

# STORIES OF CHANGE

Transforming lives through agricultural and rural development



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# Preface

**T**his book provides a snapshot of CTA's achievements during the last decade. It is a celebration, rather than a conventional impact assessment, and it provides an insight into the broad range of activities that CTA has supported through partnerships across Africa, Caribbean and the Pacific (ACP).

Established under the Lomé Convention between the ACP Group of States and the European Union 30 years ago, CTA initially focused on the dissemination of information as its main activity. Although this remains an important part of our work, we subsequently developed programmes on policies, agricultural value chains and information and communication technologies (ICTs).

Our main purpose has always been to make a difference on the ground, and in particular to improve food security and the livelihoods of smallholder farmers in ACP countries. It is often difficult to attribute impact and determine exactly why changes occur in farmers' fields and to their livelihoods. Frequently, several factors – the introduction of new technologies, exposure to information, favourable trading regimes – combine to help farming communities shift from subsistence to market economies. However, I believe the stories told here provide compelling evidence that CTA has made a real difference through its various interventions.

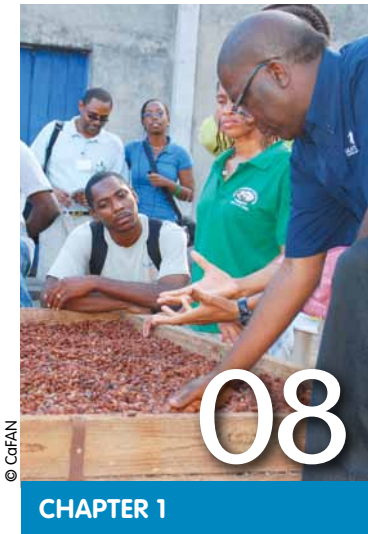
Some of the stories focus on activities that are directly helping to improve the productivity and incomes of small-scale farmers and fishers. Some describe the support we have provided to academic institutions and researchers. Others give a flavour of the many policy processes in which CTA is playing an active role. All are contributing, in one way or another, to our goal of improving food security and reducing poverty.

A development institution like CTA must ensure that its work makes a difference to its ultimate beneficiaries – smallholder farmers in ACP countries. However, as a small institution with a large mandate, we need to build smart partnerships with farmers' organisations, government agencies, research networks, youth and women's groups and the private sector to add value and bring about sustainable transformation in the agricultural sector. Indeed, our partners are the real heroes of many of the stories told in this book.

We are fortunate that governments, development partners, NGOs and private investors are now paying more attention than ever before to agriculture as an engine for socio-economic growth in ACP countries. It is time to redouble our efforts and play an active role in the process of transforming agriculture to achieve its true potential for food and nutritional security and the prosperity of millions of ACP citizens.

**Michael Hailu**  
CTA Director

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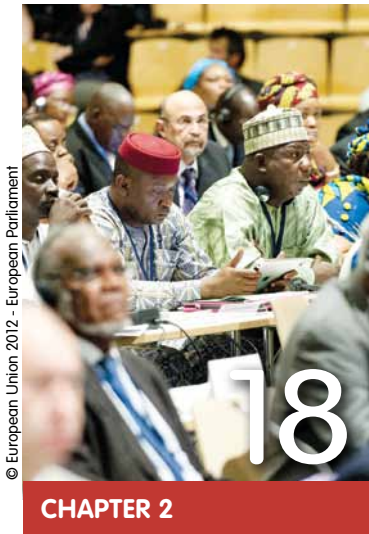


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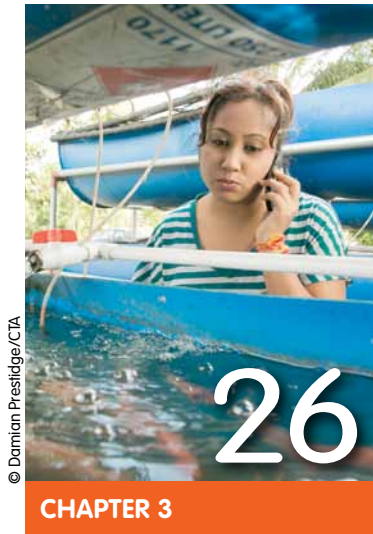


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## CHAPTER 1

# STRENGTHENING PRODUCER ORGANISATIONS

► **CTA has provided support to dozens of organisations representing small-scale farmers and fishing communities in ACP countries.**

The Caribbean Farmers Network (CaFAN) and the Kenya National Federation of Agricultural Producers, whose stories are told here, are two of the many organisations that have become increasingly effective and businesslike, thanks to CTA's support. In some cases, CTA has helped to establish new organisations, such as the Caribbean Network of Fisherfolk Organisations (CNFO). Greater cooperation among small-scale farmers and fishers has led to increases in productivity and higher incomes. They have also become more influential in national and regional policy processes.

# Creating a better future for farmers in the Caribbean

“CTA has been like a godfather to us,” says Jethro Greene, director of the Caribbean Farmers Network (CaFAN). “It has funded many of our activities since the early days, and we would never have achieved what we have without CTA’s support.” Indeed, the idea of creating a network was first raised at a workshop organised by CTA and the Caribbean Agricultural Research and Development Institute (CARDI) in Trinidad in 2002.

Caribbean agriculture was then in a state of crisis. Its contribution to GDP was steadily declining, and would fall from 4.8% of GDP in 2000 to just over 3% in 2006. The Caribbean imported 90% of its food requirements, and many of the region’s smallholder farmers, who constitute around a fifth of the labour force, suffered from low productivity, poor marketing and high levels of poverty. Although many islands had their own national farmers’ organisation, there was little or no cooperation between them.

Shortly after the Trinidad workshop, the executive director of CARDI got in touch with Jethro. He said: ‘Since you initiated this idea, why don’t you take it over?’ Jethro replied that he didn’t have the resources to establish a new organisation; but these – thanks to CTA and CARDI – were soon made available. The Eastern Caribbean Trading Agriculture and Development Organization (ECTAD), managed by Jethro from an office in Kingstown, St Vincent, took on the role of secretariat.

## EMPOWERING SMALL-SCALE FARMERS

“At the outset, we decided to focus on small-scale farmers – 90% of farmers in the Caribbean have less than 5 acres – and pay particular attention to the needs of women and young people,” says Jethro. “And we initially chose to work on non-contentious issues which would bring people together; unite not divide.” This was particularly important as old enmities between islands in the Caribbean often hindered regional cooperation. CaFAN now provides a voice for over 20 farmers’ organisations in 15 countries, which between them represent some 500,000 individuals.

CaFAN’s main programmes involve sharing information and knowledge; promoting food and nutritional security; encouraging the involvement of young people in agriculture; influencing national policy making; and helping farmers to improve their incomes through greater involvement in value chains.

“Improving marketing is now a key thrust of our work,” says Jethro. He is particularly proud of the success which ECTAD and CaFAN have had in improving farmers’ profits from various root crops. A decade or so ago, farmers were getting as little as US\$0.25 a pound for their dasheen (*Colocasia esculenta*). This barely covered the costs of production. ECTAD linked farmers to new markets and ran a series of training sessions on post-harvest handling and packaging. Before long, farmers were getting US\$0.70 a pound, and at times almost double that. (See Box page 12: Dasheen delivers)

## TRAINING MATTERS

The dasheen trainings were among many supported by CTA. “CTA has been particularly important when it comes to the training of trainers,” says Cleve Scott, who works part-time for CaFAN as a project manager.

The first major CTA-funded training workshop, on the management of farmers’ associations, was held in Barbados in 2007. Twenty-three participants from 11 countries attended the workshop. Since then, CTA has supported many other training events covering a wide range of topics, from disaster management and risk assessment to post-harvest handling, marketing and the use of ICTs. Many farmers’ leaders have also benefited from Web 2.0 trainings (see page 28).

The impact is clear to see. Farmers’ organisations are now more efficiently managed and better led, and many farmers have improved their productivity and incomes. “I recently attended CTA training workshops on the use of ICTs and Web 2.0,” says Audrey Walters, a farmer from Sans Souci in St Vincent. “I found them extremely helpful, and I now have a much better idea about how I can use the Internet and mobile phone for business activities.” Since the training sessions, she has been sharing her new-found knowledge with other farmers who belong to the 30-strong Women in Agriculture for Rural Development (WARD) group she helped to found.

## THE SPIRIT OF PARTNERSHIP

Talk to anyone who works for CaFAN and you will be struck by their passion and commitment. “We can’t afford a civil-service type mentality, with people sitting in an office and thinking of this as a permanent job,” says Jethro. Instead, the organisation places a strong emphasis on volunteerism. Most staff are part-time and make their living elsewhere. Cleve Scott, for example, lectures at the University of West Indies and works in



© Damian Prestidge/CTA

Training in the use of information and communication technologies (ICTs) is helping to increase productivity and incomes.

the music business. CaFAN’s country directors – there are two for each country – also have other business interests. One is a doctor; one is a teacher; one a full-time farmer; another a consultant.

“Bureaucratically, we are very lean,” explains Cleve. “Until now, there have been no long-term, salaried positions, although people have been paid on short-term contracts to undertake the specific projects for which they’ve raised funds.” This is about to change, as CaFAN has recently received a large grant from the Canadian International Development Agency (CIDA), and this will involve taking on some permanent staff. However, Cleve believes that the network’s basic philosophy will remain much the same.

CaFAN hopes to continue its relationship with CTA, not least because it appreciates the way CTA has provided support and advice. “We like CTA’s partnership approach to development,” says Jethro. “CTA believes in consultation, not dictation, and I think that’s one of the things that sets it apart from many donor organisations.” ■

### Dasheen delivers

Carlton Ottley has two small farms in Richland Park, high up in the picturesque Mesopotamia Valley, an hour's winding drive from St Vincent's capital. At one he rears poultry; at the other he grows dasheen and bananas. "When I first began growing dasheen, about eight years ago, I used to get 30 sacks off a piece of land like this," he says as he walks us across his fields. "Now, on the same area, I get 40 or more sacks." He attributes his higher yields to the CTA-funded technical training he received from the Eastern Caribbean Trading Agriculture and Development Organisation (ECTAD).

