look to the future.

A highlight of 2013, and an event where CABI Member Countries formed their vision for the organization going forward, was the 18th CABI Review Conference. The Conference was held in Oxford, UK, and brought

together a record number of member delegates. We agreed on our goals and on developing a better understanding of the economic benefits and rate of return on our work. Positive reports on Plantwise from funding agencies, such as DFID and the Swiss Agency for Development and Cooperation, tell us we are on the right track.

2013 WAS ANOTHER STRONG YEAR FOR CABI AND I AM PLEASED TO ANNOUNCE OUR FOURTH YEAR OF ROBUST PERFORMANCE

With this in mind, this year's CABI in Review focuses on impact; how we achieve our mission and change people's lives for the better with agricultural knowledge and scientific expertise. We look forward to continued success, concentrating on our vision of delivering high impact development projects with world class information, skills and a solid science base.



CHAIRMAN
CABI BOARD

John Ripley, Chair

A photograph of Trevor Nicholls, CEO, speaking at a podium. He is wearing a dark suit, a white shirt, and a purple tie. He has short, light-colored hair and is wearing glasses. He is smiling and looking towards the right. A name tag is pinned to his lapel. The background is a blurred indoor setting with vertical elements.

**IT IS
IMPORTANT TO
THINK ABOUT
SUSTAINABILITY
NOT ONLY IN
TERMS OF THE
ENVIRONMENT
BUT ALSO
PEOPLE**

Trevor Nicholls, CEO

I am very pleased that the organization can report another year of strong financial performance in 2013. The past year has seen us make good progress in expanding the scope of the Plantwise programme, while broadening our activities in soil health and mobile agro-advisory services, as well as new and continuing projects combating the spread of invasive species, empowering smallholder farmers with the knowledge they need to raise their incomes, and strengthening plant health systems in support of trade and market access. Our publishing activities remained strong, delivering revenue growth above the market average and increased profit contribution.

I would like to recognize the hard work and dedication of CABI staff around the world, and thank our customers, donors and partners, old and new, for their support during the year.

While it is important for the long-term sustainability of CABI that we deliver good financial results, the real measure of our performance as an organization is the extent to which we make a positive difference to the lives of people in our Member Countries, be they policy makers, academics, students, extension workers or farmers. In recent annual reports, we have been able to share some powerful individual case studies and this year's report is no different.

However, we have also begun to make a step change in our capabilities to measure and evaluate the outcomes and long-term impacts of our projects on a more quantitative and systematic basis. It will take time to accumulate this information across most of our projects, but I am pleased that this report already begins to document some of these achievements.

As we look to the future, and given that 2014 is the UN's International Year of Family Farming, it is great that many of our projects focus on providing rural smallholder farmers with the knowledge they need to help them improve the food and income of their families. We are investing more effort in ensuring that the advice we provide supports access to nutrition over and above basic carbohydrates, as well as considering how we can tailor and target the messaging to reach the right people. Our growing programme of advisory services delivered

via mobile phones allows us to be much more ambitious in the reach, frequency and impact of the knowledge we provide.

Sustainable family farming is essential for food security. Collectively, these farmers are responsible for producing over 70% of the world's food, but too often the soils on their farms become depleted of nutrients and degraded, or their crops are damaged by pests and diseases, before and after harvest. We are helping to address some of these challenges through our projects on soil health and via Plantwise, offering science-based, actionable advice direct to farmers.

It is important to think about sustainability not only in terms of the environment, but also people – creating the next generation of farmers. The key is to reach people when they are young, well before they leave their rural communities. CABI works with partners to stimulate training of poor, unskilled and vulnerable young people, helping them gain better jobs in agriculture and/or become self-employed and create income opportunities of their own. During the year, we have continued to be active participants within the Association of International Research and Development Centres for Agriculture (AIRCA), publishing a white paper entitled 'Transforming rural livelihoods and landscapes – sustainable improvements to incomes, food security and the environment.'

Moving rural farming from subsistence to a commercial basis is critical. Often, smallholder crops are not produced to the standards that enable them to access valuable opportunities in supplying urban, regional or international markets.

Increasingly, our projects are taking a value chain approach to help farmers reduce waste and overcome specific challenges: how to produce to regulations or retail specifications; how to handle and store produce after harvest to prevent damage; how to deliver on time according to the amount of demand; how to add value without adding cost.

I hope you enjoy reading this report and, through the stories we include, discover how we are turning good words into positive, practical action for the benefit of many farmers around the world.

CABI'S 2013 REVIEW CONFERENCE

A milestone for CABI in 2013 was our 18th Review Conference. On 27-28 June, 70 delegates from 37 countries – more than have ever come together before – met in Oxford, UK, to agree our priorities aimed at protecting a wealth of projects in agriculture and the environment.

The theme of the event – ‘**Growing to the global challenge: creating a sustainable future**’ – provided a solid background for reaching new solutions to new challenges in a rapidly changing world.

At our last two Review Conferences (2009 and 2011), we highlighted the challenges the world faces in addressing food security in a changing climate and CABI's contribution to these issues over 100 years of scientific endeavour around the world. In 2013, we looked to the future, focusing on building solutions to address the challenges we face in agriculture, trade and improving livelihoods sustainably.

The Conference outlined how CABI plans to address the shared priority areas of our Member Countries by delivering practical, on-the-ground programmes and growing our work together, placing partnership at the heart of what we do. The Review Conference was built on the work of Regional Consultations, which were held in Africa, Asia and the Caribbean in 2012 and 2013. These were important mechanisms for aligning goals between members and forming a strong foundation for the Review Conference, as well as agreeing our new vision for 2020.

Delegates committed to four strategic goals:

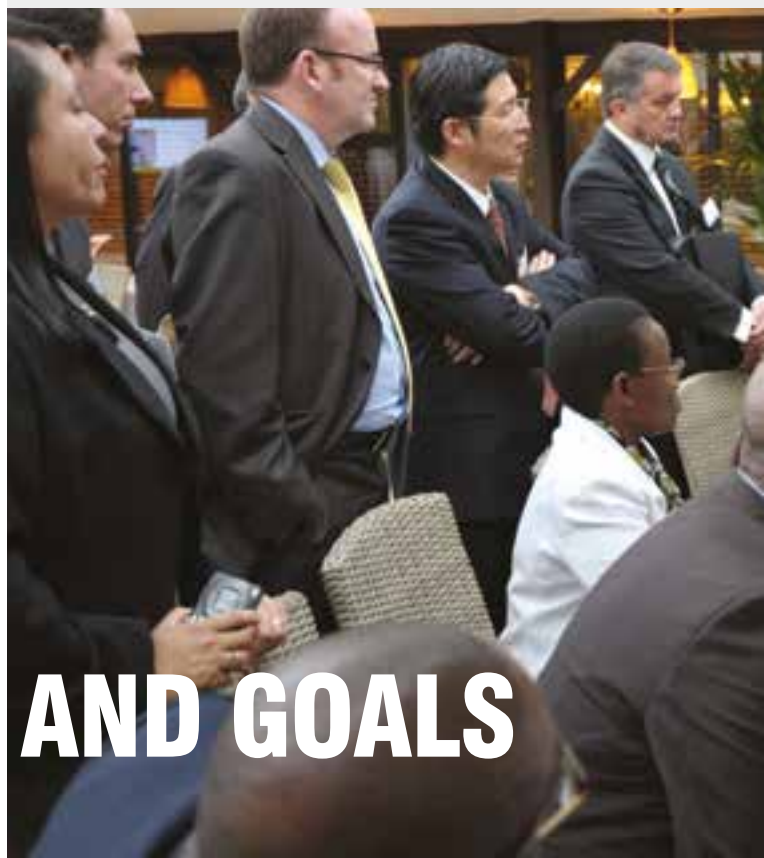
- 1. TO CONTRIBUTE TO GREATER FOOD AND NUTRITIONAL SECURITY WORLDWIDE**
- 2. TO HELP SMALLHOLDER FARMERS INCREASE THEIR INCOMES AND IMPROVE THEIR LIVELIHOODS**
- 3. TO PROTECT THE ENVIRONMENT AND PRESERVE ITS BIODIVERSITY**
- 4. TO PROMOTE INNOVATION AND BUILD CAPACITY TO ADOPT MORE SUSTAINABLE AGRICULTURAL PRACTICES**

which are intended to guide progress towards delivery of Vision 2020:

To deliver high impact development projects with world class information, skills and a solid science base.

which will ultimately deliver CABI's core mission.

VISION, MISSION AND GOALS





"I learnt a lot during the conference, particularly on your Plantwise and plant clinic initiative – a very successful initiative conducted by CABI."

– Dr Masri bin Muhamad, Ministry of Agriculture and Agro-Based Industry, Malaysia



Improving food security through plant health

Nearly one billion people go hungry every day. Meanwhile, a significant amount of food currently grown worldwide is lost to pests despite advances in agricultural technology. Reducing this loss by just 1% could feed millions. To do this farmers need good advice from people they trust.

By bringing agricultural knowledge to smallholders, **Plantwise** and partners are changing the food security story. Since its creation in 2011, Plantwise has delivered more plant clinics, more plant doctors and more life-changing information to small-scale farmers, year on year.

Changing lives with plant health knowledge

Plantwise helps farmers grow more and lose less. When a farmer produces regular, sustainable crops, he or she can keep his or her family healthy, not only in terms of calories, but also nutrition.

Farmers can generate income, send their children to school and build better homes. They can become self-sufficient.

Enabling success for smallholder farmers is a win for food security. Around 40% of the world's food is grown in smallholdings, and over half of the people going hungry worldwide work on these farms.

With the population set to increase to nine billion by 2050, it is critical for everyone that we support small-scale farming by sharing knowledge and increasing agricultural skills.

