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CABI in review

10

our mission

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

our mission and direction are influenced by our 46 member countries who help guide the activities we undertake

through our work:

smallholder farmers are lifted out of poverty: they lose less of their crops to pests and diseases, improve crop quality and yield, and sell their produce for better prices

extension workers can give better advice on agricultural practice

researchers and policymakers have the information they need to develop strategies to support agriculture and the environment, and improve livelihoods

contents

100 years of scientific endeavour


John Ripley

We have strong commitment and purpose as a development organization, putting research into use through working with farmers to improve their livelihoods and implement sustainable agricultural practices.

foreword from the Chair

It is with great pleasure that I contribute to CABI's Annual Review for 2010, having taken over the role of Chair from John Regazzi. John stepped back mid-way through the year to take up the position of Chair Emeritus as part of our ongoing plan for Board renewal and succession.

I would like to thank John for his significant contribution to CABI over a 12-year period during which there has been a tremendous improvement in the financial health and strategic focus of the organization.

I would also like to thank Mme Josefa Sacko, who also left the Board at the end of the year after six years of service, and to welcome Dr Vibha Dhawan from India who joins in her place.

It is very pleasing to report a much improved financial performance during the year, which has seen the organization continue to grow strongly and deliver a return to operating surplus with a strong year-end cash position. The management and staff of CABI are to be congratulated on delivering these good results in a difficult economic climate.

A key focus of the Board continues to be the monitoring and guidance of management in the creation of a framework of long-term financial health for the organization.

The year has also seen good progress in the implementation of the plans arising from our 2009 Strategic Review. This organization has always been known for its objective, science-based approach and its unique combination of research and publishing expertise.

As we have expanded our membership and operating base to become truly international, we have strong commitment and purpose as a development organization, putting research into use through working with farmers to improve their livelihoods and implement sustainable agricultural practices.

These skills come together in our major strategic initiative, **Plantwise**. During 2010 this has progressed from the concept that was agreed by Review Conference in 2009 to become a reality, with an acceleration in the number of plant clinics being launched and the development of a prototype Knowledge Bank.

As CABI continues to use its scientific expertise and knowledge capabilities, we can look forward with some excitement to our next hundred years of service and fulfilment of our mission to improve people's lives worldwide.

report from the CEO

As CABI's centenary year, 2010 has naturally been a time for looking back and celebrating our achievements over the past 100 years. It is an honour and a privilege to be leading the organization at this time – but also somewhat daunting to be setting course for the coming century! Most importantly, it has been a time to look forward so that we build upon the reputation and heritage that has developed in that first century, consolidate our strengths, revitalize our mission, and prepare ourselves for our next 100 years of operation.

During the year, the financial and operating climate for both our Publishing and International Development businesses has remained difficult and uncertain. Despite that, we were able to achieve revenue growth of over 10% and deliver an operating surplus of more than £500,000. This was a hard-won but very welcome recovery from the disappointing results we had seen in 2009.

It was particularly encouraging to see our core Publishing business achieve 7% revenue growth as a result of a focus on retaining and winning customers despite cutbacks in academic library budgets, as well as a strong programme of new books – in both print and electronic formats. Back office operations also performed well with more abstracts than ever being added to the database – we achieved the nine millionth record during 2010 – at a declining cost per abstract.

Our International Development activities continued to grow strongly as well and we were very pleased to win some significant new projects during the year. In particular:

- a major project, funded by the Bill and Melinda Gates Foundation, to build an African Soil Health Consortium which will provide and communicate information to rural farmers in Africa so as to promote practices to encourage sustainable soil health
- our first project in microfinance, supported by the Common Fund for Commodities and Rabobank, to help farmers in Ethiopia and Rwanda buy the equipment they need to produce better quality coffee, building upon our earlier work in this area
- a disaster-relief project in Pakistan, funded by Welt Hunger Hilfe, a German NGO, to restore farmland devastated by the recent floods in the country

In order to increase our presence in key developing economies that have a strong base of agricultural research, we have increased the size and strength of our team in India and opened an office in Brazil. In the coming year our staff in these offices will be building closer collaboration with the national agricultural research systems to deliver against both domestic and international needs.


Trevor Nicholls

Over the past year we have seen how access to knowledge has empowered smallholder farmers and enabled them to improve their livelihoods. This Annual Review showcases many examples of communities and individuals who are now growing better quality crops, losing less to pests and diseases, and gaining access to markets as a result of working with us on international development projects. Researchers, professionals, and policy-makers also all depend upon being able to obtain and use information. Our expertise in creating and disseminating knowledge in the wider agricultural and environmental spheres, as well as our experience in its application, allows us to contribute to addressing major issues such as improving food security and protecting biodiversity.

In summary I am confident that 2010 has been a very successful year upon which CABI can close off its first century and move into its next one as a strong and vibrant organization with a clear sense of mission and purpose.