Just as significantly, ECTAD has helped to transform the fortunes of dasheen farmers by finding new markets. In the days when Ottley began growing dasheen, he and his neighbours had to accept whatever the buyers or traders – mostly women who take produce to neighbouring islands by schooner – offered, which wasn't much more than the cost of production. Since ECTAD identified new markets in the UK and elsewhere, the price farmers get for their dasheen has more than doubled.

"I don't necessarily sell my dasheen to ECTAD," says Boston Maloney, who farms the land adjacent to Carlton's. "I sell to whoever pays me most, but I appreciate the fact that ECTAD has forced traders to offer more than they did in the past."

Although ECTAD has been the driving force behind the improvement in the dasheen market in St Vincent and the Grenadines, CaFAN has also played an important role. "If a buyer in the UK orders a container of dasheen and the farmers here don't have enough, then we get in touch with CaFAN members in Guyana, Grenada and elsewhere," explains Audrey Walters, whose farmers' group, Women in Agriculture for Rural Development (WARD), is a member of ECTAD, which in turn is a member of CaFAN. "That way, we can fill the container and we all benefit." As a result, hundreds of farmers have seen an improvement in their living standards.

# Knowledge means success for Kenya's farmers

**A**nnah Kinya Kiambati is the national women's representative for the Kenya National Federation of Agricultural Producers (KENFAP). She is also chair of the local KENFAP branch in Meru County. She believes the organisation has made a profound difference to the welfare of small-scale farmers in this hilly district to the north-east of Mt Kenya. Like Annah most of the farmers here, grow a variety of crops, such as beans, maize and bananas, and many have one or two dairy cows, several chickens and a few goats.

"We are farming much more efficiently than we did in the past, because we have access to better information," she says. "We have become more efficient and businesslike, and this has led to better crop and milk yields." Not long ago, her two dairy cows used to yield just 4 litres of milk a day between them; now, she gets 12 litres from each cow, thanks to better feeding practices and the use of improved breeds. None of this could have happened, she says, without the help of KENFAP's Regional Information Centre, which occupies a cramped office off one of the busiest streets in Meru.

The Meru information centre is one of 10 centres established by KENFAP with support from CTA under the project "Strengthening and improving rural communities' access to agricultural information in Kenya." The project enabled KENFAP not only to establish and equip a network of regional information centres, but to revive its bimonthly magazine

*Farmers' Voice*, train farmers how to use the Internet, improve the skills of its staff, and attend agricultural shows.

"Our role is to represent farmers, sensitise farmers to the services available to them, and push for changes in policy which will help farmers in Kenya," explains KENFAP's chief executive officer, Kanywithia Mutunga. CTA's support has played a significant role in the development of KENFAP's communication policy. "We always had a good relationship with CTA," says Dr Mutunga, "and it complemented the support we've received from other organisations such as Agriterra"

## THE ROLE OF REGIONAL INFORMATION CENTRES

The first thing that strikes you when you enter one of the regional information centres is the sense of industry. These are places that are meant to be used. Every year, around 2400 farmers visit the centre in Meru, and around 10,000 in Nyeri. Some come to browse in the library, or borrow books. In Meru, the centre has 32 books or booklets which it describes as "farmer-friendly"; and 112 of interest to researchers and extension agents. Visitors can also read *Farmers' Voice*, CTA's *Spore* magazine, and dozens of leaflets about specific aspects of farming, many published by CTA.

Farmers will often come with specific problems related to pests and diseases, or the feeding and care of livestock, for example. "If I know the answer, then I'll help them, but more often I link them to advisers within the local branch of the Ministry of Agriculture,

Livestock and Fisheries,” says Lucy Nyambura, KENFAP’s county coordinator in Nyeri. She always follows up to make sure that the farmers have received the help they need.

The Regional Information Centres also have computers, provided with support from CTA. In Nyeri, KENFAP invited the 80 farmers groups which are members of the branch to send youth representatives for training. They were taught how to set up email accounts, browse the Internet and search for information. As a result, says Lucy, many farmers have improved their productivity and some have even established new enterprises as a result of what they have learned. One of the most striking examples – described more fully on pages 50 and 51 – involved a group of retired civil servants who established a quail farming business in Nyeri. They first got the idea from reading about these birds in *Spore*; they then used the Internet to gather more information and contact breeders in Nairobi. Now they have a thriving business.

### TRAINING MAKES THE DIFFERENCE

Regional information centres are an important resource for a wide range of groups and organisations. For example, district extension

teams – involving farmers, KENFAP county coordinators, government offices and researchers – frequently meet in the centres. Farmers who are members of ‘common interest groups’ also use these centres as a source of information and the place to contact research institutions, extension agencies and others who can help them.

One of the disadvantages of the centres is that they are based in towns, and difficult to get to for farmers who live in remote areas with poor infrastructure. However, the centres have established training programmes which are held in the countryside, and these often get information to farmers who wouldn’t receive it otherwise. “We’ve held a whole series of training programmes on subjects such as bananas, sweet potato and maize production, on entrepreneurship, and on developing livestock enterprises,” says Judith Nkatha, KENFAP coordinator for Meru County.

These training sessions have helped farmers improve their productivity. After holding discussions with Annah Kiambati and a group of women farmers in Rwanjange, near Meru – she was gathering information for a CTA impact assessment – Mercy Rewe, KENFAP’s manager in charge of information, communication and knowledge management, summed up some of the benefits of training.

“The women cited plenty of examples of how training sessions have helped them,” said Mercy. “For example, they now know how to choose the best varieties of banana and what they have to do to increase yields.” Many are now getting bigger bunches of bananas, worth five times more than the meagre bunches they used to produce. Likewise, training sessions on chicken farming has led to the introduction of new breeds and better feeding regimes, which in turn has led to a doubling in the price they get for each bird as their chickens are now much larger.



REGIONAL INFORMATION CENTRES HAVE ESTABLISHED TRAINING PROGRAMMES WHICH ARE HELD IN THE COUNTRYSIDE, AND THESE OFTEN GET INFORMATION TO FARMERS WHO WOULDN'T RECEIVE IT OTHERWISE.”

CTA is now focusing on supporting regional, rather than national, farmers' organisations. But its influence endures. KENFAP's regional information centres continue to operate successfully, serving an ever expanding number of farmers; *Farmers Voice* and various e-bulletins provide farmers and

extension agents with up-to-date information. However, it's not just CTA which deserves praise. "CTA support has been extremely important, but so has the support we've received from a range of other organisations," says Mercy Rewe. "They have complemented each other very well." ■

## Empowering fishing communities in the Caribbean

Measured purely in economic terms, Caribbean fisheries are not considered to be particularly important. Their contribution to the nations' gross domestic product being less than that of agriculture. However, the fisheries – an estimated 680 species are harvested in Caribbean waters – are vitally important for two reasons.

First, they provide a source of protein in countries where agricultural production is frequently erratic and threatened by natural disasters and, more recently, climate change. Second, the fisheries sector employs 182,000 people either full-time – for example, as fishers – or indirectly in activities such as processing, marketing, boat building and net making. Fisheries-related employment is particularly important in rural areas where alternative income-earning opportunities are limited or non-existent. A recent survey revealed that in some countries significant numbers of fisherfolk live in poorly construc-

ted houses, have relatively low levels of education, and suffer from poor access to schools, health care and credit.

One organisation that is doing its best to improve their welfare, and ensure the sustainability of the region's fisheries, is the Caribbean Regional Fisheries Mechanism (CRFM), an inter-governmental body established by the Caribbean Community (CARICOM) in 2002. Empowering small-scale fishers has been at the heart of its work. "We recognised that fisheries in the region would be better managed if small-scale fishers were more involved," says Terrence Phillips, who joined CRFM as programme manager in 2003. "Up until then, fisheries had always been managed in a very top-down way, with governments making the laws without adequately consulting small-scale fishers."

This made for poor fisheries management, and high enforcement costs. "The hope was that if fishers were more engaged



© REUTERS/Eduardo Munoz

Net-making in Port-au-Prince, Haiti. Fisheries provide many full-time jobs and support employment in other sectors.

### STRENGTHENING FISHERFOLK ORGANISATIONS

The survey and subsequent discussions led to a major three-year CRFM/CTA technical assistance project, with CRFM acting as the implementing agency. Its objective was to improve the standards of living and income of small-scale fishers and promote the sustainable management of fishery resources.

“We began by identifying six countries which had no national fisherfolk organisations,” recalls Terrence. National consultations led to the launch of new organisations representing small-scale fishers in Dominica, Guyana, St Lucia, and St Vincent and the Grenadines; and to the creation of steering committees to form national fisheries organisations in St Kitts and St Nevis, and Grenada. At the same time, the CRFM/CTA project provided training for leaders of existing national fisherfolk organisations to help them improve their management and advocacy skills.

Before the project began, the only organisations representing fisherfolk in St Vincent and the Grenadines were three cooperatives, which acted independently of each other and whose main business was marketing the fish catch. By 2013, a national fisherfolk’s organisation had been established. According to its chairman, Eocen Victory, this has been a significant institutional reform. “We can now speak with one voice, and that will make a big difference in future,” he says. “When we were speaking as a single cooperative – rather than three cooperatives acting together – it didn’t carry so much weight.”

The Caribbean Network of Fisherfolk Organisations (CNFO) was officially launched in 2007, and it is now playing an important role in regional policy-making. “Over the years, CNFO has made an increasingly significant contribution to fishery discussions

in the policy processes, they would buy into the measures needed for sustainable development, and the costs of enforcement would be reduced,” says Terrence. But if that was to happen, the fishers themselves would need to be better organised.