Plantwise – improving people's lives

Easy access to daily meals is something that many people take for granted. But for millions, eating healthy, nutritious food means being able to grow it. Without practical plant health information to keep crops healthy, people in many regions cannot tackle the damage that pests cause on their own. Ultimately, this affects the health of their families and communities, and threatens their livelihoods.

Providing knowledge on plant health to farmers quite simply changes lives. Plantwise has been doing this through empowering countries to establish plant clinics with trained plant doctors, and a global **knowledge bank** to support them. With over 700 factsheets created in partnership with local experts, and more than 7,000 factsheets contributed from global content providers, the knowledge bank has become a key resource for disseminating plant health information on a large scale.

"After the Thane cyclone, I planted my crops. Four to six rows started turning yellow. The yellowing was spreading in my field and it was completely destroyed. I was lost. I did not have enough food to take home to my family. I heard about the clinics. I thought, 'Let's go and see, and find out what's happening.' When I heard their advice I got confidence to continue growing my crops. I've never seen anything like this. I obtained knowledge. The plant clinic helps not only me, but it will benefit all the farmers. Please conduct the clinics often."

– Valli Kupuswamy, Puducherry, India



“Being a plant doctor is so good. It’s like when a human doctor saves someone’s child. In the same way, when you save a farmer’s plant, you feel proud.”

MARTIN’S STORY

Martin, a Plantwise plant doctor, is one of over 2,000 plant doctors worldwide fighting hunger by advising farmers how to grow more and lose less.

He works in Kayonza Market, Rwanda, and helps hundreds of local farmers, like Emanuel, to feed themselves and their families by saving their crops from major plant health problems.

According to Martin, farmers are often unaware of what is threatening their crops.

“The first problems were bugs with viruses that attack plants. Often, the farmers are not aware of this and it can be very difficult for them. I can diagnose what’s affecting plants: a disease or something else, like salt in the soil. Then I advise the farmer what to do to protect the harvest.”

Plant clinics take place close to farms, so it is easy for farmers to get there and they do not have to spend any money on travel. This, says Martin, is one reason for the clinics’ success.

“Since we work in places close to the farmers, they come in good numbers and we help them.”

Plantwise continues to help make functional, sustainable plant health systems a reality in the countries where people need it most. We think the world needs more plant clinics and doctors, but we think Martin says it best:

“It would be good if plant clinics can reach as many people as possible. I would like policy-makers to know that the plant clinics are very important for Rwanda. Helping farmers fight plant diseases is vital. When the harvest is lost, it is usually due to these diseases. They put a lot of effort into growing their crops, so when we help them deal with the problem they get a good harvest, which provides them with vital income. Then they can look after their family, pay school fees and have good lives.”

“Information from CABI’s Plantwise knowledge bank is just what farmers need. It’s important they understand how to tackle plant diseases, like maize lethal necrosis, so they can protect their crops and their livelihoods.”

– Hon Eng Christopher Chiza, Tanzanian Minister for Agriculture, Food Security and Cooperatives

“Plantwise contributes to more efficient and sustainable crop protection at a farmer level. And in terms of the other technical people, those involved in the technical operations working closely with Plantwise, they are very motivated, willing and eager to take over.”

– Urs Scheidegger, Evaluator for Swiss Agency for Development and Cooperation

Donors:

DfID (UK), SDC (Switzerland), EuropeAid/DEVCO (European Commission), DGIS (Netherlands), IFAD, ACIAR (Australia), MoA PR China, Dow Hunger Solutions

Partners:

See: www.plantwise.org/partners

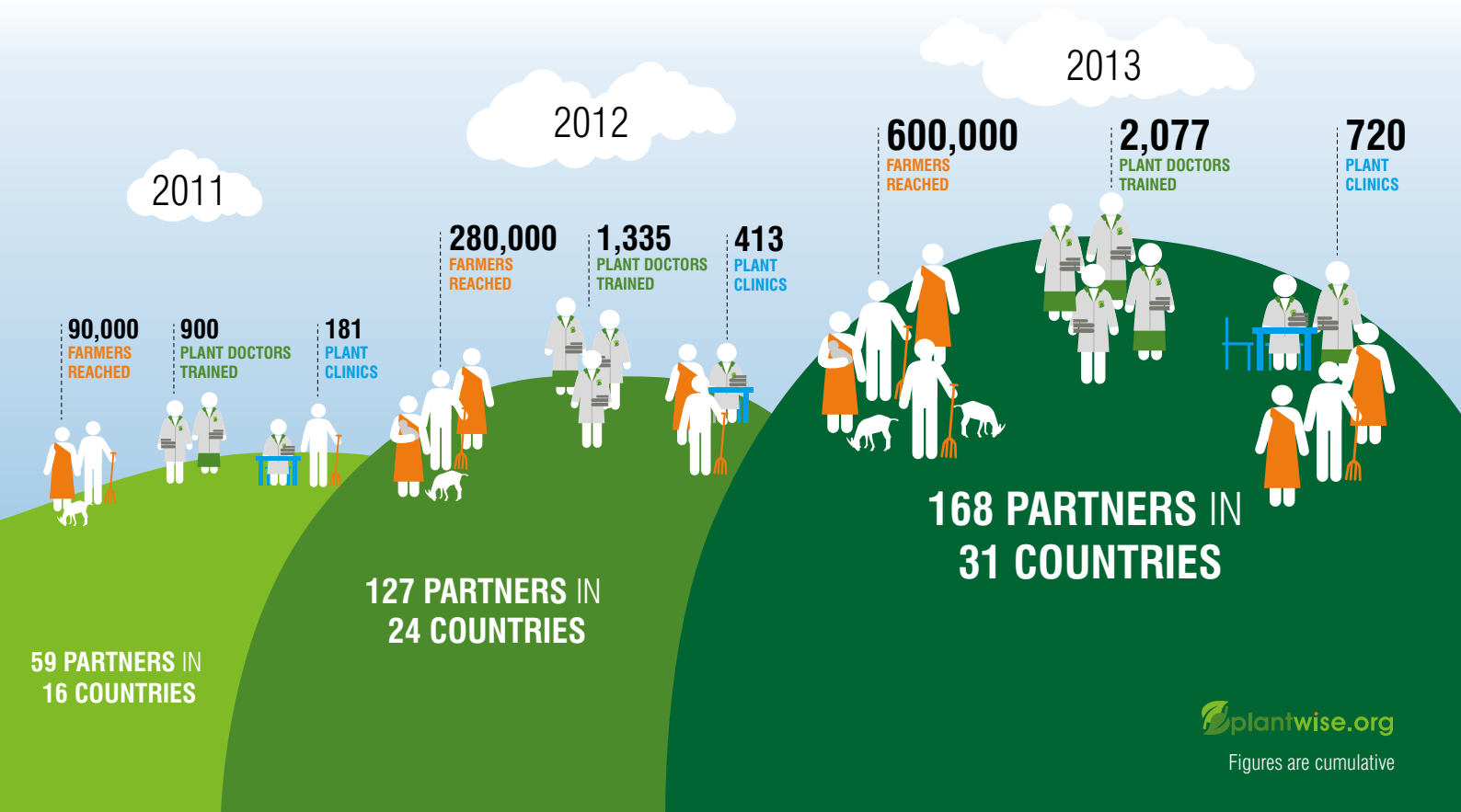
CABI centres:

All centres worldwide



Plantwise wins the National Engineering Foundation Award for Innovation in Policy, December 2013

PLANTWISE GROWING YEAR-ON-YEAR



Fighting poverty with vegetable seed production



In her wildest imagination, Catherine Atii, a mother of four living in Kenya, could not have believed such a bright and prosperous future lay ahead of her. A year ago, she was living with her children in a run-down rental house by the roadside. Today, Catherine earns almost US\$3,500 a year growing and selling seeds of African Indigenous Vegetables (AIV). She learnt to do this through a CABI-led project to reintroduce nutritious local vegetables back into diets and help smallholder farmers improve their livelihoods.

To Catherine, who used to work as a casual labourer, the idea of farming local vegetables for seed production was entirely new. She was sceptical. "I wondered how somebody could make money out of the indigenous vegetables, which we had never thought of highly." But despite her doubts, Catherine attended training organized by Simlaw Seeds Co Ltd, the Kenya Agricultural Research Institute (KARI) and Technology Adoption Through Research Organizations, which together implemented this CABI-led project, with funding and support from the Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA).

At the time of Catherine's training, her husband was away and she was taking care of her family single-handedly. But despite the hardship, Catherine flourished. Excited about the prospect of AIV farming, she asked to be selected as a farmer under a contract seed arrangement with Simlaw Seeds, a subsidiary of the Kenya Seed Company.

Since then, Catherine has become a registered seed stockist, running her own shop. And when her husband, Robert, returned to the village, he followed in her footsteps, embarking on a career in vegetable seed production. Proud of his wife, Robert sees their business expanding further.

Seed enterprise transforms lives

Today, Catherine's life is utterly transformed. CABI's AIV project gave her the knowledge and tools she needed to lift herself out of poverty. She paid for her children to attend high school, built her own house and bought

a cow. With AIVs, she feeds her growing family the nutritious meals they need.

Catherine has changed not only her family's life, but also the lives of those in her community.

She is a crusader of AIV farming in her region, training her neighbours in seed production and raising public awareness about AIV's nutritional benefits, like higher concentrations of iron and protein.

For a long time, AIVs lost favour with people in Kenya, who preferred to eat imported, but less nutritionally valuable, produce. Catherine has helped reintroduce AIVs back into local diets. Now, parents in her community report how their children prefer the taste of AIVs and choose them over other vegetables. Using the knowledge she gained from this CABI-led project, Catherine is helping her community to make better, healthier futures for themselves.