2010 was CABI's 100th anniversary. To mark this milestone we published a history of the organization written by former Director General Denis Blight AO FRSA. *CABI: a century of scientific endeavour* covered the development of CABI from its beginnings as a small scientific research institute to a truly international intergovernmental organization operating in ten centres around the world. The book highlights the contributions that CABI has made to improving agriculture and conserving biodiversity and pays tribute to the many exceptional individuals who have made this organization what it is today.

In addition, as is appropriate for an international organization, we held a number of events to mark the occasion all over the world, each designed and coordinated by a different international centre.

At our UK Centre in Egham, the doors were thrown open for colleagues in other centres and representatives from Member Countries to see more of what our scientists do.

CABI Africa invited the Kenyan Minister of the Environment and Natural Resources, together with a variety of partners, donors, and friends, to join a mass weeding and tree-planting session in Nairobi National Park. This was to draw attention to the problem of invasive weeds, which has been the focus of a major project carried out by the invasive species team in CABI Africa. The Minister commended the work of CABI in Africa and its continuing efforts to protect biodiversity.

In India, where CABI has been significantly expanding its presence with a number of key appointments, the centenary celebrations took the form of a two-day symposium for 200 people exploring a number of themes in agriculture and knowledge management. The keynote speech was given by the veteran scientist and pioneer of the green revolution in Indian agriculture, Dr M. S. Swaminathan.

Our 100th birthday also coincided with the 30th anniversary of our working relationship with China. CABI staff from the UK, Malaysia, Switzerland and China joined representatives from the Chinese Ministry of Agriculture and the Chinese Academy of Agricultural Sciences (CAAS) at a dinner hosted by CABI in Beijing.

The Swiss centre marked CABI's 100 years by hosting a 'CABI Centenary Celebration Seminar'. 75 participants, representing the diversity of sectors in which CABI is active – government, research, university and industry – travelled from Switzerland, the UK, Albania, Canada, the USA, China and North Korea to join the ambitious programme, packed with 21 presentations. The results of several successful collaborative projects were presented by CABI experts and their national and international partners, demonstrating the expertise and knowledge behind the strong reputation that CABI has earned itself over the last 100 years.

The celebrations culminated in a highly successful Review Conference in February 2011, during which Member Country representatives were taken on a tour of the highlights of the last century by Denis Blight, and strengthened their commitment to CABI's future direction with a ringing endorsement of the Plantwise initiative.

celebrating **100 years** of **CABI**

IMPROVING FOOD SECURITY

SUPPORTING FARMERS

These are the **four key aspects** of our work that help drive the achievement of our mission:

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

PROTECTING BIODIVERSITY

SHARING KNOWLEDGE

In 2010 our principal focus has been on plant health. We have used this Annual Review to show how the four aspects of our work have combined in this particular field to help farmers, extension workers, researchers and policymakers to:

lose less to pests and diseases

improve the quality of seeds and crops

gain entry to markets

manage invasive species

access plant health information

losing less to pests and diseases

Currently it is estimated that we lose up to 40 percent of crops grown worldwide to pests and diseases. A large proportion of these losses are in developing countries, where smallholder farmers are most directly affected because they rely on what they grow to feed themselves and their families. But the impact is felt worldwide; and with climate change, trade flows, and population movement all increasing, the rate at which these plant health problems arise and spread is also multiplying.

In 2010, having received a unanimous endorsement from our member countries in 2009, CABI started work on a major global initiative, called **Plantwise**, that will enable farmers, extension workers, researchers, manufacturers and policy-makers worldwide to tackle pests and diseases and a range of other plant health issues.

We made substantial progress on the initiative, which will combine self-sustaining networks of free, community-based "plant clinics" with a central Plantwise Knowledge Bank, creating a powerful global vigilance system that will help prepare farmers, communities, and countries to fight the pests and diseases that can ravage their crops.

In 2010 we signed up a number of prestigious contributors to the Plantwise Knowledge Bank and our technical team made great headway in determining how the content should be collected, structured, and presented. The Knowledge Bank will bring together high-quality historical and up-to-date plant health information and pest and disease distribution data from

We come to the plant clinic to get treatment for the diseases. Even if I spend just 5 takas I can save thousands.