Soon after it was established, CRFM – with the help of CTA – carried out a survey of national fisherfolk organisations. This survey identified weaknesses in terms of leadership, management and capability. The findings were reviewed at a meeting of fisherfolk leaders in Belize in 2004. They agreed on the need to establish a regional network of national fisherfolk organisations to promote the interests of small-scale fisheries.

and policymaking,” says Susan Singh-Renton, deputy executive director of CRFM. “Its members have developed a better understanding of fisheries management and CNFO now makes an important contribution to our forum meetings and scientific working groups.” The working groups focus on specific fisheries, such as queen conch and lobsters, reef and slope fish, and large pelagic fish such as tuna.

### WORKING WITH GOVERNMENT

CRFM and CNFO have both established a good working relationship with government fisheries departments. “We’ve gained a great deal from the work that CRFM has done since it was created,” says Jennifer Cruikshank-Howard, chief fisheries officer for St Vincent and the Grenadines. She and her staff have benefited from frequent training sessions, some funded by CTA, and from the knowledge they have gained at the annual scientific meetings organised by CRFM.

She has been particularly impressed by CRFM’s forum meetings, which are attended by all the chief fisheries officers in the region and benefit from the presence of CNFO. “In the past, I used to feel as though we were working in isolation, but now we have a much better understanding of how fisherfolk see things, thanks to the contribution made by CNFO.” She believes that closer co-operation between government officers and fisherfolks, and steady improvements in the capacity of national fisheries organisations and the CNFO, are leading to better management.

There is no doubt that CNFO’s reputation and influence has steadily grown. In 2009, it contributed to CRFM’s special forum to develop a Common Fisheries Policy for CARICOM member states. Later that year it attended a meeting of the Gulf and Caribbean Fisheries Institute in Venezuela. In 2012–13, CNFO was

involved in the development of the global small-scale fisheries guidelines, a process led by the UN Food and Agricultural Organization (FAO). It is now contributing to a new CRFM/CNFO/CTA project which focuses on the implementation of the Caribbean Community Common Fisheries Policy and other regional fisheries policies.

Terrence Phillips views CRFM’s relationship with CTA, which have been represented by José Fonseca, as a partnership between equals. “It’s about a lot more than CTA providing us with financial support,” he says. “José and I communicate a lot. He has helped us with the development of our projects and he has been very flexible. I think we’ve benefited from one another’s experience.” ■



CLOSER CO-OPERATION BETWEEN GOVERNMENT OFFICERS AND FISHERFOLKS, AND STEADY IMPROVEMENTS IN THE CAPACITY OF NATIONAL FISHERIES ORGANISATIONS AND THE CARIBBEAN NETWORK OF FISHERFOLK ORGANISATIONS, ARE LEADING TO BETTER MANAGEMENT.”



## CHAPTER 2

# PROMPTING POLICY ACTION

► **Since 2007, CTA has co-organised up to six Brussels Policy Briefings a year.** These have played a major role in sensitising policymakers to the importance of agriculture. In 2010, the first regional briefing was launched in Africa, and in 2013 Haiti asked CTA to support a series of national briefings. These were extremely successful. CTA has also provided financial and technical support to regional policy networks in Africa, the Caribbean and the Pacific. These have fostered dialogue between policymakers, farmers, processors and others involved in food production and marketing. CTA's annual conferences have become major events in the development calendar, putting specific issues – such as smallholder value chains and agricultural extension services – onto the policy agenda.

# Leading the debates

“CTA’s annual conferences have become major events in the development calendar, attracting a large range of interests, including farmers, scientists, politicians, policymakers and representatives of development agencies. Each year, CTA picks a specific theme of topical interest. In 2013, the annual conference, held in Kigali, Rwanda, focused on information and communication technologies: ‘ICT4Ag – The digital springboard for inclusive agriculture’. The year before, the ‘Making the Connections’ conference in Addis Ababa, Ethiopia, focused on smallholder farmer value chain development. In 2011, the theme of the annual conference, which was held in Nairobi, Kenya, was ‘Innovations in Extension and Advisory Services’ (see also page 54).

“CTA’s annual conferences help to raise the profile of specific issues and get them onto the policy agenda in ACP countries,” says Judith Ann Francis, one of the organisers of the Nairobi extension conference. “Sometimes, we are ahead of the game, and we have helped to mainstream issues of importance.”

Nowadays, the annual conferences are held in Africa. As 90% of the population of the ACP regions live in Africa, this makes sense. However, there is also a logistic imperative. It is much easier for non-Africans to gain visas for African countries than it is for Africans to gain visas to visit Europe, where CTA held some of its early annual seminars, the forerunners of today’s conferences. In those days, the seminars used to attract between 100 and 150 people. The annual conferences are much larger events. For example, the Addis conference on value chains attracted over 500 participants, representing 69 nationalities and more than 250 different organisations. Approximately the same number attended the ICT4Ag conference in Kigali in 2013.

Although CTA is the lead organiser of the annual conferences, it relies heavily on the support and cooperation of many other organisations. For example, the Addis conference was organised by CTA and hosted by the United Nations Economic Commission for Africa (UNECA), with significant contributions from around 20 other organisations. A similar story of collaboration can be told for the Nairobi conference in 2011 and the Kigali conference in 2013.

The conferences today are a far cry from the conventional meetings of the past, at which experts talked to one another while everyone else listened politely. There are plenary sessions, attended by all delegates, but much time is devoted to more intimate thematic discussions. CTA’s conferences also included panel discussions, group discussions, field visits and



CTA’s international conferences receive wide coverage in the media. There were over 340 articles and news reports about the ICT4Ag conference, held in Rwanda in 2013.

prize-giving ceremonies for the journalists who participate in pre-conference competitions. In Kigali, the main conference was preceded by a 'plug & play' day, where young entrepreneurs from ACP countries showcased a broad range of innovations and apps designed to provide information for smallholder farmers.

"Conferences this size are nearly always PowerPoint-led," said CTA's Giacomo Rambaldi during the closing ceremony of the ICT4Ag conference. "But right from the outset, we decided that this one would be different – that interaction would be at the core of the conference." And that's exactly how it turned out.

The amount of preparation required beforehand is considerable. For example, prior to the extension conference, the International Steering Committee's call for papers elicited some 400 abstracts. Of these, around 100 were chosen for presentation during the thematic discussions. In the months leading up to the conference, over 70 people actively participated in e-discussions.

CTA encourages a strong media presence at its conferences, which attract both local

and international journalists. *This is Africa*, a *Financial Times* magazine, for example, produced a special issue on value chains, drawing heavily on the discussions that took place at the Addis conference. This helped to raise the profile of value chains on the ACP policy agenda. The previous year, the findings of the extension conference were enshrined in the 'Nairobi Declaration', which was printed in full in a CTA Policy Pointer, *Agricultural Extension – a Time for Change*. More than 60 journalists, representing national, regional and international media, reported on the Kigali conference.

In short, CTA's annual conferences are asking – and answering – some of the big questions about the future of agriculture in ACP countries. This is why they have become so popular, and why they attract such a broad range of interests and key policy-making organisations and individuals. To give just one example, seven ministers of state attended the opening plenary session of ICT4Ag, and Rwanda's Minister of Agriculture and Animal Resources, Hon Agnes Kalibata, attended every day of the conference. ■

## Shaping rural policies

"In 2007, when we held the first Brussels briefing, agriculture wasn't seen as a high priority by the vast majority of ACP countries," says Isolina Boto, head of CTA's Brussels office. "At the time, just four or five of the 79 ACP countries had identified agriculture and rural development as their main priority for receiving European Commission support in their National Indicative Programmes (NIPs)."

During discussions with staff of the European Commission, Isolina suggested that there was an urgent need to sensitise policymakers in Brussels about the importance of agriculture, and push it higher up the policy agenda. "Many of the ambassadors and their staff thought of agricultural as something that concerned technical people, such as agronomists, rather than policymakers," she says. This is



Jethro Greene of the Caribbean Farmers Network (CaFAN) addressing one of the Brussels Briefings. These are helping to push agriculture higher up the policy agenda.

what inspired CTA, the ACP group and the Commission to launch a series of policy briefings.

The first Brussels Rural Development Briefing was held in July 2007. Since then, there have been six briefings a year, amounting to 33 by October 2013. Jointly organised by CTA, the European Commission, the European Presidency, the ACP Group of States and Concord – the European NGO federation for relief and development – the briefings are both popular and influential. Each consists of half a day of presentations and discussions, focusing on a specific topic of interest related to agriculture and rural development. “This isn’t just about food production,” says Isolina. “We’ve explored a whole range of topical subjects, such as sustainable intensification, fair trade, climate-smart agriculture, financing agriculture, the geopolitics of food and youth employment. We want to understand the various drivers of agricultural transformation in ACP countries.”

The briefings are attended by up to 150 people. A recent survey found that 21% come from ACP embassies in Brussels, 18% from

NGOs, 13.5% from international organisations and 17% from the European Commission. The briefings also attract researchers, journalists and representatives of the private sector. They have received consistently strong support from the ACP embassies, with around 35% of the embassies sending representatives to virtually every meeting.

“We frequently receive calls from ambassadors who can’t come, asking for documents,” says Isolina. These include the comprehensive ‘Readers’, providing background information for each topic, researched and written by Isolina and her young staff. The briefings are also videoed live on the web, and in recent years CTA has produced a series of policy briefs following the briefings. The briefings have promoted strategic partnerships with key ACP, European Commission and international organisations involved in rural development, and they have attracted the interest of new partners for CTA, such as agribusiness companies and multinational corporations. They have also helped, along with many other factors, to push agriculture and rural development higher up the policy agenda. Indeed, over 30 ACP countries identified agriculture and rural development as a key priority for support in the latest round of National Indicative Programmes.