Along with Catherine, the project trained a total of 294 farmers in Bungoma in seed production, 83 of whom were women. The training included how to apply regulatory requirements, and how to process, pack and market the seeds. The project also connected participants with lucrative, ready-made markets, and provided training to nine seed stockists, various marketing agents and 13 field assistants.

As a result, AIV contract farming has benefited both farmers and private companies alike.

Catherine believes that, "Contract farming is the way to go for us smallholder farmers." Edwin Kiptarus of Simlaw Seeds agrees, claiming that, "Companies are assured of meeting their production targets, while farmers are assured of ready markets for their produce". Likewise, Nasambu Okoko of KARI is sure of the benefits of contract farming. According to her, "It is an effective way of coordinating and promoting production and marketing in agriculture."

Catherine's story is part of a much bigger picture. CABI's involvement in AIV projects with ASARECA and Irish Aid funding has helped not only individuals, but also local markets and trade. This is essential for lifting developing countries out of poverty in the long-term and reaching greater numbers of people.

How CABI's seed programme works for AIVs

**EARNINGS
INCREASED TO
US\$3,500 A YEAR**

Farmers across Africa face challenges in accessing quality seeds. For this reason, CABI, originally funded by ASARECA, and now by Irish Aid, has been facilitating partnerships to scale up AIV farmer-led seed enterprises in Kenya, **Tanzania** and other countries in East Africa.

"Seed development requires intense training for farmers and constant support to ensure that farmers produce clean seed," says Dr Daniel Karanja, a plant pathologist working for CABI in Africa. "Once registered, the farmers are supplied with AIVs, which include African nightshade, amaranthus, crotalaria and jute mallow seed – four species that have been prioritized by farmers in the area".

As one of the beneficiaries of the project in Kenya, Catherine acquired the technology to grow jute marrow, which she planted on a 0.4 hectare plot in the first season. In the second season, she planted crotalaria on a similar sized piece of land. "After planting, we continued to receive hands-on training, which helped in ensuring that we realized our target," says Catherine.

**294 SEED
FARMERS
TRAINED**

From her plot, Catherine harvested 121 kg of jute marrow seeds and 485 kg of crotalaria seeds. She delivered these to Simlaw Seeds and received a total of Kshs. 277,825 (US\$3,473) for her AIV seed production.

Donors:

Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA)
Irish Aid

Project partners:

Horticultural Research and Training Institute Tengeru (HORTI-Tengeru)
INADES-Formation Tanzania
Kenya Agricultural Research Institute (KARI) Kisii
Simlaw Seeds Co Ltd
Technology Adoption Through Research Organization (TATRO)
The World Vegetable Center – Regional Center for Africa (AVRDC-RCA)

CABI centre:

Kenya

Using mobile technology to help farmers make better decisions

Agriculture is the backbone of many developing nations' economies: the main source of income and nutrition for the majority of the population. But smallholders are often unable to access information or public advisory services on a regular basis. Mobile technology provides an answer and CABI continues to play a major role in developing knowledge-sharing systems that harness the power of this technology.

Across the developing world, around 40% of people now actively subscribe to mobile services, with 130 million new subscribers every year, and mobile (2G) coverage around 95% by population. This proliferation in mobile communication is enabling farmers in even the most remote locations to receive timely and targeted agricultural advice, bridging the information gap that conventional public extension services cannot span.

CABI understands the importance of this technology in reaching remote communities. We work with farmers, mobile operators, content providers, extension services and industry bodies to provide mobile information services across the whole agricultural supply chain. In 2013, we continued our work in mobile delivery and rolled out several new projects.

mKisan – providing farmers with practical advice

mKisan completed its first year of operation in October 2013 and continues to go from strength to strength. This service provides practical farming advice to subscribers across six states in India (Andhra Pradesh, Bihar, Karnataka, Madhya Pradesh, Maharashtra and Uttar Pradesh).

CABI is the principal knowledge partner in the mKisan service, providing content and quality assurance through our 'Direct2Farm' information database.

Through mKisan (Kisan meaning 'agricultural worker'), farmers can get advice directly from a panel of crop and livestock experts and can also receive information on diseases, pests, weather and market prices to support real-time decision making. The response has been positive, particularly among smallholders. One million farmers have used the service to date, with around 340,000 active subscribers.



Features of the services include interactive voice response that helps overcome the literacy problems associated with more text- and literature-based services. This is especially important for women, since literacy in these regions is lower among women than men. A real-time interactive helpline provides help to farmers when they need it.

With a user-requested focus on new husbandry techniques, breeds and varieties, CABI has helped farmers diversify and adopt more productive practices, directly improving their livelihoods.

The aim now is to extend the reach of mKisan and further spread the word of mobile agro-advice.

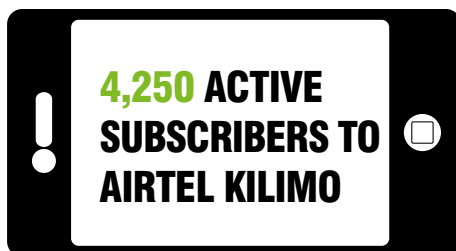
Airtel Kilimo – helping farmers to make informed decisions

Airtel Kilimo (Kilimo meaning 'agriculture') was launched in Eastern Kenya in April 2013. With five million smallholder farmers relying on 5,500 agricultural extension workers for advice, a new approach to information sharing was needed. Airtel Kilimo provides exactly this.

Over 70% of Kenyans own a mobile phone; mobile technology is therefore ideal for reaching farmers in remote or isolated communities with limited access to extension workers.

CABI is working with partners to manage the advisory content of Airtel Kilimo. This service provides information to farmers through both voice and text, enabling them to make well-informed decisions when preparing soil, planting, managing pests, harvesting, and marketing produce. Importantly, climate and weather news is integrated to support real-time farming decisions. Advisory messages inform farmers on very detailed issues, such as where they can buy seed, at which growth stage to apply fertilizer and when to weed, improving productivity and reducing cost and environmental impact.

By the end of September 2013, the service had 4,250 active subscribers to SMS services and voice content covering five crops. The success of the scheme prompted its extension to western Kenya in November 2013 with the intention of rolling it out to central regions in 2014.



Café Móvel – the mobile coffee service

Café Móvel was formally launched in Southern India in August 2013. As the sixth largest coffee producer in the world, India supports over 22,000 farmers, especially in the southern states. Coffee, an export-oriented commodity, earns a considerable amount of foreign exchange for the country as a whole.

Focusing on better trade practices, Café Móvel (meaning 'mobile coffee' in Portuguese) is a mobile-enabled extension service based on CABI's Direct2Farm database. This service supplements existing face-to-face support and provides the information that farmers need to boost the quality and yield of their produce and, ultimately, get a better market price.



To date, it has advised and supported around 150,000 coffee farmers in Southern India. CABI will continue to develop this service with the aim of integrating coffee processing and marketing businesses to provide a direct field-processing-market resource for coffee farmers.

“Our growing programme of advisory services allows us to be much more ambitious in the reach, frequency and impact of the knowledge we provide.”

– Trevor Nicholls, CEO, CABI

Promoting mobile services

In a world where technology is increasingly important, CABI's expertise in processing quantities of complex data, combined with our knowledge and experience in agricultural best practice and sustainability, have allowed us to harness mobile technology to improve the livelihoods of smallholders worldwide.

In the case of mKisan, 20% of profiled customers fell below the international poverty line of US\$1.25 a day but, with improved access to information through new technologies, many are finding a way out of poverty.

Sanjay Yahulla from Uttar Pradesh, India, explains that, "I keep goats and I get to know many information about goats, such as good breeds, feeding and diseases from mKisan service. My milk production has increased by 35% and now I can earn INR 150–200 (US\$2.50–3.30) per day. The main good thing about this service is that we can get any information right from home, any time."

Looking to the future, CABI will continue to work to improve access to good quality agricultural knowledge in developing nations. CABI has always been at the forefront of getting information into the hands of those who need it most and will continue to harness the best technologies to continue to make this happen.

"I am using mKisan since April this year. I got good advices on turmeric farming and this year I have earned INR 30,000 (US\$492) from my one acre plot. I am very happy; mKisan is a real friend of Kisan."

– Yogesh Rameshwar Lulle, Maharashtra, India

"Because of timely tips, I got from mKisan, I could increase yield of my gram crop by 25% this year and earned additional INR 50,000 (US\$821). Mobile advisory service is a boon for us, the farmers; more of us should take benefit of this."

– Arjun Aharwal, Madhya Pradesh, India

Donors (mKisan):

Bill & Melinda Gates Foundation

GSMA mAgri

United States Agency for International Development (USAID)

Partners (mKisan):

Digital Green

Handygo Technologies

International Livestock Research Institute (ILRI)

Donors (Airtel Kilimo):

Bill & Melinda Gates Foundation

GSMA mAgri

United States Agency for International Development (USAID)

Partners (Airtel Kilimo):

Airtel Kenya

Kenya Agricultural Commodity Exchange Ltd (KACE)

Kenya Agricultural Research Institute (KARI)

Kenya Meteorological Department

Kilimo Media International (KiMI)

OnMobile

Donors (Café Móvel):

Coffee Board of India

Common Fund for Commodities

International Coffee Organization

CABI centres:

India, Kenya, UK

Delivering down-to-earth advice on smart farming

'Malkia saves the seed' was commissioned by ASHC and published in **Shujaaz**, a youth media magazine, developed by Well Told Story, the double Emmy Award winning, Kenyan-based, social communications consultancy, in partnership with Farm Inputs Promotions Africa (case study), and Peter Okoth and CIAT (agronomic impact).





HEE! IT'S SIMPLE! FOR A MUCH IMPROVED YIELD ALWAYS REMEMBER TO...