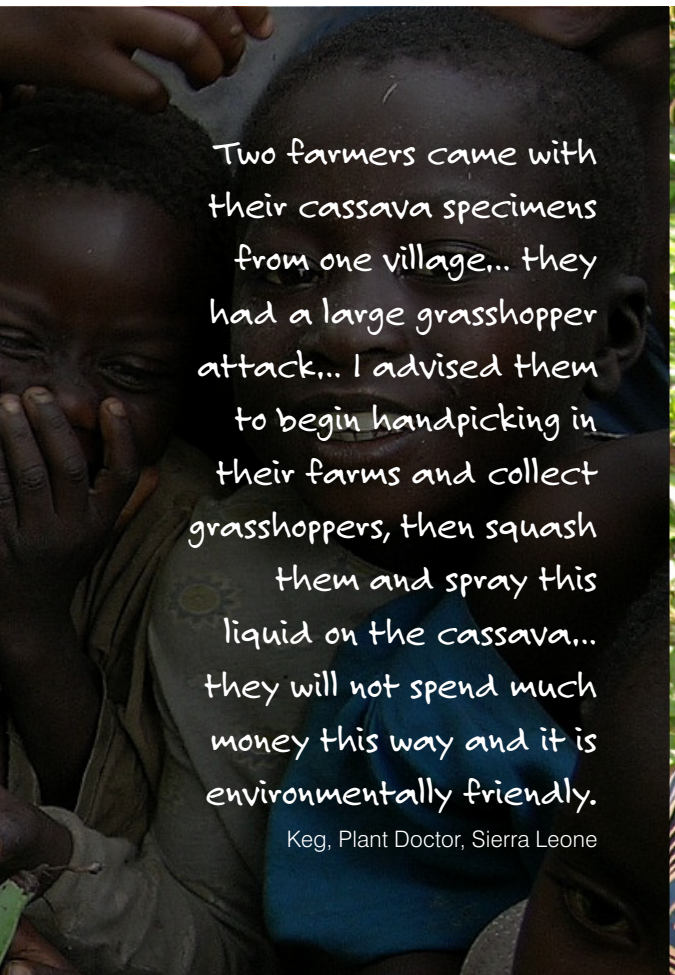
Farmer, Bangladesh

a wide range of international sources and content partners, augmented by validated observations from the plant clinics. This information will be digitized, aggregated, structured, made searchable and then made available through interactive maps, providing an unprecedented level of granularity. For the first time this will enable policymakers, researchers, extension workers and farmers to prioritize research efforts, plan mitigation strategies, and – most importantly – arm farmers with the knowledge to protect their own crops. A prototype will be available in mid-2011.

The plant clinics team, which started the year with 80 clinics running in nine countries, supported partners in launching 50 more clinics covering a further six countries. We will be accelerating the rollout of clinics throughout 2011 and 2012.

The benefits of the plant clinics, which are based on the model of a doctor's surgery, are clear: they facilitate the flow of technical support and expert help to smallholder farmers and extension workers in rural areas and make a real difference to their livelihoods. A farmer from Kikuya District in Kenya told the African Business Daily that he had spent 10,000 shillings on pesticides for his potatoes and spinach but they were still failing. He took his problem to the plant clinic where the plant doctors encouraged him to spray wood ash on his crops. This wiped out the disease within a week.

A study in Bangladesh showed that farmers who took the plant doctors' advice increased their yields by an average of over 9%. They increased their incomes by almost $1 a day, spending the extra money on their children's education, improving their living conditions, or reinvesting in their farms.



Two farmers came with their cassava specimens from one village... they had a large grasshopper attack... I advised them to begin handpicking in their farms and collect grasshoppers, then squash them and spray this liquid on the cassava... they will not spend much money this way and it is environmentally friendly.

Keg, Plant Doctor, Sierra Leone

SUPPORTING FARMERS

In addition to Plantwise, a number of CABI projects dealing with specific pests and crops have had positive impacts at individual, local, and regional levels.

In May 2010 the Kenyan Assistant Minister for Agriculture reported that as many as 2.1 million households in the country had benefited from new control initiatives against the damaging armyworm pest, which can quickly devastate maize, millet, and rice crops. CABI piloted a number of forecasting techniques in Tanzania in 2009 and these have been scaled up in other African countries throughout 2010. The tools, which include simple insect traps and rain gauges, help farmers make predictions about the likelihood of an attack and then share this within their community. In the Machakos and Makueni districts, which were severely affected in 2009, villagers informed neighbouring villages of the possibility of an invasion. The local farmers were then able to prevent crop losses by sourcing pesticides and spraying their crops.

Also in Africa, coffee farmers are now able to plant coffee bushes that will not succumb to either coffee leaf rust or coffee berry disease – diseases that have been devastating coffee plantations throughout Africa and south-east Asia for decades. Entire crops have been lost in some places, while in others, constant spraying with fungicide has eaten into farmers' incomes, to say nothing of the damage caused to the environment. As a result of partnerships with national research organizations in India, Zimbabwe, Uganda and Rwanda, a CABI research team has identified two Indian coffee varieties that appear to be resistant to both diseases. These have been tested in a nursery, in research fields, and finally in farmers' fields, and despite being planted next to varieties known to be susceptible to Coffee Leaf Rust, they have proved resistant to the disease.