In 2011, CTA co-organised a briefing with the International Food Policy Research Institute (IFPRI) on nutritional security in ACP countries. Since then, IFPRI and CTA have co-organised two more briefings on food price volatility and agricultural resilience. IFPRI considered these such a success that it has offered to co-organise and part-finance one briefing a year, as have the NEPAD Planning and Coordinating Agency and the African Union Commission. Following the briefing on agricultural resilience, IFPRI staff asked its Board of Trustees to include resilience as

part of its strategic programme for the next five years. Agricultural resilience will also be the subject of a major 2020 conference to be held by IFPRI – thanks to the influence of the Brussels Briefing. Following the briefing on food price volatility in November 2011, CTA facilitated the input of farmers' organisations to the G20 meeting held in Mexico in 2012. The key recommendations of this meeting were accepted by the G20 Ministers of Agriculture.

In 2012, CTA published a DVD containing information on all the Brussels briefings. This will be updated every year.

## BEYOND BRUSSELS

In 2010, the ACP Committee of Ambassadors and African regional farmers' organisations asked CTA and its partners to launch a series of regional briefings. The first of these, focusing on land access and acquisition, was held in Yaoundé, Cameroon, in September 2010. By October 2013, a further 11 regional briefings had been held in Africa, the Caribbean and the Pacific. Their objective has been to raise awareness about key rural development issues, especially food security, and increase the exchange of information and expertise on selected issues.

These one- to two-day regional briefings consist of three or four panel discussions with up to six speakers. Each speaker provides a different perspective on the topic in question. The discussions are followed by interactive debates, and the briefings conclude with a press conference. Many have received good coverage in national and international media. Wherever possible, the briefings are held back-to-back with high-level regional policy events. In terms of feedback, over 95% of those who have attended have expressed themselves to be very satisfied with the sharing of knowledge, the plurality of experiences exchanged and the openness of the debates.

It says a great deal about the influence the policy briefings can have that Haiti, one of the poorest countries in the world, should approach CTA with a view to setting up its own national policy briefings. "They told us they'd been following the Brussels Briefing online, and they wanted to use the materials we produce for these as background for their own briefings, looking at the same topics through a national lens," explains Isolina.

National Briefings in Haiti were launched in March 2013. Organised by Promotion for Development (PROMODEV), the Ministry of Agriculture and other development partners, with financial and technical support from CTA, the first briefing focused on 'Building resilience in the face of crisis and shocks,' which had been the subject of Brussels Briefing No 30. The next two meetings, which attracted over 200 people, focused on adding value to local food products and aquaculture and fisheries development. Each meeting was tailored to the local context and made use of the materials used in the Brussels briefings. "We are very proud that the briefings are owned at regional and national level and driven by the partners," says Isolina. ■



THE CTA BRUSSELS BRIEFINGS HAVE PROMOTED STRATEGIC PARTNERSHIPS WITH KEY ACP, EUROPEAN COMMISSION AND INTERNATIONAL ORGANISATIONS INVOLVED IN RURAL DEVELOPMENT."

# It's time to talk about policy

CTA helped us to create a new form of dialogue in the Caribbean," says Diana Francis, a policy and trade specialist in the inter-American Institute for Cooperation on Agriculture (IICA) Caribbean region. "Not long ago, agricultural ministers would just talk among themselves, or to the heads of organisations like CARDI (the Caribbean Agricultural Research and Development Institute). Now, they talk to farmers, farmers' organisations and others involved in food production." With the support of CTA, the Caribbean Regional Agricultural Policy Network (CaRAPN) has played an important role in fostering dialogue between all the different parties.

In 2000, CTA invited organisations and individuals from the Caribbean and the Pacific to attend a workshop in Entebbe, Uganda. The purpose was to introduce people from these regions to the work being done by policy networks in Africa, and especially the Food, Agriculture and Natural Resources Network (FANRPAN), which had been set up in 1997 in response to a call from African ministers for an organisation that would gather evidence to inform regional policy-making.

"Our message at the workshop to people who came from the Caribbean and Pacific was: If you think setting up regional policy networks is a good idea, we'll provide you with support," recalls CTA's José Fonseca. This led, before long, to the setting up of the Pacific Agriculture and Forestry Policy Network (PAFPNet) and CaRAPN. The latter

was formally established in 2003, following a workshop organised by CTA and the University of the West Indies in Suriname. Since then, CaRAPN has played a leading role in policy formulation in the Caribbean. It has commissioned research on a wide range of topics and provided guidance and input to the Caribbean Community's food and nutrition and common agricultural policies.

Here, as in Africa, CTA has provided considerable support for activities related to communications and dissemination. During the course of the past decade, CaRAPN has produced workshop reports, technical studies, policy briefs and popular books. "Thanks to CTA, we now have a much larger pool of information products than we had 10 years ago," says Diana. Besides providing financial support, CTA has been closely involved in developing projects and improving the quality of products. Typical of the more popular publications is *Choices – Caribbean Agriculture Our Way*. Published in 2012, this provides compelling stories about small-scale farmers and entrepreneurs who have increased productivity and created wealth through sustainable farming practices. Highlighting what is going right, rather than just focusing on what's going wrong, has become a trademark of CaRAPN's work.

The network has also managed Agricultural Round Tables, first held during the Caribbean Week of Agriculture in 2008. Apart from putting agricultural ministers and policymakers in touch with people working at the business end of farming, tilling the soil and producing crops and livestock, the CTA-supported round tables have attracted entrepreneurs and farmers whose activities have been highlighted in publications like *Choices*. "They have brought policy to life by highlighting the links between policy and all the good things that are happening on the ground," says Diana.

## INVOLVING YOUNG PEOPLE IN POLICY MAKING

It is easy to be gloomy about the state of agriculture in sub-Saharan Africa. For one thing, cereal yields remain depressingly low, little more than they were 30 years ago. For another, many countries are suffering from a lack of involvement of young people. Farmers are getting older, and the young increasingly head to the cities in search of work. However, if young people are healthy, skilled and motivated, they can do much to stimulate economic growth, especially in the agricultural sector; which is why it is so important to get them involved.

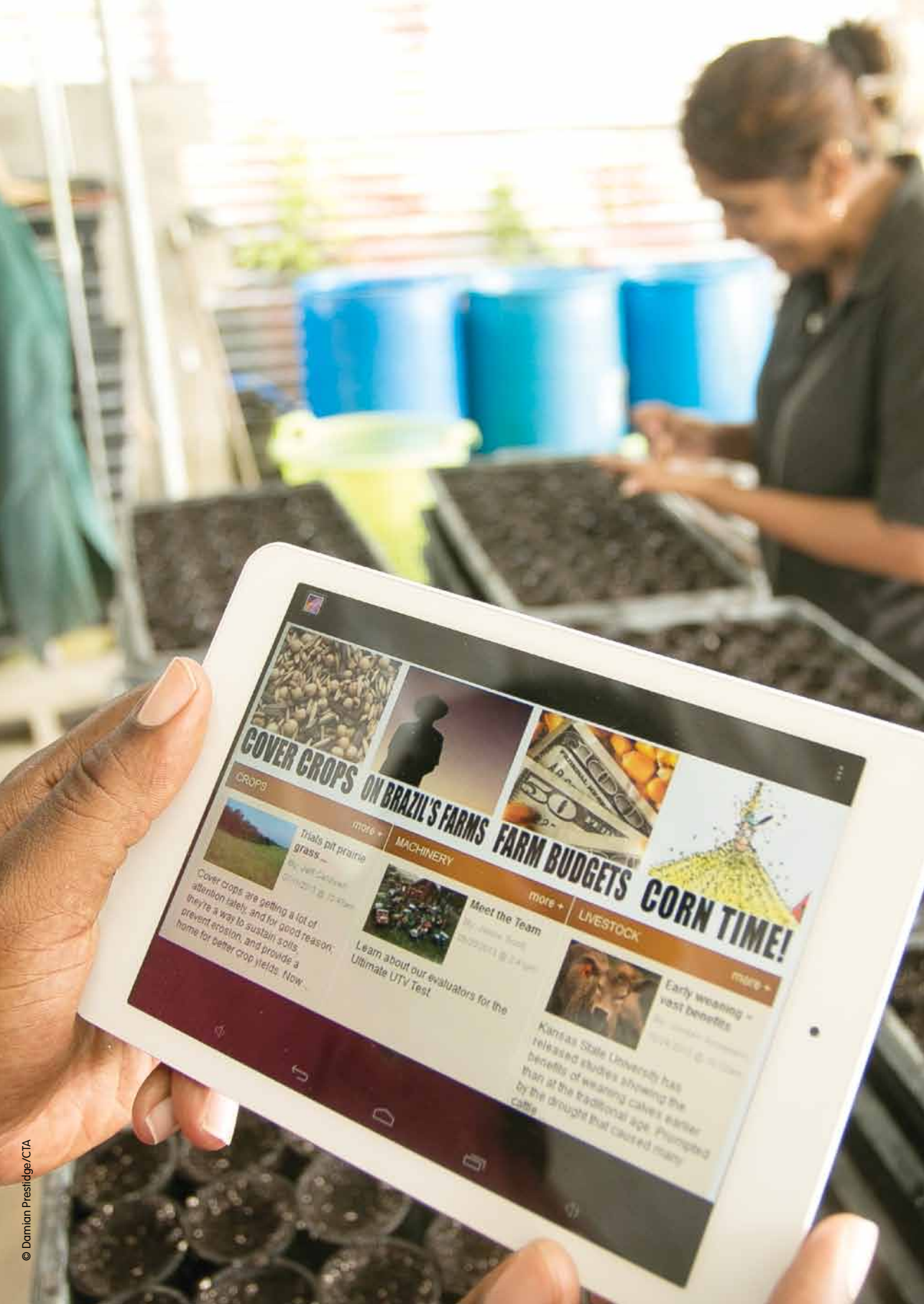
FANRPAN has identified this as a key topic for investigation, and with support from CTA it commissioned six young researchers to examine policies in Malawi, Mauritius, South Africa, Swaziland, Tanzania and Zambia. Their findings were presented at FANRPAN's regional dialogue in Tanzania in September 2012. "The researchers found that there are many policies related to agriculture, and many related to youth, but hardly any which are concerned with helping young people to make a living within the agricultural sector," says Oluyede Ajayi, a policy expert at CTA.