- USE IMPROVED QUALITY SEED.
- APPLY THE RIGHT FERTILIZER, AT THE RIGHT TIME, IN THE RIGHT AMOUNT.
- NEVER LET THE FERTILIZER TOUCH THE SEED.
- SPACE YOUR SEEDS 25cm APART IN ROWS THAT ARE 75cm APART.
- ADD ORGANIC MATTER TO THE SOIL WHEN PLANTING (you can use compost, chicken and cow manure)
- KEEP YOUR FIELDS FREE FROM WEEDS AND PESTS!

HEY BOB! YOU'VE GOTTA TELL EVERYONE HOW TO IMPROVE THEIR YIELD BY FOLLOWING THESE STEPS...IT EVEN WORKS FOR BACK FARMING SO MARIA KEM WILL BE HAPPY!

"TELL YOUR PARENTS & GRANDPARENTS - THEY'LL BE SO PROUD OF YOU, JUST LIKE AN ANKRA BEE!"

If this cartoon has taught you anything about smart farming, imagine what it could teach 100,000 young African farmers.

In Africa, many people are farmers and grow their own food to eat. But they often lack access to information about good farming practices, like Integrated Soil Fertility Management (ISFM). ISFM practices are based on years of research. While they are readily integrated into farming in developed countries, they are not always accessible in the developing world. Today, ISFM can increase crop yields



agriculture and science. This has meant 'training the trainers', for example, holding workshops for scientists to help re-sensitize them about the information young people need and how best to communicate it to them. In 2013, two 'write-shops' were held in Ethiopia and Ghana to teach scientists how to communicate to young people in a non-technical manner.

Produced for a range of audiences in at least seven different languages, the ASHC materials, co-developed with partners, share best practice, knowledge and information. Professional communications experts, cropping system specialists, economists, gender experts, soil

scientists and technical writers have come together to help deliver the best practical resources possible. These resources are helping smallholder farmers in Africa make the changes they need to grow more quality produce.



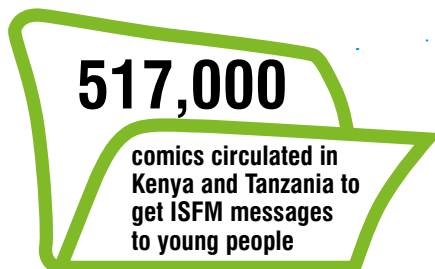
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two- to three-fold. How much better would the lives of smallholders be if they could grow two or three times more food from their land?

A wealth of information exists on smart farming practices, like ISFM, but is not reaching those who need it most in Africa. To

answer this challenge, CABI is leading the **Africa Soil Health Consortium (ASHC)**. This partnership aims to bridge the gap between those who have science-based agricultural information and the farmers who can benefit from it. ASHC does this primarily by working with partners to deliver down-to-earth information and materials, such as books, cartoons, and leaflets, designed to improve farmers' understanding of ISFM.

ASHC has experimented with innovative ways of educating young people about



80%

Dr Shamie Zingore, the International Plant Nutrition Institute's Regional Director for sub-Saharan Africa, talks about the benefit of working with CABI on developing ASHC materials to communicate the 4R concept of soil nutrient stewardship.

"We recognize CABI for their significant support in the project so far. Their expertise in developing communication materials and preparing a field-testing questionnaire to measure the impact of the materials is commendable," says Dr Zingore commenting at a project review meeting in Nairobi, Kenya.

SMART FARMING

When it comes to changing farming practices, it is important to start with young people. In 2013, CABI, in partnership with Young African Express (YAE), ran a programme of school-based education activities. This included an ISFM poster competition dubbed 'Smart Farming'. After a series of science lessons on ISFM in the YAE magazine, and an art lesson on drawing posters, the children produced designs depicting everything they had learnt.

The winner of the competition was **Felix Kamiri Muchiri** of Kiambu High School in Kenya. He showed that young Kenyans really understand what farmers need to be successful.

Felix's poster shows how ISFM can be combined with other practices to make farming more productive and profitable. Felix so impressed Kiambu County's Deputy Governor, Hon. Gerald Githinji, that he has agreed to mentor Felix in reaching his career goal in agriculture.

"From the competition I learnt that there are young people out there with big ideas but lack avenues of bringing them out. When I participated in the competition, I didn't imagine coming this far and I am sure there are others like me", says Felix.

He is grateful for having won the competition. "It gave me a chance to meet with the Deputy Governor of Kiambu

County. I also received an AMIRAN farmer's kit from CABI that has brought much change, not only to my life, but also to my family," says Felix. "Being awarded a prize really boosted my confidence. My teachers were proud of me and my fellow students began to look up to me for a positive change in their attitudes towards opportunities in life!"

Dr George Oduor, Deputy Regional Director at CABI, is convinced that young people are a great source of hope for the future of farming in Kenya. "It is often thought that young people don't take an interest in agriculture", says Dr Oduor. "This competition shows that with a combination of exciting lessons and incentives, young Kenyans quickly pick up the basics of smart farming and are keen to learn. After meeting Felix, it was clear why he won the Smart Farming poster competition. He's already actively involved in farming and he sees it could be a successful career option for him."

Donor:

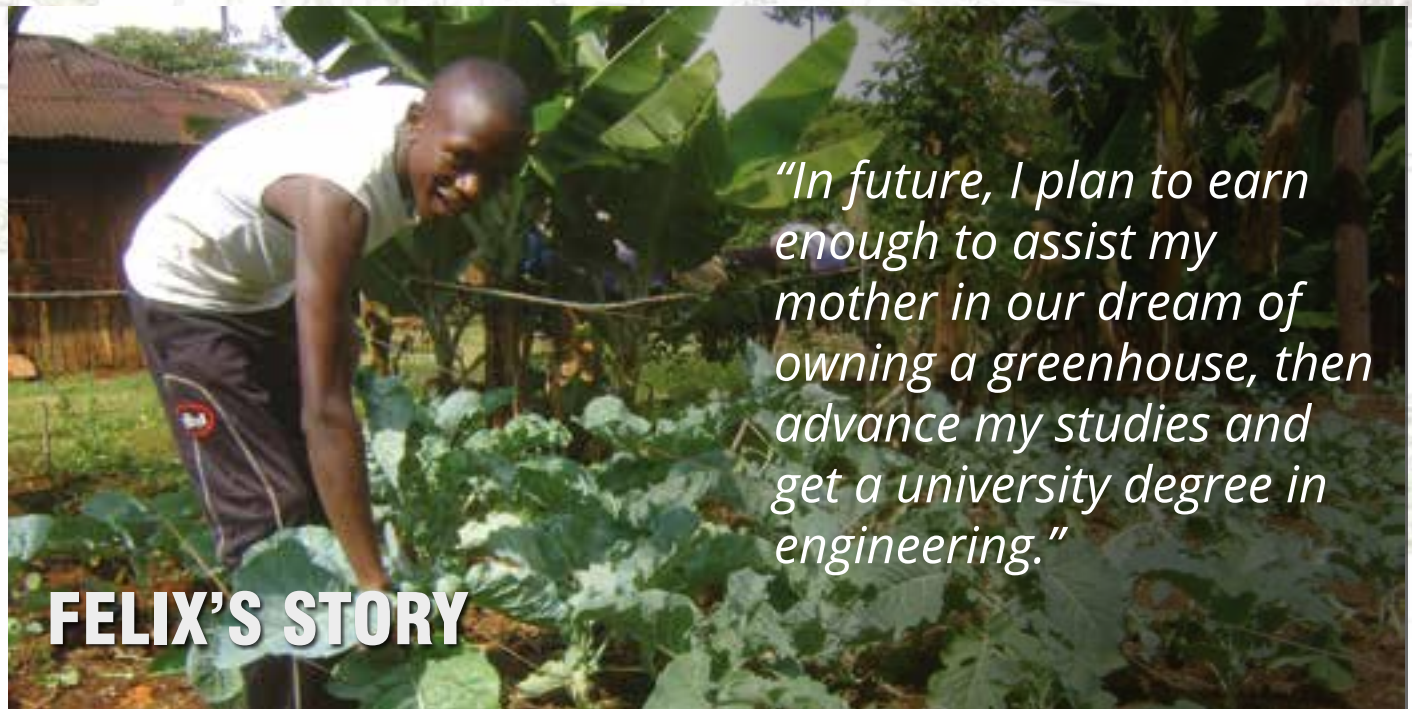
Bill & Melinda Gates Foundation

Partners:

See: www.cabi.org/ashc

CABI centres:

Ghana, Kenya



"In future, I plan to earn enough to assist my mother in our dream of owning a greenhouse, then advance my studies and get a university degree in engineering."

FELIX'S STORY

Combating invasive species to protect livelihoods

Globalization, climate change and human mobility have fundamentally altered the biological world in which we live. As a result of travel, transport and tourism, species have been moved into new environments, where many have established and proliferated. The increased mobility of a host of species wreaks havoc in a range of sensitive habitats like coral reefs, forests and grasslands, as ‘invasive’ species arrive and compete with native species – animals and plants on which rural communities often depend.

Tackling **invasive species** is often considered in the context of protecting biodiversity and the environment in general, but is also very much an issue of economic and social importance. Every year, invasive species are estimated to cost the global economy more than US\$1.4 trillion, or 5% of global GDP (Pimentel *et al*, 2001).

In developing countries, where fewer resources are available to tackle the problem, the impact of invasive species on economies and livelihoods is devastating. Dr Arne Witt, Invasive Species Coordinator at CABI, recognizes how invasive species can spell disaster for rural communities in the developing world:

“Most people in developing countries are dependent on natural resources for their survival. People in rural communities use indigenous or native species for building materials, for grazing, for food, and for medicine.