> The extension officer gave instructions on how to mix pesticides and how to spray the field against armyworms. The spraying was done and completed, achieving good control. Farmers of the community also actively took part in the control effort. The entire village benefited from this initiative.
>
> Story from Kachure, Malawi

Meanwhile, the devastating fungal disease Coffee Wilt Disease was the subject of a CABI book, *Coffee Wilt Disease*, edited by Julie Flood, CABI's Global Director, Commodities, and published in April 2010. An output of the multi-country Regional Coffee Wilt Programme, coordinated by CABI, this is a compilation of the current knowledge of various aspects of the disease, including information about the pathogen, its spread and, importantly, its management.

In the Democratic People's Republic of Korea (DPRK), farmers have achieved increases in their maize yields of between 20 and 40 percent in initial trials of a programme to increase maize production through Integrated Crop Management (ICM) techniques. And more than 100,000 people based on the project farms have enjoyed a more stable supply of food and increased economic stability following the development of 24 facilities for production of the biocontrol agent *Trichogramma ostriniae* to attack the destructive Asian corn borer.

In Papua New Guinea (PNG), thanks to a CABI project, cocoa growers are finding that 90% of harvested pods are yielding usable beans despite the presence of the highly destructive cocoa pod borer, which is capable of wiping out entire crops. More than 296 farmers so far have attended Farmer Field Schools, where they have been trained in Integrated Pest and Disease Management techniques. This will help them to predict and respond to outbreaks of the disease.

CABI's leading publishing resource on pests and diseases of crops, the **Crop Protection Compendium** (CPC), was relaunched on a new platform during the year. Its expanded content includes 400 new full data sheets, taking the total to more than 3,000 covering pests, diseases, natural enemies and crops. There is basic information on 27,000 more species, and the new platform allows for weekly updating of the 160,000 bibliographic records provided within the resource. The result is a comprehensive, up-to-date resource providing researchers, extension workers, policymakers and practitioners with key facts and detailed background information about pests, their global distribution and impact.

Cocoa pod borer management knowhow is spreading across Papua New Guinea. Inspired by his CABI training, facilitator Eware Dewara is sharing his knowledge with cocoa farmers across the country with the slogan 'Every pod. Every tree. Every week.'

I could not understand the yellow powdery formations on my wheat crop, so called up the IKSL helpline. The manager told me it is due to fungal disease called Rolli (yellow rust of wheat). He advised me to spray the field with a fungicide and also advised me to do the spraying in the evening when there is no strong wind.

Thanks to his advice, my crop is saved. I got 22 quintals of wheat from my field this year, compared to 16 quintal last year and made INR 7,200 more income … Now I can buy a bicycle for my son so that he can go to school easily.

Sri Arjan Awale, Farmer,
Maharashtra in western India

improving the quality of seeds and crops

CABI has a long history of providing practical support and guidance to extension workers and farmers in developing nations. A number of current projects focus on transferring knowledge and providing farmers with the choices and tools to increase productivity by improving the quality of seeds and crops.

In India, 6 million farmers have been receiving advice through their mobile phones on everything from crop protection to fertilizers and animal husbandry, as part of an innovative service provided by IKSL – a joint venture between fertilizer manufacturer IFFCO and the mobile phone company Bharti Airtel, with scientific backstopping by CABI. The service sends five free voice messages in local languages every day on issues relating to crops, pests, and markets, and also operates a Farmers Helpline.

Since inception, the service has sent out 108,000 voice messages and received 110,500 queries through the helpline. This has had demonstrable results in the field: for example, 800 basmati farmers increased their yields by 22 percent and also improved the quality of the rice they were producing.

In Africa, CABI received funding from the Bill & Melinda Gates Foundation for a four-year project that will contribute to radical change in the understanding and use of Integrated Soil Fertility Management (ISFM) techniques amongst smallholder farmers. Soil fertility degradation has been described as the second most serious constraint to food security in Africa, but there is a desperate lack of knowledge about how to improve it. This project is working to combine the most up-to-date research information and, using participatory approaches, make it accessible so that it can be of practical use to everyone

It is a great idea. Do it across the world... Great work, keep it up. President Barack Obama

involved in farming systems development – from policymakers and university lecturers to extension workers, input suppliers and the farmers themselves.

Another key to producing high-yielding and disease-free plants lies in the availability of good seeds. In Kenya, CABI is working with a community-based farmers' organization called TATRO (Technology Adoption Through Research Organization) to train farmers growing Kenya's traditional leafy vegetables to produce their own seeds. They also learn best practice in seed handling, and how to control weeds and pests in a seed plot. Project staff have used local media and demonstrations to increase awareness about the initiative. This means that the people of western Kenya can now enjoy traditional local vegetables, grown locally in a sustainable way by farmers in their own communities and, in doing so, can make a valuable contribution to the local economy.

On the publishing side, a number of new titles contributed to the body of knowledge concerning improving the quality of crop production, including *Bananas and Plantains* by J.C. Robinson and V. Galán Saúco, and *Tropical Vegetable Production* by R.A.T. George.