The studies revealed that young people tend to have a negative perception about agriculture, and are unaware of the opportunities that exist in the sector. Young people working in agriculture also say that they do not get enough support. The authors concluded that governments need to develop incentives to encourage young entrepreneurs to get involved in the agricultural sector. They should also be included in policy-making processes.

But do events such as these have any real impact? José Fonseca believes they do. "FANRPAN is now one of the most vibrant think tanks on agriculture in Africa, with a lot

of influence across the continent," he says. This was confirmed by a recent impact study, which explored the development and impact of nine organisations that have received long-term support from CTA.

According to the report on FANRPAN, CTA support has enabled the organisation to raise its profile, increase awareness of its activities among a wide audience and improve the frequency and quality of its communication products. The study found that CTA's funding had indirectly supported the organisation's development and growth and helped to instil confidence among other potential donors. As a result, FANRPAN had improved its website, undertaken case studies, launched a new media strategy, introduced new communication tools and participated in regional and international policy meetings, all of which had helped to increase its influence. Much the same could be said for the policy networks that CTA has supported in the Caribbean and the Pacific. ■



## CHAPTER 3

# PROMOTING INFORMATION & COMMUNICATION TECHNOLOGIES

► **CTA has been in the vanguard of the communications revolution which is transforming the lives of small-scale producers in ACP countries.**

The experience of the Rwanda Telecentre Network provides an insight into the effect of CTA-supported trainings on information and communication technologies (ICTs). Since 2008, over 2500 people have benefited from CTA's Web 2.0 training programmes. The Agriculture, Rural Development and Youth in the Information Society (ARDYIS) project has contributed to raising young people's awareness of the challenges facing agriculture and the potential of ICTs.

# The life-changing impact of social media

In 2013, CTA's 'Web 2.0 and Social Media Learning Opportunities' was the winner of the World Summit on the Information Society prize in the 'ICT applications: e-agriculture' category. This was in recognition of the remarkable success of its Web 2.0 training programmes, which began in 2008. Over the years, CTA has received a continuous stream of positive feedback. "Many people have told us that the training sessions have not only changed their working behaviour, but their whole lives," says Giacomo Rambaldi.

Since 2008, around 2000 people from ACP countries have benefited from CTA's Web 2.0 training programmes. Ranging from one-day introductions to intensive five-day courses, their aim has been to familiarise participants with the use of advanced web tools, such as publishing blogs and tweets and calling for free over the Internet, as well as other collaborative and social media tools.

In 2012, CTA commissioned a study from Euforic Services Ltd. "We had plenty of anecdotal evidence about the benefits of our training sessions, but we wanted to get a clearer idea about their impact," says Giacomo. The results were revealing. The majority of trainees who responded to the survey said the trainings had improved their ability to access and share information. Over half the survey participants said they had improved their information management; a third have used their newly acquired skills to run and facilitate Web 2.0 training sessions themselves.

"One of the most revealing findings was that the highest adopters, and the people who take greatest advantage of the trainings, are English-speaking women under the age of 35," says Giacomo. Between 2008 and 2010, 32% of trainees were women and 40% were the under the age of 35. The corresponding ratios for 2012 were 40% and 64% respectively. "We made a specific effort to achieve this," explains Giacomo. "This fits well with CTA's new strategy, which places a strong emphasis on working with women and young people in general."

During the first two years of the programme over half the participants were involved in research and education. By 2012, the figure had shrunk to 18%, with CTA putting a much greater emphasis on the groups and individuals who make the most of Web 2.0's potential, such as those working for government, non-governmental organisations, the private sector and the media.

When CTA first began its Web 2.0 training, it covered most of the costs, which included flights and accommodation. Since 2010, it has adopted a cost-sharing approach. To give just one example, trainings in Uganda were held in Kampala, Entebbe and Gulu in 2010 and 2011, and participants were encouraged to make their own way to the workshops and stay with friends or family. This has reduced CTA's per capita investment and as a result, it can now offer more training sessions to more people.

The testimonies below provide a brief – and highly selective – insight into the impact of the Web 2.0 trainings.

## PROMOTING E-EXTENSION IN KENYA

In Kenya, the Ministry of Agriculture is now using ICTs – mobile phones, text messages and social media – as a way of communicating with farmers. “We have approximately one extension staff for every thousand farming households, so that makes it very difficult for us to reach more than a fraction of farmers,” explains Richard Githaiga, head of extension management at the Ministry. “This, and the high costs involved in visiting farmers, encouraged us to establish an e-extension project.”

Richard and his colleagues have developed an e-extension curriculum and manual, incorporating the Web 2.0 concepts they become familiar with at CTA training sessions. In 2013, the manual was used in training workshops attended by 67 Ministry extension officers. “A key selling point of Web 2.0 is that it’s a technique that anyone can embrace,” says Steve Rono at the Ministry’s Agriculture Information Resource Centre (AIRC). “Within five days, you learn all you need to know about how to share information and use social media, and the skills you need to train others.”

Extension staff who benefited from the Web 2.0 training sessions are now sharing their skills with other field officers. In mid-2013, the Ministry issued over 600 of its 4700 extension staff with shock-proof Mecer laptops and smart phones, and these will be used as a way of communicating with farmers, using the skills provided through Web 2.0 training.

The majority of farmers in Kenya now have mobile phones, which means that the e-extension project can provide them with information using text messages and – for those with smart phones – information on the Internet. “This is going to make it much easier for us to reach large numbers of farmers,” says Richard. “It is also going to make it easier for farmers to communicate directly with our staff.”



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In Kenya and many other developing countries, mobile phones provide farmers with a direct link to extension workers and access to information via text messages.

## MAUREEN'S STORY

In 2009, Maureen Agena, a young Ugandan woman, applied to attend a CTA seminar in Brussels on the role of ‘The Media in Agricultural and Rural Development in ACP Countries’. She submitted an abstract on the use of Web 2.0 tools for sustainable agriculture, and she was accepted. “That was my first experience with CTA,” she recalls. “I got to learn all about social media and began to realise its potential for improving people’s lives.”

A few months later, she applied for a long distance internship at CTA, under the supervision of Giacomo Rambaldi. Again, she was accepted. She learned about moderating exchanges related to Web 2.0, and how to disseminate online products and use various online publishing tools. All of this, she says, helped her professional life. At the time, she was enrolled for her second degree and working for the Women of Uganda Network (WOUGNET) as its information officer.

In 2010, she was the only Ugandan to attend the CTA-supported Web 2.0 Learning Opportunity event at Baraka Agricultural College in Kenya. “I knew about 80% of what I was taught there, but I was still able to expand

my knowledge," she says. When she returned to Uganda, she shared her new-found skills – for example in using advanced searches, RSS Wikis, Google docs and Skype – to train WOUNET members in rural Uganda.

"Before, I used to blog mostly about ICTs, gender and health," says Maureen. "But the trainings broadened my vision of how ICTs could be used, particularly to help people involved in agriculture." In 2012, CTA paid for her to attend a meeting organised by the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) on the role young people could play in formulating agricultural policies. She subsequently worked as an intern at CTA's headquarters in Wageningen with the Policies, Markets and ICT programme.

"In a period of just two years," she wrote in a message to CTA, "I must say that I am so grateful and thankful for CTA for the investment, experience, exposure. I would never have wished for something better than this." Maureen completed her internship at CTA in 2013 and has since been working on social media with the communications team at the World Bank Group in Kenya.

### AND MUCH MORE BESIDES...

Sean Rogers decided to go straight into business after he left school, eager to get a feel of the real world. In 2006, he set up a small IT company in Port-of-Spain, Trinidad, convinced that small companies could give better personal service than large corporations. In 2012, he attended a CTA-supported Web 2.0 training session in Port-of-Spain. This provided him with a new set of skills, access to online libraries and new contacts. "Once you join these sorts of e-forums, business opportunities become as wide as an ocean," he says. He now intends to set up web-based programmes that will help small-scale farmers in the Caribbean to become more business oriented.

In Zambia, Rodney Katongo has been putting the skills he learned during a Web 2.0 training session to good use. Among other things, the training helped him to create the project 'Participation in Zambia's Constitution Making Process', which is hosted by the Forum for Youth Organizations in Zambia (FYOZ). In September 2012, FYOZ launch an Internet blog to provide a platform for sharing information and submissions made by civil society to the technical committee drafting the Zambian constitution.

"Perhaps most excitingly it allows live blogging from events – so when the technical committee are visiting a district to secure feedback and input, it is possible for people at the event to link live to the FYOZ blog and input people's comments and perspectives as they are made," says Rodney. The Web 2.0 capacities acquired by FYOZ played an important part in attracting funding from the Zambia Governance Foundation.

In June 2013, Anna Radavisa, the elected mayor of a small community in Madagascar, wrote a blog which reflected on the Web 2.0 training she had received in the capital, Antananarivo, the previous November. At first, she said she was confused by all the jargon about Facebook, YouTube, Google and so forth. However, she soon became an enthusiastic convert, and this has proved to be of enormous benefit in her non-mayoral work for two private companies. Furthermore, she has also been able to use LinkedIn and her WordPress blog to get back in touch with old friends, and meet people in her professional and social sphere. "My greatest wish is that the women and young people in my country obtain these tools quickly in order to have more possibilities to open up on the rest of the world," she wrote in her blog. "My dream is that the 1549 communities in Madagascar become modernised with the help of these tools... This way, Madagascar would develop much faster." ■

# Supporting Rwanda's telecentre revolution

It is market day in the village of Gakenke, in Rwanda's North Province, and by mid-morning the Business Development Centre is doing brisk business. "More than 50 people will come to use the computers and the Internet today," says manager Alice Nadine Kaneza. During the rest of the week, even on quiet days, at least 20 people – including students, farmers and local entrepreneurs – make use of the centre's facilities.