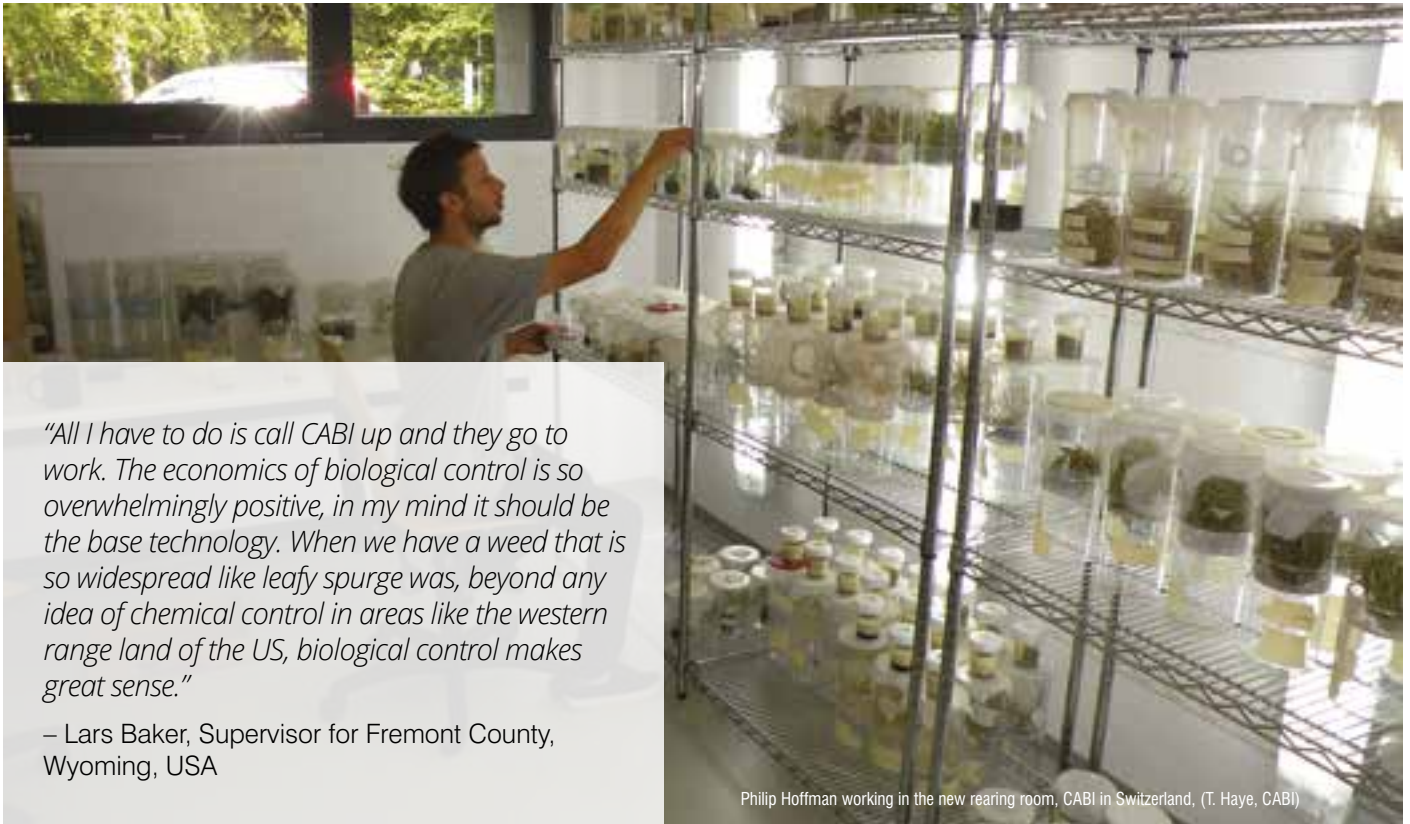
When invasive species come into the system, they erode the natural resources on which so many people depend.”



Ambrosia artemisiifolia (Ragweed), (H. Müller-Schärer)



Ophraella communis beetle



Philip Hoffman working in the new rearing room, CABI in Switzerland, (T. Hays, CABI)

“All I have to do is call CABI up and they go to work. The economics of biological control is so overwhelmingly positive, in my mind it should be the base technology. When we have a weed that is so widespread like leafy spurge was, beyond any idea of chemical control in areas like the western range land of the US, biological control makes great sense.”

– Lars Baker, Supervisor for Fremont County, Wyoming, USA

CABI’s expertise

CABI is a world leader in tackling invasive species.

With over 800 years of collective experience in its ranks, CABI is successfully helping to control invasive species worldwide.

In 2013, our centre in Switzerland formed part of an EU COST Action consortium,

which found the beetle *Ophraella communa* present in Europe for the first time. This beetle offers a natural control to *Ambrosia artemisiifolia*, commonly known as ragweed or ambrosia. Ragweed is an increasing problem in Europe, as it rapidly colonizes farmland and is a severe allergen in humans. The effects of ragweed cost Europe an estimated €4.5 billion a year. CABI’s work contributed to a greater understanding of how the beetle naturally controls ragweed, offering hope of the first successful biological control solution in Europe, and a potential answer to long-term control of one of the most invasive species on the continent.

**RAGWEED COSTS
EUROPE €4.5
BILLION A YEAR**

Economic analyses are important tools for understanding how best to tackle invasive species, but little guidance exists on how they should be applied in practice. In 2013, our centre in **Trinidad & Tobago** identified a lack of economic

impact studies on invasive species in the Caribbean, and the shortage of skilled personnel to conduct them, as specific gaps that urgently need to be addressed. Data produced from CABI-led expert workshops demonstrated the cost effectiveness of managing invasive species in the Caribbean. Results clearly showed that it was in the government’s best

interests to manage invasive species in the region, such as whitetop and giant African snails.

But the threat of invasive species continues and so too does CABI’s work to combat it. We look at how one plant is affecting the lives of hundreds of people in East Africa – *Opuntia stricta*.

Solving a prickly problem

Opuntia stricta, also known as Australian prickly pear or pest pear, is an invasive cactus native to the Americas. It was introduced to East Africa decades ago. Today, it is having a devastating effect on people's lives, reducing land productivity, impacting livestock health, and driving people from their homes and land. Talking to people in Kenya, the level of destruction the cactus has brought becomes all too clear.

This cactus is a threat because it is so invasive. Most animals cannot eat the plant itself because it has spines, which are known to cause serious injuries to livestock trying to forage under or near the plants.


However, the cactus fruits are tasty to a number of animals. When goats, sheep and other animals feed on them, tiny spines on the fruit are deposited in their mouths causing

"Before the cactus, we had a lot of animals. Each and everybody. But up to this time now, some have completely nothing. Our life depends on animals. Only. Goat, sheep and cattle – that's all. If they get finished, we also get finished. We have tried so many things to kill it, to try to stop it. Some try to cut it and then burn it. Nothing."

– Simon Gila, Kenyan farmer

abscesses, which inhibit feeding. Spines also lodge in their stomach and intestine, causing secondary infections, and in some cases death. People living in East Africa find the cactus almost impossible to control.

The best option is biological or natural control, using the invasive species' natural enemies to make it less



"This used to be a very beautiful environment before Opuntia colonised our grazing fields. We are having this as a major problem, since it has begun claiming livestock, claiming land, and forcing us to move from our homes."

– Parsito Kitongo, Kenyan farmer

problematic. Cacti spread rapidly through the dispersal of seeds by animals that have consumed their fruit. The spines make manual control virtually impossible. Chemical control is expensive because exceptionally high concentrations of herbicides are needed. The only really viable option is natural control.

In 2013, CABI started a project in Kenya to introduce a bug, commonly known as cochineal, to control *Opuntia stricta*. Different species of cochineal are specific to particular cactus species and, as such, cannot feed or develop on any other plant species.

Through our work, we are tackling the spread of *Opuntia stricta*, as well as many other invasive species like devil weed and famine weed, in order to safeguard people's livelihoods.

To see more about how invasive species affect people in Africa, see: www.cabi.org/greeninvasion

Donors (*Opuntia stricta*):

DGIS
The Grumeti Fund
OI Jogi Ltd

Partners (*Opuntia stricta*):

Department of Agriculture, Food Security and Cooperatives in Tanzania
Kenya Agricultural Research Institute (KARI)

Donors (Caribbean):

United Nations Environment Programme – Global Environment Facility

Partners (Caribbean):

See: www.cabi.org/projects/project/2916

Donors (Ragweed):

EU

Partners (Ragweed):

SMARTER COST Action (FA1203), see: www.ragweed.eu

CABI centres:

Kenya, Switzerland, Trinidad & Tobago, UK

"If we act now – if we develop and implement effective management strategies, including biological control – we can make a difference."

– Dr Arne Witt



Field and affected by *Opuntia stricta* in Laikipia, Kenya (Sarah Hillier, CABI)

Creating futures in farming for young people and women

Majida Parveen lives with her father, Meharban Ali, in the Muzaffargarh District of the Punjab in Pakistan. Most of the people in her village live on low incomes and have limited access to education.

Her father has worked as a labourer for more than 30 years but, for the past two, has seen regular employment steadily diminish. With the family struggling to make a living, Majida recently decided to leave education, find work as a seamstress, and support her family.

Without education and skills, Majida's prospects for finding work will be difficult. But with the right training, farming can offer her a much brighter future – something that Majida was not aware of until she joined a **CABI-led Skills for Farms project**.

Losing agricultural skills

Agriculture is the mainstay of Pakistan's economy. It engages nearly half of the country's workforce and accounts for over 20% of GDP. Together with agro-based products, agriculture contributes 80% of the country's total export earnings.