Paul O'Congo, TATRO

Farmers have discovered that there is a market for their traditional leafy vegetables. However, they need good quality seeds in order to keep on planting high-yielding and clean plants free from diseases. They needed a local, sustainable solution – and that is why we are collaborating with CABI to train them to produce the seeds themselves.

gaining entry to markets

Even the poorest subsistence farmer aspires to more than self-sufficiency. But starting to trade, whether locally or further afield, is a surprisingly complex business, and most people need advice and support. Exporting brings with it additional challenges, particularly with regard to plant health, as farmers need to comply with international standards and the legislation of the importing countries.

In Pakistan, solutions are in sight for farmers battling the damaging mango midge. The larvae of the midges feed on newly formed fruit, causing crop losses of more than 38 percent, and until recently farmers' only option was to spray their crops with an expensive mixture of pesticides, herbicides and fungicides. However, this made export almost impossible as World Trade Organization regulations demand that fruit and vegetables are pesticide-residue-free. CABI's research project to find a sustainable solution culminated in teaching farmers a combination of methods, including conservation of midges' parasitoids, hoeing the soil under trees, catching the midges in light traps, and spraying the biopesticide neem on mango flowers, giving them a better chance of selling their mangoes in export markets.

In Ethiopia and Rwanda, coffee is a vitally important commodity crop, with 1.6 million smallholder farmers producing it and over 15 million households directly or indirectly dependent on it for their livelihoods. But, largely due to poor production and processing practices, and a lack of access to financial resources, productivity and quality is less than it could be. This is why Quality Coffee was one of CABI's most important new projects in 2010.

Through partnership with Rabo International Advisory Services (RIAS) the project will design and roll out a credit guarantee scheme to support short-term investments in coffee production, processing, and marketing. It will enable smallholder farmers to gain access to much-needed commercial loans in order to buy and install better coffee-processing equipment, while acting as a catalyst to improve the quality of coffee they produce by sharing good agronomic

and processing practices. The credit guarantee scheme will also enable cooperative societies to purchase and export the resulting high quality coffee. After the first phase of the project, which piloted new processing methods, coffees were achieving prices of nearly 30% more than those of conventionally processed coffees. This has translated into better household incomes for the farmers and improved lives for their families.

In October, Kenya's Agriculture Minister, Dr Sally Kosgey, launched The Centre of Phytosanitary Excellence (COPE), a joint venture by Kenya Plant Health Inspectorate Services (KEPHIS), the University of Nairobi (UoN), and CABI. This will provide plant health services to public and private clients so that they are able to comply with international phytosanitary standards and the legislative requirements of importing countries, and the capacity of plant health systems and services in Africa can be increased.

COPE's services include a range of training programmes in phytosanitary policy and practice, and a unit for applied pest risk analysis (PRA). The training will range from short in-service modules to degree programmes. The PRA unit will assess the likelihood and consequences of new pests and diseases entering the country and advise on how these risks can be minimized to protect the country's agriculture and trade.

The effectiveness of interventions in the agricultural field is further demonstrated by the CABI book *Nourishing the Land, Nourishing the People: A Madagascar Success Story*, by B. Thierry, B. Shapiro, H. Ramilison, A. Rakotondratsima, and A. Woldeyes. It covers the progress of a development initiative in Madagascar that enabled a region suffering from chronic drought and famine to provide food and become the area's breadbasket. Meanwhile *Agri-food Chain Relationships*, edited by C. Fischer and M. Hartmann, offered an insight into the sustainability of agribusiness relationships and discussed how these may be improved.

managing invasive species

Invasive species are a major threat to biodiversity and the global economy. They cost billions of dollars to control each year and can devastate environments. CABI is a world expert in managing invasive species. To maintain biodiversity, we concentrate on finding natural solutions to invasive non-native species to help support agriculture and protect the environment.

In 2010 we published a report on the costs of invasive non-native species in Britain, funded by the Scottish Government, the Welsh Assembly Government, and the Department for Environment, Food and Rural Affairs (Defra). Invasives were calculated to cost a total of £1.7 billion every year in the UK in control measures and damage to the environment. These costs were found to be reduced if and when there is early intervention and timely eradication, rather than letting the species become widespread, as has been the case for many invasive species globally. The report generated significant media interest throughout the world, which has contributed to raising public awareness about the impact of invasive species.

The management of invasive species is an area for public concern, as organisms are often introduced to new environments accidentally through trade, transport, travel and tourism and can have adverse effects on the environment, agriculture and trade. **The Invasive Species Compendium**, which has been under development in 2010 for launch in 2011, will therefore be available free of charge to users. It is a global,

With the way things are going, the weed, which inhibits other underground growth, will be the only plant thriving on my farm and there will be nowhere to graze our livestock. Farmer, Kenya

online, encyclopedic reference work, containing detailed species data sheets and the latest research abstracts and full text conference proceedings. Intended as a tool for resource managers, extension workers, policymakers and researchers in the areas of agriculture and the environment, it will be a single point of access to vital research and management information about invasive species. This will allow users to prepare training courses and information resources, identify research needs, advise decision-makers and support risk analyses.