Managed by the Rwanda Telecentre Network (RTN) on behalf of the Rwanda Development Board, the centre offers a range of services besides the Internet. Alice and her colleagues provide secretarial assistance, advice on tax affairs and link the community to government e-services. During the first six months of 2013, RTN also ran five-day training courses on basic accounting and strategic planning that attracted over 100 people.

Among those who benefited were 10 members of the Cooperative des Producteurs de Fruits de Gakenke (COAPGA). "The training has made a tremendous difference to us," explains Titus Nijobigira, president of the 173-member fruit-growers cooperative. "As a result of what we've learned, we've gained access to new markets and developed a new business plan. We're now selling dried pineapples as well as fresh, and we've negotiated better prices for our produce." Members' incomes have increased, and many have been able to open savings accounts and pay for health insurance for the first time.

## VISION FOR THE FUTURE

In 2000, the Rwandan government outlined its development pathway. 'Vision 2020' proposed a shift away from a low-income, agriculture-based economy towards a 'knowledge-based economy.' Among other things, this would involve the creation of a large number of ICT access centres – or telecentres – in rural areas. Here, farmers and entrepreneurs would be able to use the Internet and benefit from the acquisition of new skills.

"It was an excellent idea, but progress was initially slow," explains Paul Barera, RTN's executive director. "The government began setting up its first telecentres in 2006, but only 30 were fully operational by 2010." The financial outlay was considerable, with each centre costing around US\$100,000 to build and equip.

Paul was already developing his own ideas about how to improve access to information and communication technologies in



EVIDENCE SUGGESTS THAT THE CREATION OF AN EVER-EXPANDING NETWORK OF TELECENTRES IN RWANDA WILL BRING ABOUT FURTHER IMPROVEMENTS IN RURAL SERVICES AND INCOMES."

the countryside. "I had always had an entrepreneurial spirit, and dreamed of creating jobs for myself and others," he recalls. For his university thesis he focused on the concept of improving access to ICTs in rural areas. In 2006, soon after he left university, a small grant from the United States Agency for International Development (USAID) enabled him to set up a telecentre in his home village of Nyamata.

Here he provided basic computer training for local people – a novelty in this area – as well as Internet and secretarial services. Later, he added other services. He acted as a representative for several companies and set up a mobile phone service for paying electricity bills. He also provided advice, free of charge, to the government. But it was his partnership with CTA that really changed his life and, just as importantly, Rwanda's approach to developing telecentres.

### **BUILDING ON THE INDIAN MODEL**

In 2008, Paul was invited by CTA to attend a workshop in Zambia which focused on the sustainability of telecentres. "It was an important subject, and the workshop helped me to develop my own ideas about how to ensure a long-term future for my own telecentre," he says. "But it was my experience in India two years later that really opened my eyes."

During the course of an Indian study tour, organised by CTA in 2009, his group met a wide range of people from government, academia, the private sector and rural communities, and visited telecentres in five different states. Rather than constructing expensive purpose-built facilities, like the government of Rwanda, the Indians were fitting out existing public buildings with computers and Internet connections at a fraction of the cost, often as little as US\$1000.

"The Indian study tour was incredibly important in terms of my personal development, and it helped me develop a vision for

the future," says Paul. "It also provided me with the evidence I needed to convince policymakers here that they should change their approach." They didn't need much persuading, once they had seen the figures, and Paul's advice led to significant changes in the government's ICT policy.

The first 30 telecentres – including Gakenke – are now managed by private organisations such as RTN, although they remain under the supervision of the Rwanda Development Board. The government is currently in the process of establishing another 60 telecentres, adopting the Indian model of fitting out existing buildings at relatively low cost.

RTN's mission, developed in the wake of the Indian workshop, is to help the government and the private sector create a network of 1000 telecentres. These will provide local communities with the skills they need to develop their businesses, improve the employability of young people, create jobs – each telecentre will employ at least three people – and link rural communities to government services.

### **INVOLVING THE PRIVATE SECTOR**

In 2010, with support from CTA, RTN conducted a baseline study of existing 'ICT access points' in rural Rwanda. It subsequently invited the 140 entrepreneurs – cybercafé owners, telecentre managers and mobile phone providers – who managed them to a workshop. Since then RTN has held regular training sessions and workshops to improve their business skills.

The benefits have been considerable. Take, for example, the experience of Aneclat Nambajé, who lives in the northern town of Musanze. He set up his first telecentre in 2007, and offered basic training in the use of computers, as well as access to the Internet and secretarial services. Before long, he set up another three

centres, but his business only really took off after the 2010 workshop. Since then he has benefited from four training sessions on subjects ranging from business management to accounting and strategic planning.

"I now have a much better understanding about how to manage the telecentres efficiently and provide the services people need," he says. He currently employs 14 people and he expects to take on more staff soon. By the end of 2015 he hopes to have established another six telecentres.

Rwanda has made remarkable progress when it comes to reducing poverty and improving the welfare of rural communities. Although some 45% of Rwandans still live below the poverty line, over one million people – out of a population of 10 million – have been lifted out of poverty during the past decade. All the evidence suggests that the creation of an ever-expanding network of telecentres will bring about further improvements in rural services and incomes. ■

## Transforming lives in rural Rwanda

Jean de Dieu Niyibizi, president of the Twihangire Imirimo Cooperative, unfurls a 3-metre long roll of laminated paper, revealing three stylised sketches depicting the dramatic changes that have taken place in the surrounding villages and farmland since 2006. "In 2006, we were getting just 600 kg of maize per hectare," says Jean. "By 2011 we were getting 4 T, and we're hoping to get 5 T by next year."

The picture of progress depicts numerous other changes, mostly for the better. The leaking thatch on their homes has been replaced by tin roofs. Dirt roads have been improved and in some places paved. The village now has drying sheds for maize and many farmers get around by motorbike, rather than on foot or by cart.

According to cooperative members, the training they have received from RTN and other agencies at the Gakenke Business Development Centre has played a major role in raising living standards. "We have discovered new markets, developed new crops and improved our incomes," says Jean. "And because we've been able to develop business plans, the banks are more willing to provide us with credit."

Paul Barera is particularly encouraged by the way the cooperative uses the Internet. "They're doing their own research and development and using ICTs in a very entrepreneurial way," he says. Not long ago, the main crops were maize and beans. Now, making use of information on the Web, they are growing tomatoes and developing a small-scale pig industry. They have also learned about new techniques in storage and disease and pest control.

# Giving young people a voice

In sub-Saharan Africa, 65% of the labour force is involved in agriculture, which generates around a third of the Gross Domestic Product. Yet despite its importance, young people tend to think of agriculture as an unattractive career option. At the same time, the age profile of farmers in ACP countries is becoming progressively older.

“The loss of young people in the agricultural sector is a major problem, so we need to encourage them to stay in the sector,” says Ken Lohento, who is in charge of CTA’s Agriculture, Rural Development and Youth in the Information Society (ARDYIS) project. “Just as importantly, we believe that young people

have the skills needed – especially in the use of information and communication technologies (ICTs) – to ensure that the agricultural sector thrives.”

Launched in 2010, the ARDYIS project seeks to raise the awareness of young people to the challenges facing agriculture and the potential of ICTs. The project is managed by CTA, in collaboration with an advisory committee comprising many of its regional partners.

Its first activity was an essay-writing contest on the subject of youth finding solutions to the challenges facing agriculture and rural development using ICTs. Publicised through CTA’s flagship magazine, *Spore*, and by word-of-mouth, the competition attracted entries from 174 young people between the age of 18 and 35 from 33 ACP countries. A panel of judges selected the 12 best essays, two for each of the six ACP regions. The authors were invited to attend CTA’s 2010 annual seminar, held in Johannesburg, to give an oral presentation, and the winners received a trophy, cash prizes and CTA publications

Following the success of the essay writing competition, CTA and its partners launched a competition designed to stimulate blogs that encourage young people to get involved in agriculture. The Youth in Agriculture Blog Competition (YoBloCo) targeted two separate constituencies: young men and women from ACP countries; and ACP institutions or organisations with their own agriculture-related blogs. The first YoBloCo competition attracted 90 entries and considerable public enthusiasm. Around 3000 people commented on the blogs or voted on their preferences online.

The best entrants attended a prize-giving ceremony which was held during the 3rd International Association of Agricultural Information Specialists conference in



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Young people often see agriculture as an undesirable career path. However, the use of ICTs is encouraging many farmers’ children to remain in the sector.

Johannesburg, South Africa, in May 2012. They received cash prizes, became part of the project's network and benefited from various other opportunities. Following the success of the first edition, a second one was launched in 2013 and included more partners.

During 2013, over 100 young people were trained under the ARDYIS project on how to use ICTs, with a particular focus on writing blogs to strengthen the involvement of young people in the agricultural sector. Training workshops were held in Central Africa, the Pacific and the Caribbean. "We were particularly proud of the Congo workshop, as Central Africa has tended to be neglected," says Ken. CTA received over 300 responses to its call for participation in a workshop that could take a maximum of 25 people.

Besides the competitions and workshops, the project has disseminated information on ICTs and agricultural opportunities via its website, mailing lists and by using social networking sites such as Twitter and Facebook. By the end of 2013, ARDYIS had about 900 followers on Twitter and 2200 on Facebook.

Reflecting on the influence of the ARDYIS project, Ken highlights two main achievements. On the one hand, he believes that the competitions and training sessions have proved to be a powerful instrument for rebranding agriculture, and promoting the use of ICTs in agriculture, especially by young people. Just as importantly, the activities have opened up new opportunities for many of those who participated, as the stories below illustrate.