But despite the economic importance of agriculture, many young people and women have little access to information that could help them improve their future farming careers and livelihoods. Each year, the number of young people and women choosing to farm for a living is going down. Left unchecked, this reduction in the farming workforce will affect the future of sustainable food production and, ultimately, food security in Pakistan.



In 2013, CABI launched the Skills for Farms project with financial support from the Punjab Skills Development Fund (PSDF). This project aims to stimulate agricultural markets by training poor, unskilled and vulnerable people. The project focuses on youth and women from four districts of South Punjab: Bahawalnagar, Bahawalpur, Lodhran and Muzaffargarh.

Working directly with local communities, the CABI team has been working to enhance the skills of young people and women in particular, enabling them to get better jobs or generate income through self-employment. Eventually, the trainees will contribute towards food security and the lives of the rural poor by utilizing these skills.

So far, CABI has established a support office and five training centres in villages in the Muzaffargarh District. The team has developed complete training programmes and has conducted regular classes in both kitchen gardening and grain storage. Between September 2013 and March 2014, CABI trained 250 young people in two sessions, each lasting three months.

Also working on the training project is CABI's partner, the University of Arid Agriculture, based in Rawalpindi, Punjab. This university has established a system for certifying agricultural trainees according to their knowledge, skills and training levels. To monitor these and other agreed outputs, PSDF is engaging a third-party firm. At the same time, PSDF's own monitoring team regularly visits the project sites to assess the quality of the training being provided to young farmers.

Changing lives with kitchen garden skills

Majida says employment opportunities were not always forthcoming – sometimes she could find work; sometimes not. Fortunately, Majida's village was one of those to be selected for Skills for Farms kitchen garden training. Majida joined a group, visiting the CABI centre and taking part in the lessons, as well as practical exercises in the training gardens.

After three months, Majida successfully completed her course. Armed with a thorough understanding of the production of various types of vegetables, she decided

to support her family. Her father allowed her to use two acres of his land, where she worked with him in the field, growing a selection of local vegetables. The produce they grow now not only gives them fresh, nutritious food to eat, but also to sell for income.

NAJMA SHAHEEN LIVES IN MOUZA BUDH TEHSIL. SHE RUNS A CANTEEN IN A GIRLS' HIGH SCHOOL AND WAS TRAINED IN KITCHEN GARDENING. SHE NOW USES THE INFORMATION SHE GAINED TO GROW VEGETABLES FOR THE GIRLS WHO EAT AT HER CANTEEN, PROVIDING THEM WITH MORE NUTRITIOUS MEALS.

Majida says she is happy. "I am playing my part to make food security in my family and village a reality. I no longer need to work as a seamstress, and am back in education. Thank you CABI for changing my life."

Majida is just one of hundreds of women trained by CABI in kitchen gardening through the Skills for Farms project. Many other women have benefited from the courses and are going on to improve their own lives, as well as the lives of their families and communities, in terms of food security, nutrition and income generation.

QALSOOM BIBI LIVES IN MUHALLAH BAKHAR. HER TRAINING IN GRAIN STORAGE MANAGEMENT HAS NOT ONLY HELPED HER PROTECT HER OWN GRAIN, BUT ALSO EMPOWERED HER WITH THE KNOWLEDGE TO TEACH OTHER WOMEN IN HER VILLAGE TO SAFELY STORE THEIR GRAIN AND THEREBY IMPROVE THEIR OWN FOOD SECURITY.

Donor:

Punjab Skills Development Fund (PDSF)

Partners:

The Food and Environment Research Agency (FERA)
University of Arid Agriculture, Rawalpindi

CABI centre:

Pakistan

Improving lives with knowledge

At CABI, we know the most effective way of addressing important agricultural and environmental issues, and improving people's lives, is to facilitate sharing of scientific information and knowledge. In working to achieve this, we have been at the forefront of scientific publishing for over 100 years, consistently reinvesting our publishing surpluses into development projects.

Our work in publishing very much reinforces our international development goals and projects. In 2013, CABI joined a number of initiatives to share knowledge, including **Global Open Data for Agriculture and Nutrition (GODAN)**, which supports efforts to make agricultural and nutritionally relevant data available, accessible and usable worldwide.

We also announced a strategic collaboration with the **Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)**, giving 32 African universities free access to **CAB Abstracts**, **CABI Compendia** and **CAB eBooks**.

Our publishing products and work in knowledge management enable all kinds of people working in agriculture and the environment to make informed decisions – from farmers and extension workers needing practical soil health information, to researchers and decision makers needing data to form policies to address some of the world's biggest challenges like climate change and food security.

Policy makers, researchers and workers in many organizations across the world benefit from CABI's science publishing and knowledge management and, in 2013, we continued to build on these resources to help people reach well-informed decisions and positively impact people's lives.

CABI's work supports US policy decision making on invasive species

In 2013, CABI worked with the United States Department of Agriculture (USDA), using our scientific expertise and evidence-based approaches to research, to help prove their focus on tackling invasive species in the US is scientifically justified.

The USDA wanted to understand how it could prevent invasive species negatively impacting endangered, threatened or 'candidate' (i.e. potentially endangered or threatened) species in the most cost effective manner. However, the evidence underpinning the impact was fragmented. While certain documents, like the COP10 statement of the Convention on Biological Diversity, state that invasive species are the second greatest cause of species extinction, the information supporting this statement was incomplete.

The USDA recognized that to be cost-effective, management of invasive species must be supported by the best available science. The department asked CABI – with world-class expertise in analyzing scientific data – to undertake a systematic review and determine whether the COP10 statement agrees with the available information. **"Systematic reviews** are quickly becoming the gold-standard method for evidence-based policy," says Holly Wright, Systematic Reviewer at CABI. More rigorous than conventional literature reviews, systematic reviews involve an exhaustive and unbiased search of all available literature, including peer-reviewed articles and papers.

In 2013, a team of CABI scientists considered data supporting or contesting the impact of invasive species on the decline or extinction of endangered, threatened or candidate species in the US. They discovered that the

vast majority of the information they reviewed showed the impact to be negative.

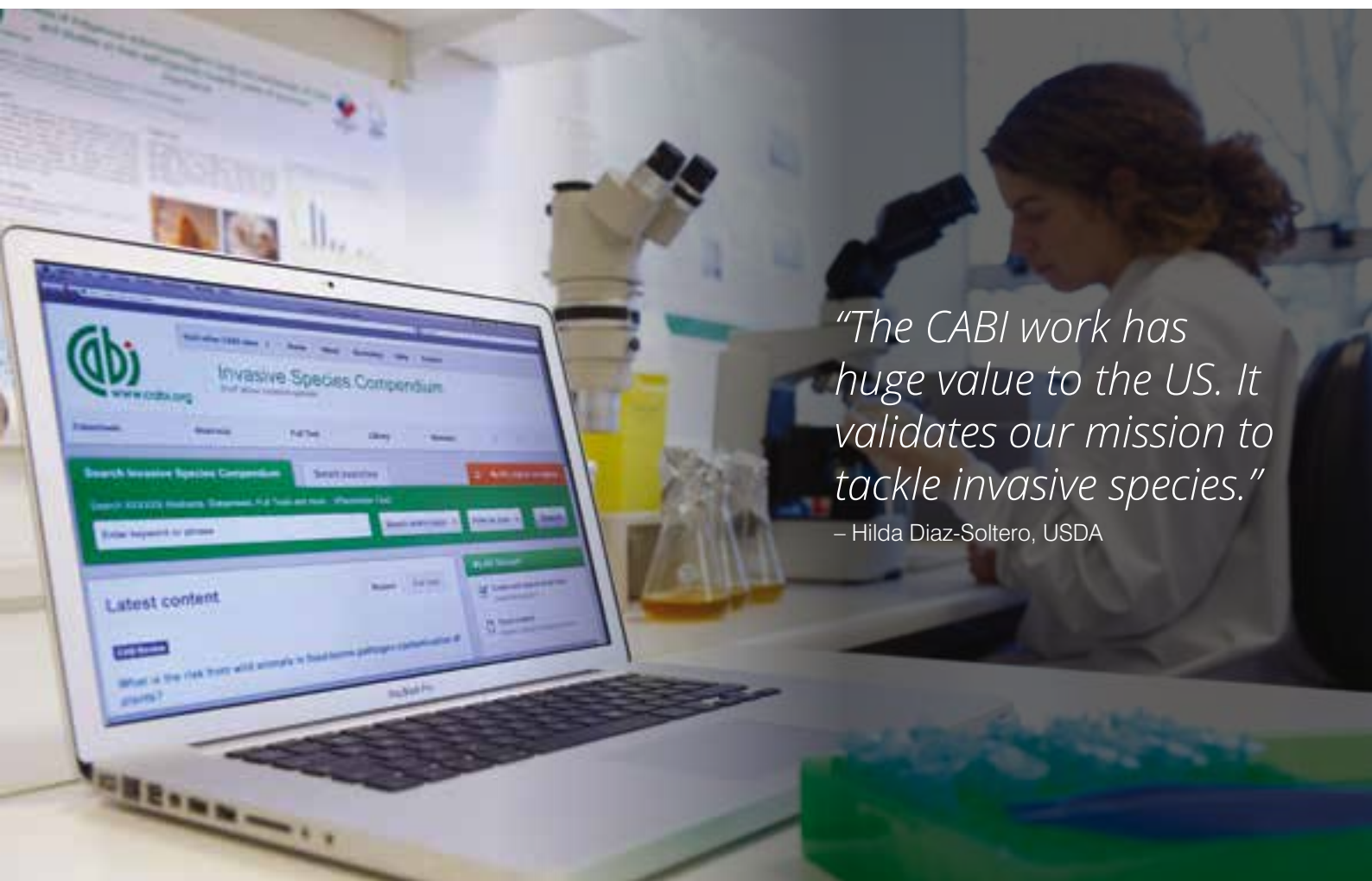
For USDA, the CABI review justifies its efforts to control invasive species in the US. Specifically, it provides an evidence base for the department's programme, Invasives Causing Extinction.