A major project completed during 2010 was *Removing Barriers to Invasive Plant Management in Africa*, sponsored by the United Nations through the Global Environment Facility and carried out in Ghana, Zambia, Uganda, and Ethiopia. In these countries, the introduction of invasive species has led to a loss of biodiversity and is affecting the local fishing, farming and tourism industries. Our project staff helped the countries establish National Invasive Species Strategies, as well as local coordinating units to specialize in risk analysis and the impacts and management of invasive species. They also set up training programmes for officials, quarantine officers, community members and other groups affected by the problems, and raised public and political awareness of the issues surrounding alien invasive species.

Other continuing projects include the Japanese knotweed project in the UK and a project tackling invasive species in the Caribbean. Invasive non-native species are a particular problem in the Caribbean due the distinctive biodiversity they support. We are working with governments to establish a broad approach to deal with invasive species both by strengthening national capacity and developing regional strategies.

The Japanese knotweed project hit a major milestone at the beginning of the year when a licence was granted for the release of the psyllid *Aphalara itadori*. This was the first time the release of an exotic natural enemy for the control of a weed had been officially approved in an EU Member State. The first phase of the release was carried out under a The Food and Environment Research Agency (Fera) licence in a small number of locations. It is anticipated that the Phase II release will take place in 2011.

We must boldly repel the presence of invasive alien species. They have emerged as major threats to sustainable development equivalent to global warming and the destruction of life support systems ... [We] foresee the establishment of a regional strategy as most beneficial in seeking to address the introduction/invasion of future invasive species into The Bahamas.

Cresswell Sturrup, Permanent Secretary, Ministry of Agriculture and Marine Resources, The Bahamas

accessing plant health information

There is a rising tide of data about life sciences which only becomes meaningful and useful when managed by systems that make connections and disseminate information in a clear and accessible fashion.

CABI has global expertise in managing scientific knowledge in the agricultural and environmental sciences and public health through its world-renowned databases, books and online services.

CABI is now at the forefront of e-book publishing, with over 200 titles available. During the year CAB Direct, our database platform that includes **CAB Abstracts** – the world-leading database for applied life sciences – published its nine-millionth abstract and now has over 100,000 full-text articles available to subscribers. The breadth and depth of content that we make available through CAB Direct, including selected full text material from less well-known and non-English journals, mean that it is increasingly the first, if not the only, port of call for serious researchers in the applied life sciences.

Alongside our databases sits our range of time-saving, encyclopedic, mixed-media Compendia, currently comprising the **Animal Health and Production Compendium**, the **Aquaculture Compendium**, the **Crop Protection Compendium**, and the **Forestry Compendium**. During 2010 these were relaunched on a new platform and with new content, making it easier for subscribers to access and use expert, encyclopedic information covering the economic species of the world. The relaunched Compendia now feature a clearer layout and a powerful new search engine that make it easier to find specific information, as well as to browse. The platform also allows for more regular updating, so the latest research information is now always available.

In a radical departure from previous models, CABI will in 2011 launch the **Invasive Species Compendium** (ISC) free of charge to users. The launch and long-term future of the Compendium will be supported by the Compendia Development Consortium, which provides expertise and sponsorship to develop these knowledge tools. Tested during 2010, this

PROTECTING BIODIVERSITY SHARING KNOWLEDGE

Sometimes knowledge is useful in preventing unnecessary action. An apple farmer had spotted insects on his trees and asked the local specialist for advice on insecticides. The specialist instead encouraged him to monitor the orchard. After consulting CABI's knowledge resources, they were able to confirm the presence of aphid predators which would keep the insects in check. The famer therefore did not spray his apple trees, saving pesticide and labour costs and reducing the impact on the environment.

Story from the Apple Producer Club, Albania

Compendium will cover all invasive species, including plants, fungi, bacteria, viruses, insects, nematodes, molluscs and vertebrates. Their impact on natural ecosystems, on biodiversity and on systems managed for agriculture, forestry and aquaculture will be described through text, maps and images. CABI is thus providing the links between knowledge – our own and others – and the needs of those who use information to make policy, and create solutions to problems of protecting biodiversity.

Our team not only commissions, writes, abstracts, and edits for the print and web environments, but they develop new web products and services. These same skills are being used to tailor knowledge management solutions such as the **Global Agricultural Research Archive** (GARA), which preserves and disseminates agricultural research information from developing nations; the use of mobile phone technology to answer questions facing farmers in the developing world; and the design, construction and maintenance of complex online information portals, such as the R4D (research for development) website, created and maintained on behalf of the UK Government's Department for International Development (DFID).

CABI does not see information improvement stemming only from high technology. We combine our expertise in knowledge management, communications and information technology with 100 years of hands-on experience in working alongside smallholder farmers within their communities, in order to advise and train local farmers and extension workers in how to increase their food production.