### **MAKING WAVES IN MADAGASCAR**

In 2012, the group Jeunes et Agriculture à Madagascar ( Youth and Agriculture in Madagascar) – won second prize in YoBloCo's institutional category for the East African

region. Its members, who had established a blog with the support of Farming and Technology for Agriculture (FTA) – <http://jeuneagrimadagascar.org/> – used the €3000 prize to support two ventures. They organized awareness-raising activities for sensitising young people to the importance of agriculture, and the role they could play in agriculture; and they developed e-Market Rural, a mobile and web-based application designed to provide farmers with information about market prices.

The e-Market Rural app was launched in June 2013 at a one-day public meeting attended by representatives of agricultural cooperatives, the Ministry of Agriculture, the Ministry of Commerce, several development agencies and Internet providers. "This has been a remarkable achievement, and I think it's a reflection of the way in which ARDYIS has encouraged young people to develop innovations which can improve farmers' welfare and productivity," says Ken Lohento.

### **NAWSHEEN'S STORY**

Nawsheen Hosenally was studying agriculture at the University in Mauritius when she first heard about the ARDYIS essay writing competition. Although she wasn't one of the winners, she was among the top 30, which meant she was invited to participate in the Web 2.0 training workshop in Accra, Ghana, in 2011. "I already had a blog, and I was using Web 2.0 tools," she recalls, "but I wasn't using the blog to cover agricultural issues." Instead, she had used 'Nawsheen world' –<http://nawsheenh.blogspot.com> – for networking and keeping in touch with friends. That all changed after the workshop. From then on, she took a more serious interest in blogging about agricultural issues.

In 2012, Nawsheen won first prize (€1500) in the first edition of YoBloCo. Since then, her career has gone from strength to strength.

Soon after she won the competition, CTA put her in touch with the Food, Agriculture and Natural Resources Network (FANRPAN), and she was one of six young people commissioned to undertake studies – in her case focusing on Mauritius – examining the status of young people in agricultural policymaking.

In November 2012, CTA offered Nawsheen a one-year internship at its headquarters in Wageningen. “I’ve been invited by many organisations to conferences, representing CTA, and given presentations on youth, ICTs and agriculture,” she says. She has also worked with Ken Lohento, her supervisor, on developing the ARDYIS project and planning CTA’s 2013 Kigali conference, ‘ICT4Ag: the digital springboard for inclusive agriculture’. And of course, she’s continued to develop her blog.

### SOLOMON’S STORY

Solomon Elorm Allavi was familiar with CTA when he entered the second ARDYIS essay writing competition in 2011, which was organized in partnership with NEPAD. A Geographic Information Systems (GIS) expert, Solomon had already established his own small company, Syecomp Business Services, in Accra, Ghana. The company was set up to provide GIS services to smallholder farmers, and this was the focus of Solomon’s essay, which won first prize in the West Africa category.

“The essay competition helped me to explore how ICT opportunities could be used to help smallholders, and it encouraged me to explore practical solutions which my company could use in its work,” says Solomon. He used the prize money to purchase tender documents and a tax clearance certificate, thus enabling Syecomp to participate in competitive tenders for government contracts. He also joined the ARDYIS D-group, a networking platform where he has been able to share ideas and information,

and even make friends, with other young people working in the same field.

In 2012, Solomon’s company was the winner of the institutional prize in the first edition of YoBloCo. “Although we already had our own business website, I’d never blogged before,” says Solomon. “It was the YoBloCo competition that encouraged me to start blogging.” Take a look at the blog – <http://agricinghana.com/> – and you will see how sophisticated it has become. On average, it attracted 80 unique visitors per day, and many more to Solomon’s blogs on particular newsworthy issues.

Solomon used the €3000 prize money to provide stipends for his team and to buy new equipment and software for his company. All of this has helped the company to expand its operations, much to the benefit of local farmers. Just to give one example, Syecomp is currently providing accurate geo-referenced data on some 280 smallholder pineapple farms in Ghana. This is part of a process which will enable growers to meet the GLOBALG.A.P standards which are required for exporting produce to the European Union. ■

# A little goes a long way

In 2002, a meeting at CTA's headquarters in Wageningen explored how women in rural communities could gain better access to information and communication technologies (ICTs). The participants drafted a plan which led to the creation of a small-grants scheme known as GenARDIS (Gender, Agriculture and Rural Development in the Information Society.) Since then, GenARDIS has provided support to 34 organisations in 21 countries. The results have been impressive. «GenARDIS has shown that it's possible to create initiatives of real value with relatively small amounts of seed money,» says CTA's Oumy Ndiaye, citing just a fraction of the success stories.

In Benin, rural women learned new fish conservation techniques, and improved their access to markets, following training in the use of video, television and mobile phones. In the Democratic Republic of Congo, a grant enabled an NGO to establish a network of rural women, who have been trained in the use of ICTs. The women can now exchange

information about agricultural issues, and they have been able to purchase better seeds from neighbouring countries.

Thanks to a GenARDIS grant, villagers in Tanzania who were tired of having to walk many hours to market have been able to purchase mobile phones. They now use these to get market information and communicate with buyers, and they recently established their own market, saving themselves both time and money. These are just three of many success stories.

The last group of grantees, who received €7000 each, were actively encouraged to think beyond GenARDIS, and were given tools and training to take their research one step further. Some have used the results of their research for policy advocacy; others have learning about new monitoring and evaluation tools. ■



IN BENIN, RURAL WOMEN LEARNED NEW FISH CONSERVATION TECHNIQUES, AND IMPROVED THEIR ACCESS TO MARKETS, FOLLOWING TRAINING IN THE USE OF VIDEO, TELEVISION AND MOBILE PHONES. IN THE DEMOCRATIC REPUBLIC OF CONGO, A GRANT ENABLED AN NGO TO ESTABLISH A NETWORK OF RURAL WOMEN, WHO HAVE BEEN TRAINED IN THE USE OF ICTS."

Soil #	RRC	Comp	Sat	L/L	1/25
1		44			
2		56			
3		5			
4		56			



## CHAPTER 4

# SUPPORTING RESEARCH FOR DEVELOPMENT

► **Science has a major role to play in the development of a productive agricultural industry and in tackling food insecurity.** The Agricultural Science, Technology and Innovation (ASTI) approach to research, supported by CTA, has done much to foster innovation and encourage scientists to work more closely with policymakers and farmers. As a result of CTA's support, scientists and students in 200 ACP universities and research centres now have The Essential Electronic Agricultural Library (TEEAL), which gives them access to over 275 scientific journals.

# The power of a strong idea

In 2007, Dr. Irene Egyir, head of the Department of Agricultural Economics and Agribusiness at the University of Ghana, attended a training-of-trainers' workshop organised by CTA in collaboration with the Council for Scientific and Industrial Research (CSIR) in Accra. The workshop was designed to introduce scientists and others to the innovation systems concept and its relevance to understanding, analysing and strengthening the Agricultural Science, Technology and Innovation (ASTI) system for enhanced agricultural performance in ACP countries.

"For me, this was a eureka! moment," recalls Irene. "Everything I heard during the workshop about the ASTI system resonated with the work I'd been doing on subjects such as the use of agrochemicals by plantain farmers and urban agriculture."

The ASTI system's methodological framework was developed and piloted in 2004/2005 by CTA and the United Nations University Institute for New Technologies (UNU-INTECH) in partnership with ACP organisations. It was further modified in 2006 in consultation with EU and ACP universities, research organisations and development partners, and it has been widely used to analyse the performance of specific sub-sectors and commodities. The framework consists of six steps: reviewing the policy environment and the historical performance of the sub-sector under study; identifying the key actors; assessing their competencies, habits and practices;

analysing the performance of the key functions at system level; and mapping the links between the actors.

"The ASTI systems approach provides an excellent framework for gathering information and analysing all the different factors that influence the way a sector operates," says Irene. "It has changed the way I look at agricultural development and been of enormous benefit for my work."

Following the Accra workshop, Irene collaborated with CSIR on an analysis of the plantain sub-sector in Ghana, using the ASTI system methodology. In addition to the desk research, this involved gathering data from 358 people involved in the value chain, from growers to traders and processors. The study revealed that there are strong links between farmers and traders, but relatively weak links between researchers and policymakers.

Based on their findings, Irene and her colleagues made a number of recommendations. Among other things, they called on the government to increase the budgetary allocation to research and development agencies, and strengthen policy dialogue. The authors also recommended that NGOs and the private sector should intervene more strongly in the provision of credit to farmer-based organisations. Their findings were also shared in national and international forums and published in scientific publications.

"One of the strengths of using the ASTI system approach was that it brought together farmers, traders, transporters, input dealers and everyone else involved in the value chain to discuss the problems and search for solutions," says Irene.

Since then, Irene has been involved in a number of other projects that have used the ASTI systems framework, including a major

study of Ghana's marine and freshwater fisheries. Commissioned by CTA, this was one of several commodity-based case studies led by ACP researchers. Some of the other studies looked at cut flowers in Kenya, the dairy industry in Zambia, nutmeg in Grenada, bananas in St Vincent and the Grenadines, and rice in Senegal and Papua New Guinea.

Irene regularly makes use of the ASTI systems framework in her university work. "It is now a part of my toolbox on two of the courses I teach," she says. One of these, which attracts up to 30 students a year,

focuses on the rural economy; the other explores the subject of climate-smart agriculture. Irene has also been invited by CTA to share her knowledge and experience at training-of-trainers' workshops in Ethiopia, Ghana and Nigeria.