"The CABI work has huge value to the US. It validates our mission to tackle invasive species, and it helps us make a strong case for prioritizing the fight against invasives in agency programmes and budgets," says Hilda Diaz-Soltero, USDA Senior Invasive Species Coordinator representing the Secretary of Agriculture at the National Invasive Species Council in the US.

CABI also curates and manages the **Invasive Species Compendium (ISC)**. This free resource – a comprehensive database of up-to-date datasheets, records and information on invasive species – helps people working in invasive species management with

their research, education and decision making. Joan Steer, Plant Protection Officer at the Department of Agriculture (DoA), Cayman Islands, comments on how she and her colleagues have embraced the ISC in their day-to-day work:

"The Agricultural Health Inspection Services staff members use the ISC regularly as a tool to aid the decision making process especially with regards to the importation of live plants. The importers' list of plants is checked against the Invasive Species (IS) list in the Compendium. When IS are identified on an importer's list, the Inspectors bring such species to the attention of both the Department of Agriculture's Plant Protection Unit and the Department of the Environment for review before a final decision is made to grant permission or deny entry of the species into the Cayman Islands."



"The CABI work has huge value to the US. It validates our mission to tackle invasive species."

– Hilda Diaz-Soltero, USDA

CABI databases recommended for use in human and animal health reviews

CABI's Global Health database is a recognized resource for helping policy makers reach evidence-based decisions worldwide. Our public health database has been used in over 100 systematic reviews, including those used by the World Health Organization to deliver global health policy guidelines.

An increasing number of organizations are adopting and endorsing **CAB Abstracts**, CABI's bibliographic information service for applied life sciences literature, for developing processes in veterinary medicine.

In 2013, researchers from the Centre for Evidence-based Veterinary Medicine at the University of Nottingham studied the coverage of veterinary literature by the major bibliographic databases. They recommended CAB Abstracts as the most comprehensive resource for supporting an evidence-based approach to animal health; CAB Abstracts covers 90.2% of all global journals with veterinary content.

The full results of the study were published in the *Journal of Veterinary Medical Education* (39(4):404-412), with the authors concluding:

"For a veterinary practitioner to be able to make clinical decisions based on the best available evidence, as required by the evidence-based approach, the authors indicate that they should be including CAB Abstracts in literature searching or they are likely to miss crucially important evidence."

The need for an evidence-based approach is central to veterinary science, with those working in the field needing the best possible information to make decisions on animal health. The Veterinary Emergency and Critical Care Society also recently recognized CAB Abstracts as the leading veterinary database for the science of resuscitation of domestic animals.

CABI records make crop pest climate change study possible

In 2013, researchers at the Universities of Exeter and Oxford used data from **CABI's historical records** to demonstrate that global warming is resulting in the spread of crop pests towards the North and South Poles at a rate of nearly three kilometres per year.

The research team used the CABI Distribution Maps of Plant Pests and of Plant Diseases to track crop pests and diseases around the world using data from 1822 to the present day, and demonstrated the strong relationship between increased global temperatures over the past 50 years and expansion in the range of crop pests.

They detailed their findings in a study published in the science journal, *Nature Climate Change* (3:985-988), suggesting that this spread will continue to increase if global temperatures rise as predicted.

CABI plays a key role in collecting data that is vital to understanding the spread of crop pests. This includes leading the Plantwise programme which, through plant clinics and a freely accessible knowledge bank, assists developing countries in collecting and analyzing local plant pest records.

As these records grow, pest reporting and forecasting will become even more detailed and useful. Dr Dan Bebbler from Exeter University says CABI's role was crucial to his research: "Without CABI data, we wouldn't have been able to do our work."

6,690,000 UNIQUE VISITS TO CABI DATABASES, WITH MOBILE USAGE UP MORE THAN 100% FROM 2012

366,584 NEW ABSTRACTS ADDED TO CAB ABSTRACTS

41,530 FULL TEXT ARTICLES ADDED TO CAB ABSTRACTS

176,007 NEW ABSTRACTS ADDED TO GLOBAL HEALTH

10,231 FULL TEXT ARTICLES ADDED TO GLOBAL HEALTH

INFOTREE LAUNCHED

57 NEW BOOKS PUBLISHED

124 BOOKS RE-PRINTED

136 CABI BOOKS AVAILABLE AS KINDLE EDITIONS

Our people

At the heart of CABI's success are **our people**. We have over 400 staff working from more than 20 locations globally, all of them experts in their field. From microbiologists and ecologists to content editors, book commissioners and web specialists, we have the expertise to make a difference. In 2013, more than 85 staff joined CABI from around the world. Our new starters talk about what attracted them to join our organization.



"I joined CABI because I really wanted to work in an organization that combined my passions in agriculture and the environment, and where our work makes a difference to people's lives by sharing knowledge and publishing useful information."

Dominick Azere, Office Assistant, Nairobi, Kenya



"CABI is a place where I can bring together my background in international development, agriculture and Fairtrade, and combine it with the organization's scientific expertise, helping people to change their lives for the better."

Jantien Meijer, Partnership Development Officer Europe, Leusden, Netherlands



"Becoming a permanent employee at CABI in 2013 was a great pleasure. CABI is a unique place where I really enjoy working. The organization provides plenty of opportunities to learn, grow and contribute."

Priyanka Anand, Project Coordinator Direct2Farm, New Delhi, India



"I always wanted to work in a way that helps farmers produce more and get better returns. It was a challenge to find an organization that covered both aspects, but then I found CABI. With its scientific base, world class research and publishing service, I became part of a team that works on all parts of the agri-food chain."

Dr Babar Bajwa, Regional Director, CABI Central and West Asia, Rawalpindi, Pakistan



"Working for CABI has realized my desire to work in international development. Through my role, I'm able to promote CABI's global mission and ultimately help better the lives of others."

Rajan Sanhotra, Marketing Executive, Conferences and Digital Communications, Wallingford, UK



"I've always been interested in using my design skills for positive social change. I really enjoy working on CABI's global issues and the cultural dynamic this brings to the creative process. Working here is incredibly rewarding."

Lauren Brown, Junior Designer, Wallingford, UK

Governance



Mr John Ripley



Dr Trevor Nicholls



Mr Ian Barry



Dr Lutz-Peter Berg



Mr Philip Walters



Dr Vibha Dhawan



Mr Andrew Bennett



Professor Emmanuel
Owusu-Bennoah



Mr Roland Dietz

CABI BOARD

This advisory board oversees CABI's programmes and guides management on operational and strategic issues

REVIEW CONFERENCE

CABI's supreme governing body is the Review Conference of **Member Countries**, which reviews CABI's work programmes and determines its broad policies and strategies.

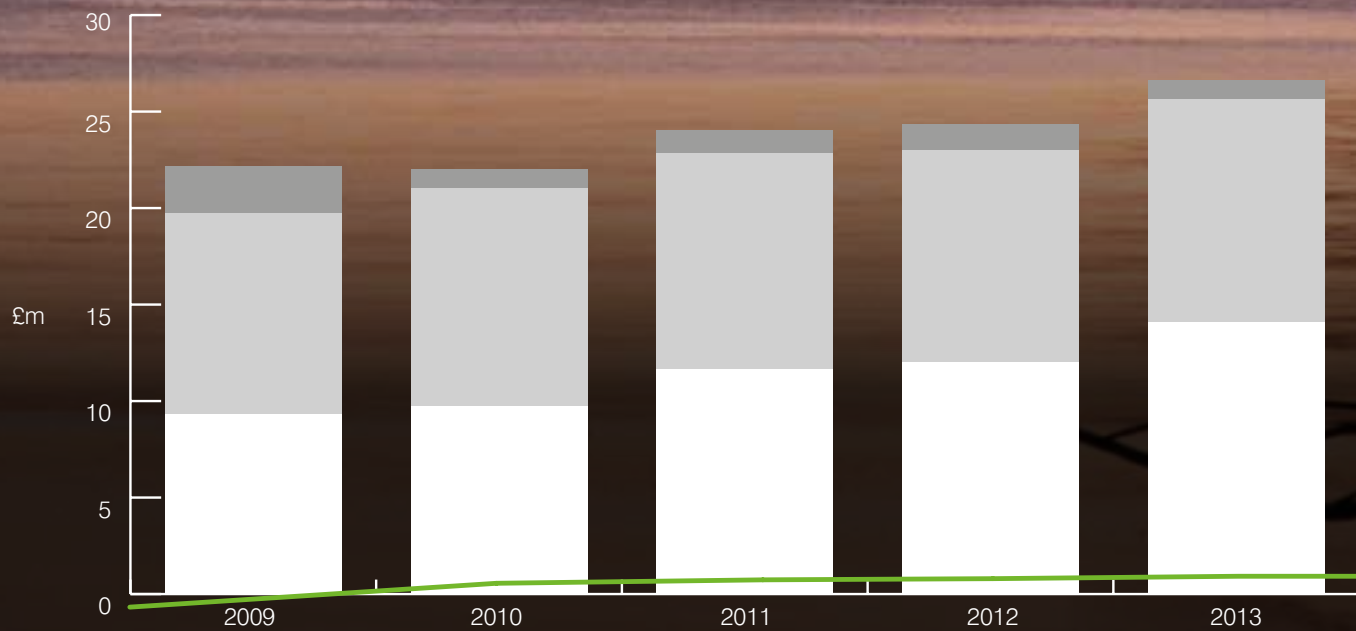
EXECUTIVE COUNCIL

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 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.