For example, in Albania we are improving apple farmers' knowledge and practice through both theoretical and field-based training in integrated pest management. To support the implementation of this IPM knowledge in Albania a consortium of academic, government and non-governmental organizations is also subscribing to **CAB Abstracts**. Access to expert technical advice and the development of an apple producer club, with its own inspection scheme and technical advisory service, is leading to increased knowledge of good agricultural practice and a reduction in pesticide misuse. This is a new project, but already apple quality is improving, and ultimately may help revitalize Albania's ailing apple farming industry.

statement of comprehensive income

for the year ended 31 december 2010

After the difficulties of 2009, CABI produced a transformed financial performance in 2010. Income grew by 7% and the operating surplus improved by over £1m to £518k from a deficit in 2009.

The key reason for this improvement was the growth in the Publishing business which delivered income growth of 8% and an increased surplus. This was due to the combination of good retention of existing subscriptions and excellent new sales of subscription and purchase products. In International Development, after significant growth in 2009, the mixed results from the regional centres meant that overall total income and surplus were relatively flat on the prior year. However, it was encouraging that we were able to attract major new donors in 2010 such as the Bill & Melinda Gates Foundation. Moreover, our core relationships with other major donors have been strengthened and broadened.

	2010 £'000	2009 £'000
continuing operations		
income		
sales and project income	21,015	19,719
member contributions	1,009	700
CABITAX recovery	1,168	1,015
miscellaneous income and recoveries	103	247
	23,295	21,681
expenditure		
staff costs	7,507	6,646
direct project costs	8,512	7,934
production	3,092	3,178
facilities and maintenance	1,392	1,464
sales and distribution	547	614
travel	544	589
depreciation and leasehold amortisation	596	486
consultants, freelancers	382	543
restructuring costs	179	42
increase in provision for arrears of member country contributions	85	58
associated company profits	(71)	(2)
other (gains) / costs	(3)	596
	22,762	22,148
operating surplus / (deficit) before interest	**533**	**(467)**
interest receivable	6	7
interest payable	(21)	(13)
	(15)	(6)
operating surplus / (deficit) for the year	**518**	**(473)**
other comprehensive (deficit) / income		
cash flow hedges	(58)	1,240
property revaluation gains	129	0
actuarial losses on defined benefit pension schemes	(904)	(76)
	(833)	1,164
total comprehensive (deficit) / income for the year	**(315)**	**691**

statement of financial position

as at 31 december 2010

	2010	2009
	£'000	£'000
assets		
non-current assets		
properties – held at revalued amounts	9,562	9,560
plant and equipment – held at cost	1,129	1,191
investments accounted for using the equity method	245	174
	10,936	10,925
current assets		
inventories	1,803	1,581
trade and other receivables, net of provisions:		
- sales debtors (incl member countries)	859	934
- sums owing by project sponsors	2,127	1,827
financial assets:		
- debt instrument asset	36	94
- cash and cash equivalents	3,385	1,628
other debtors	800	696
	9,010	6,760
total assets	**19,946**	**17,685**
equity and liabilities		
equity		
revaluation reserve	1,921	1,792
translation reserve	36	94
accumulated fund	6,669	7,055
	8,626	8,941
liabilities		
non-current liabilities		
financial liabilities	924	20
	924	20
current liabilities		
sales income received in advance	3,007	3,127
member country contributions in advance	0	177
sums held on behalf of project sponsors	4,303	2,585
Bionet International Fund	132	308
trade and other payables:		
- trade creditors	512	393
- other creditors	1,534	1,434
- hire purchase creditor (due within 1 year)	0	16
financial liabilities		
- debt instrument liability	0	0
- cash and cash equivalents	908	684
	10,396	8,724
total liabilities	**11,320**	**8,744**
total equity and liabilities	**19,946**	**17,685**

statement of cash flows

for the year ended 31 december 2010

	2010	2009
	£'000	£'000
cash flows from operating activities		
cash generated from / (used in) continuing operations	2,131	(648)
interest received	6	7
interest paid	(21)	(13)
net cash generated from / (used in) operating activities	2,116	(654)
cash flows from investing activities:		
payments to acquire tangible fixed assets	(407)	(759)
receipts from sale of other tangible fixed assets	0	10
net cash used in investing activities	(407)	(749)
net increase / (decrease) in cash and cash equivalents	1,709	(1,403)
NOTES TO THE CASH FLOW STATEMENT		
(i) reconciliation of operating surplus / (deficit) to net cash inflow / (outflow) from operating activities		
operating surplus before interest	533	(467)
depreciation charges	596	486
share of associated company profits	(71)	(2)
(increase) / decrease in inventories	(222)	436
(increase) in trade and other receivables	(225)	(402)
increase / (decrease) in trade and other payables	116	(20)
increase / (decrease) in income in advance	1,421	(792)
(increase) / decrease in other debtors	(104)	113
increase in provision for restructuring	87	0
	2,131	(648)
(ii) movement in net cash during the year		
net cash at 1 January	636	2,039
net cash at 31 December	2,345	636
movement in net cash during the year	1,709	(1,403)

(iii) analysis of movement in net cash	01.01.2010	cash flows	31.12.2010
	£'000	£'000	£'000
cash at bank in hand and in transit	1,628	1,757	3,385
bank overdrafts	(684)	(224)	(908)
adjustment for Bionet funds	(308)	176	(132)
net cash	**636**	**1,709**	**2,345**

with special thanks to our donors and sponsors

The work of CABI is supported by the contributions of governments, corporations, international bodies and regional and local organizations. In 2010 some of our major donors and sponsors included:

international

- Asian Development Bank (ADB)
- Bill & Melinda Gates Foundation
- Common Fund for Commodities (CFC)
- European Commission (EC)
- Global Environment Facility (GEF)
- World Bank (WB)
- World Trade Organization (WTO)

national and regional

Australia	Australian Centre for International Agricultural Research (ACIAR)
	Department of Agriculture, Fisheries and Forestry (DAFF)
Canada	Agriculture and Agri-Food Canada (AAFC)
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Malaysia	Malaysian Agricultural Research and Development Institute
Pakistan	Government of Pakistan
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UK	Department for International Development (DFID)
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	Environment Agency (EA)
USA	United States Department of Agriculture (USDA)
	United States Agency for International Development (USAID)
	Wyoming Biological Control Steering Committee

CABI people

At the heart of CABI's success are the skilled and hardworking people who make it happen. From our scientists, who between them publish more than 100 papers in peer-reviewed journals each year, to information and communications specialists and support staff, we have the expertise to make a real difference to people's lives worldwide.

Such a pleasure working among decent people but the main motivation is the feeling that I am personally making a small contribution to making a difference to people's lives in developing countries.

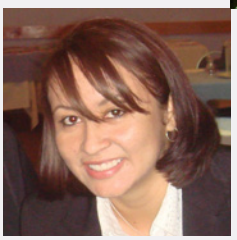
Halina Dawson, UK

Practical application of world-class science is what first attracted me to CABI in 1995. CABI's impact is both global and local and I am still proud to be part of it.

Janny Vos, Netherlands

It's very rewarding to be part of the CABI global "family" and to see first-hand how our diverse knowledge, skills, languages, cultures and life experiences can be applied to make a real difference in the lives of farmers across the globe.

Patricia Neenan, USA

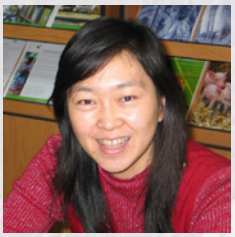


For me is fantastic to see practical IPM approaches being implemented by farmers as a result of training courses and information enabled and provided by CABI. Working with CABI we also have the opportunity to know and work with the leading agricultural institutions in different countries and learn a lot from their experiences.

Yelitza Colmenarez, Brazil

CABI has given me a unique opportunity to broaden my skills and scientific knowledge through travel and working with extension services around the world.

Rob Reeder, UK



I enjoy all change and new challenges in my job at CABI, because it keeps me fresh and keen to get ahead every day.

Min Wan, China

CABI is a way of life. It allows your talents to blossom, nurtures your aspirations and above all, being a not-for-profit organization, gives you a sense that your effort goes on to serve the most important goal of all – PEOPLE.

Sreepat Jain, India

CABI gives me opportunities to make interesting pit-stops along the fascinating routes of International Development – to feel, to touch and to enhance the livelihoods of many diverse and multicultural rural communities.

Wai Hong Loke, Malaysia

I am proud to be a part of this mature yet dynamic organization and I hope that I too can contribute towards its future success.

Marsden Momanyi, Kenya

I find our customers appreciate hearing about what we do worldwide – particularly that CABI is an ethical organization using its publishing and scientific expertise at the grass roots level in developing regions.

Chris Edmeades, Australia

governance

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.

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

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Mr John Ripley, Chair (from July 2010)
Mr Gary Whitfield, Chair, Executive Council
Dr Trevor Nicholls, CEO, CABI
Mr Ian Barry, CFO, CABI
Mr Andrew Bennett
Dr Vibha Dhawan (from October 2010)
Dr Don Merino
Professor Emmanuel Owusu-Bennoah
Mme Josefa Sacko (to October 2010)
Mr Martin White

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Representatives from each member country meet biannually to monitor CABI's affairs and implement Review Conference resolutions. The Council approves the annual budget, the admission of new members and takes other key decisions.

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Mr Ian Barry, CFO
Dr Joan Kelley
Mr Neil MacIntosh
Ms Carol McNamara
Mrs Andrea Powell
Dr Dennis Rangi

liaison officers

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

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publications by CABI scientists

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