ANGUILLA	Mr William Vanterpool, Director of Agriculture, Ministry of Agriculture, The Valley, Anguilla
AUSTRALIA	Dr Gary Fitt, Head, CSIRO's Biosecurity Flagship, CSIRO, Black Mountain Laboratories, Black Mountain ACT 2601, Australia
BAHAMAS	Mr Anthony McKinney, Permanent Secretary, Ministry of Agriculture and Marine Resources, Nassau, N.P., The Bahamas
BANGLADESH	Dr Wais Kabir, Executive Chairman, Bangladesh Agricultural Research Council, Dhaka – 1215, Bangladesh
BARBADOS	Mr Michael James, Senior Agricultural Officer, Ministry of Agriculture, Food, Fisheries and Water Resource Management, Christ Church, Barbados
BERMUDA	Dr Fred Ming, Director, Department of Environmental Protection, Ministry of Health and Environment, Bermuda Government, Hamilton HMCX, Bermuda
BOTSWANA	Dr Pharoah Mosupi, Director of Agricultural Research, Common Service Division, Ministry of Agriculture, Gaborone, Botswana
BRITISH VIRGIN ISLANDS	Mr Ronald Smith-Berkeley Permanent Secretary, Ministry of Natural Resources and Labour, BVI Government, Central Administration Complex, Tortola, British Virgin Islands
BRUNEI DARUSSALAM	Hajah Aidah binti Haji Mohd Hanifah, Acting Director, Dept. of Agriculture, Ministry of Industry and Primary Resources, Bandar Seri Begawan BB 3510, Brunei Darussalam
BURUNDI	Mr Nahimana Dieudonne, Director General, Institut des Sciences Agronomiques du Burundi (ISABU), Bujumbura, Burundi
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GUYANA	Dr Oudho Homenauth, Director, National Agricultural Research and Extension Institute, c/o Ministry of Agriculture, Mon Repos, East Coast Demerara, Guyana
INDIA	Dr Rajesh Ranjan, Director (International Cooperation), Ministry of Agriculture, Dept of Agricultural Research and Education (DARE), New Delhi 110001, India
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PAKISTAN	Dr Muhammad Shahid Masood, Member (Plant Sciences Division), Pakistan Agricultural Research Council (PARC), Islamabad, Pakistan
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SOLOMON ISLANDS	Permanent Secretary, Ministry of Finance, Honiara, Solomon Islands
SOUTH AFRICA	Mr Ramagwai Joseph Sebola, Director, Research and Technology Development, Department of Agriculture, Forestry and Fisheries, Pretoria, Republic of South Africa
SRI LANKA	Dr Karunathilaka Wahundeniya, Director, Horticultural Crop Research and Development Institute, Peradeniya, Sri Lanka
ST HELENA	Mr Darren Duncan, Chief Agricultural and Natural Resources Officer, Agriculture Department, Scotland, St Helena Island, South Atlantic Ocean
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TANZANIA	Dr Fidelis A Myaka, Director, Division of Research and Development, Ministry of Agriculture and Cooperatives, Dar es Salaam, Tanzania
TRINIDAD & TOBAGO	Ms Myrna Thompson, Permanent Secretary, Ministry of Food Production, St Clair Circle, Port of Spain, Trinidad & Tobago
UGANDA	Acting Director General, National Agricultural Research Organisation (NARO), Entebbe, Uganda
UK	Mr Alasdair Swift, Research and Evidence Division, DFID, East Kilbride, Glasgow, UK
VIETNAM	Dr Nguyen Van Tuat, Vice President, Vietnam Academy of Agricultural Science (VAAS), Vien Cay luong thuc va cay thuc pham, Gia Loc, Hai duong, Vietnam
ZAMBIA	Mr Moses Mwale, Director of ZARI, Ministry of Agriculture and Cooperatives, Agricultural Research Institute, Mount Makulu Research Station, Zambia
ZAMBIA	Mr Davy Simumba, Ministry of Agriculture and Cooperatives, Agricultural Research Institute, Mount Makulu Research Station, Chilanga, Zambia
ZIMBABWE	Mrs Danisile Hikwa, Principal Director, Department of Research and Specialist Services, Ministry of Agriculture, Harare Agricultural Research Centre, Harare, Zimbabwe



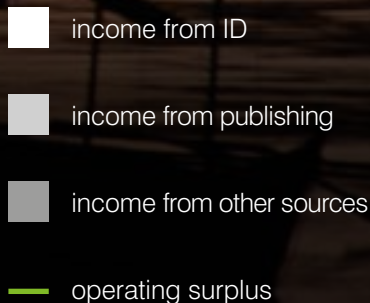
Financials

In 2013, CABI continued the trend of steady increases in revenue, operating surplus and cash.

Total revenue grew by 14% with good growth in both International Development and Publishing with the Plantwise programme again being a major driver.

Operating Surplus also increased by 14% to £810k (before the designated fund allocation) and there was further improvement in the cash position.

A good funding pipeline and strong subscription base means that CABI entered 2014 in a solid financial position.



Statement of comprehensive income

for the year ended 31 December 2013

	2013	2012
		* restated
	£'000	£'000
continuing operations		
income		
sales and project income	26,274	23,017
member contributions	1,192	934
CABITAX recovery	1,177	1,101
miscellaneous income	99	130
	28,742	25,182
expenditure		
staff costs	(8,183)	(7,372)
direct project costs	(12,124)	(9,631)
production	(3,111)	(2,968)
facilities and maintenance	(1,396)	(1,477)
sales and distribution	(717)	(632)
travel	(733)	(651)
depreciation and leasehold amortisation	(622)	(655)
consultants, freelancers	(387)	(399)
restructuring costs	(233)	(222)
provision for arrears of Member Country contributions	(52)	(35)
associated company (loss)/profit	(12)	34
other costs	(431)	(486)
	(28,001)	(24,494)
operating surplus before interest	741	688
interest receivable	69	22
	69	22
operating surplus for the year	810	710
other comprehensive income/(deficit) items that may be subsequently reclassified to operating surplus/(deficit)		
cash flow hedges	90	194
movement between funds	(150)	(150)
other losses on defined benefit pension schemes	(2,350)	(3,207)
	(2,410)	(3,163)
total comprehensive deficit for the year	(1,600)	(2,453)

* restated due to changes in pension accounting

Statement of financial position

for the year ended 31 December 2013

	2013	2012
	£'000	* restated £'000
assets		
non-current assets		
land and buildings – held at revalued amounts	10,169	9,140
plant and equipment – held at cost	1,318	1,196
intangibles – held at cost	99	143
investments accounted for using the equity method	309	321
	<u>11,895</u>	<u>10,800</u>
current assets		
inventories	1,741	1,561
trade and other receivables, net of provisions:		
– sales receivables	1,463	1,903
– sums owing by project sponsors	713	1,006
– from Member Countries	190	115
other financial assets:		
– derivative financial asset	137	47
– cash and equivalents	9,917	7,495
other receivables	1,325	972
	<u>15,486</u>	<u>13,099</u>
total assets	<u>27,381</u>	<u>23,899</u>
equity and liabilities		
equity		
revaluation reserve	(1,921)	(1,921)
cash flow hedges	(137)	(47)
designated fund	(298)	(250)
accumulated fund	40,520	38,830
total equity	<u>38,164</u>	<u>36,612</u>
liabilities		
non-current liabilities		
post-employment benefits	(49,844)	(47,494)
	<u>(49,844)</u>	<u>(47,494)</u>
current liabilities		
sales income received in advance	(3,989)	(3,259)
Member Country contributions in advance	-	-
sums held on behalf of project sponsors	(9,322)	(7,542)
trade and other payables:		
– trade payables	(633)	(545)
– other payables	(1,757)	(1,671)
	<u>(15,701)</u>	<u>(13,017)</u>
total liabilities	<u>(65,545)</u>	<u>(60,511)</u>
total equity and liabilities	<u>(27,381)</u>	<u>(23,899)</u>

* restated due to changes in pension accounting

Statement of cash flows

for the year ended 31 December 2013

	2013	2012
	£'000	£'000
cash flows from operating activities		
cash generated from continuing operations	4,082	2,931
net cash generated from operating activities	4,082	2,931
cash flows from investing activities:		
payments to acquire tangible fixed assets	(1,729)	(637)
payments to acquire intangible assets	-	(65)
loss on disposal of property, plant, equipment	-	55
interest received	69	22
net cash used in investing activities	(1,660)	(625)
net increase in cash and cash equivalents	2,422	2,306
NOTES TO THE CASH FLOW STATEMENT		
(i) reconciliation of operating surplus to net cash inflow from operating activities		
operating surplus before interest	639	638
depreciation charges	622	655
share of associated company losses/(profits)	12	(34)
(increase)/decrease in inventories	(180)	168
increase/(decrease) in trade and other receivables	658	(717)
increase/(decrease) in trade and other payables	174	(393)
increase in income in advance	2,510	2,700
increase in other receivables	(353)	(86)
	4,082	2,931
(ii) movement in net cash during the year		
net cash at 1 January	7,495	5,189
net cash at 31 December	9,917	7,495
movement in net cash during the year	2,422	2,306



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 ...



... her family



... his crops



... her livestock



... her market garden



... his education



... her training



... their village





... his farm

**Ministry of Agriculture
People's Republic of China**



... her yield



**Agriculture and
Agri-Food Canada**



... her business



... her career

**BILL & MELINDA
GATES foundation**



... his goats



**Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra**

**Swiss Agency for Development
and Cooperation SDC**



... his knowledge



... his soil health



**Australian Government
Australian Centre for
International Agricultural Research**



... their future

Staff publications

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