Like Irene, other ACP experts who were trained by CTA have also gone on to train others and incorporated the framework in their research work. Other university lecturers and networks have included modules of the CTA training-of-trainers' programme in their academic training and research programmes. ■

## Strengthening agricultural research

For many years the Caribbean Agricultural Research and Development Institute (CARDI) hosted CTA's regional branch office – there was another branch office in the Pacific – and was responsible for managing its activities in the Caribbean. In 2008, CTA and CARDI agreed that it was time to change this arrangement. This has in no way diminished its relationship with CARDI. "We are now working together on programmes consistent with our medium-term plan and CTA's strategic plan," explains CARDI's executive director, Arlington Chesney.

Established in 1975, CARDI is a leading agricultural research agency operating in 12 Caribbean countries. There is a strong focus on research for development, with CARDI

concentrating on programmes which can contribute to the sustainability and profitability of the agricultural sector, and greater food and nutritional security. Support from CTA is currently enabling CARDI to conduct research and lead science and policy dialogues on science, technology and innovation systems, climate change, ICTs and value chains.

### CLIMATE CHANGE IN THE CARIBBEAN

Agricultural development is likely to be significantly affected by climate change in the Caribbean. Already, there has been an increase in the severity of hurricanes and changes in the patterns of rainfall, with extensive floods and droughts. Helping Caribbean farmers adapt to climate

change is now seen as a priority, and since 2010 CARDI and CTA have collaborated on a number of climate-related activities.

In 2010, the focus was on protected agriculture – in other words, how to use greenhouses as a means of protecting crops from floods, droughts and other climatic events. In the years that followed, CARDI and CTA focussed on climate change and water management, the impact of climate change on plant genetic resources, and climate change and pest management.

Each of these topics was the subject of a major workshop held during the annual Caribbean Week of Agriculture. “Prior to the workshops, we held consultations and group meetings and commissioned desk studies on different aspects of each topic,” explains Dr Chesney. “We also identified success stories and established research programmes on the ground.” After the workshops, CARDI produced policy briefs and other publications to sensitise farmers, policymakers and the public.

But have these initiatives made any difference? “I think we’ve influenced policy, at least indirectly,” says Dr Chesney. “It’s important to realise that none of these are stand-alone activities, they are always part of a bigger process. That way, there’s a much better chance of the recommendations being implemented.”

José Fonseca, CTA senior programme coordinator, believes that the workshops and associated processes have had a significant impact. “If you take the example of protected agriculture research,” he says, “it has helped us to get beyond the rhetoric about climate change and come up with practical solutions. As a result, climate change adaptation is now on the policy agenda.” Research findings have helped inform the activities of

the Technical Managerial Advisory Committee of the Caribbean Community (Caricom), which plays an important role in influencing national and regional policies.

### **MAKING THE MOST OF INNOVATION**

In recent years, it has become apparent that most developing countries, including those in the Caribbean, are not getting the same returns on their investment in agricultural research as countries in the developed world. “A few years ago, CTA asked us to analyse precisely why this is happening,” says CARDI scientific officer Norman Gibson, “and we’ve done this using the Agricultural Science Technology and Innovation (ASTI) systems approach.”

The conventional dissemination approach goes along these lines: innovations are developed in centres of excellence, such as universities and research institutes, and extension services then have the task of introducing them to farmers. Frequently, this approach fails to work effectively. “During the course of our research, we found that successful innovations were taking place at the ‘borders of knowledge’, where a range of different organisations and individuals are working together and sharing ideas,” says Norman.

The ASTI research has led to a complete change in thinking. “In the past, we and other research institutes never involved policymakers in our work, and scientific research took place in silos,” he reflects. “Now, we deliberately involve policymakers and agri-entrepreneurs from the start of all our research programmes, because we can see that it’s important to get them to buy into what we’re doing. That way there’s a much greater chance of innovation making a real difference.”

This isn’t simply a question of picking up the phone and inviting policymakers and

entrepreneurs to meetings and workshops. "We needed to build their capacity, so CTA supported training for agricultural ministries, the National Institute of Higher Education (NIHERST), CARDI and farmers' organisations," says Norman. Much of this has involved learning by doing, using case studies on various commodities, such as bananas in St Vincent and the Grenadines, nutmeg in Grenada and small ruminants in six other countries. In each case, scientists and policymakers tried to understand the complex relationships between policy, innovation and production.

The research has given CARDI and its partners a much better understanding of the various issues that must be taken into consideration when promoting new ideas or innovations to farmers. To illustrate his point, Norman cites the case of crop biodiversity. "You can promote great varieties, but you also have to know how to move material from one region, or one country, to another. And that's a policy issue. In the past, CARDI would have focused mainly on the agronomic aspects. We wouldn't have looked at the regulatory and policy issues – but we do now."

### SPREADING THE WORD

Dr Chesney recalls a conversation with the president of a media association some years ago, during which he complained about the poor coverage that agriculture received in the press. "He said to me: 'Agriculture is not sexy, it's not scandalous, and it doesn't sell papers.' And that was why the sector received so little coverage."

That was before CTA helped CARDI to promote a better understanding between scientists and journalists. Since 2010, the two organisations have held annual media workshops during the Caribbean Week of Agriculture. During the first workshop, it was



Promoting new ideas or innovations depends on good research.

clear that journalists had a very poor understanding of agriculture and its importance for the Caribbean; and scientists had a very poor understanding about how the media works and how to talk to journalists. "The first of these workshops was pretty chaotic, but the ones that followed helped both sides to gain a much better understanding of each other's needs," says Dr Chesney.

Other activities have also helped to create better understanding between journalists and scientists. For example, CARDI and CTA have supported the Caribbean Media Awards – announced at the Caribbean Week of Agriculture – for agricultural journalism, with prizes going to the best TV story, the best news media story, the best print story, the best radio story and the best citizen journalist's story. "There's no doubt that all these activities have helped, and none of this would have happened without CTA's support," says Dr Chesney. "We now see many more articles in the press, and hear programmes on TV and radio, related to agricultural matters in the Caribbean." ■

# Linking researchers and entrepreneurs

It is easy to paint a gloomy picture of the agricultural industry in the Caribbean. The region has become a net importer of food worth an estimated US\$3.5 billion a year and agriculture's contribution to GDP has stagnated or declined. Yet there is much to celebrate: across the Caribbean, entrepreneurs and producers are showing that it is possible to increase food production, generate employment and develop new markets.

Until recently, little attempt was made to catalogue the success stories beyond Trinidad and Tobago. That's why the Caribbean Council for Science and Technology (CCST), with support from the Organization of American States (OAS), decided to research and document *Success Stories in Caribbean Innovation and Entrepreneurship*. The book describes the development of some 30 enterprises in niche tourism, energy and water, ICTs, agriculture and the environment, and personal health.

Shortly before it was published, CCST organised a CTA workshop in Jamaica on 'Building a Critical Mass for Science and Innovation: Identifying the Value Proposition for Caribbean Young Professionals and Entrepreneurs.' "This was one in a series of regional workshops that CTA had conducted in 2009 to mobilize the ACP community on the need to build a critical mass of scientists and innovators for socio-economic development," says Judith Francis of CTA. The Caribbean workshop provided a forum for learning lessons from demonstrated successes and sharing best practices. "It set

the foundation for encouraging agricultural research, entrepreneurship and innovation and for inspiring young Caribbean nationals to have confidence in their own vision, creative instincts and specialised capabilities," says Judith.

The workshop led to the launch of the Caribbean Research Innovation and Entrepreneurship Network (RIENet). The 60 workshop participants became its first members. It now has over 500 members, providing an electronic discussion forum for entrepreneurs – they make up about 60% of the membership – and researchers, most of whom are involved in agriculture.

## MAKING CONNECTIONS

The network has proved to be an excellent, low-cost forum for sharing knowledge about research and innovation. It has also helped to improve individual businesses. Lovaan Superville of the National Institute of Higher Education (NIHERST), an officer assigned to the CCST secretariat, gives the example of an organic farmer who has gained new buyers, thanks to the publicity he received through the RIENet website. "In some ways, I see it as a sort of help desk," she says. Since 2010 CTA has continued providing support to RIENet.

RIENet now serves as a source of expertise on science and entrepreneurship. During a 12-month period in 2011–12, a total of 72 articles from around the region were uploaded on the [www.rienet.net](http://www.rienet.net) website, representing one new item each month for the six main

themes: 'champion of the month'; research update; success stories; value propositions; and foresight and innovation. Registered users can provide their own ratings for each article, using a scoring system of 1 to 5. "The challenge is to continue to lift the average score in each category and strive to gain at least a score of three for each item," wrote RIENet facilitator, Ian Ivey, in his 2012 technical report.

RIENet members continue to participate in CTA-related science and technology activities in the Caribbean. In November 2012,

selected members deliberated on the subject of 'Adding Value to Local Foods for Food and Nutrition Security: Myth or Strategic Option'. Representatives from commodity and marketing boards, agro-processors, nutritionists, policymakers, researchers and farmers developed a three-year roadmap for adding value, both economic and nutritional, to local foods. Subsequent activities included a survey to gain a better understanding of consumer perceptions and preferences for local foods. The RIENet platform acted as a channel for communication and knowledge exchange. ■



THE CARIBBEAN RESEARCH INNOVATION AND ENTREPRENEURSHIP NETWORK PROVIDES AN ELECTRONIC DISCUSSION FORUM FOR ENTREPRENEURS AND RESEARCHERS, MOST OF WHOM ARE INVOLVED IN AGRICULTURE. IT NOW SERVES AS A SOURCE OF EXPERTISE ON SCIENCE AND ENTREPRENEURSHIP. "

## Improving access to science and research

"This is to thank you very sincerely for what I would call the most precious Gift that this university has ever received," wrote Owen Baya, senior registrar at Pwani University College, Kenya. "I want to assure you that this set will go a long way to making Pwani University a great academic institution."

The registrar was referring to The Essential Electronic Agricultural Library (TEEAL). Published by Cornell University's Mann Library, TEEAL provides scientists and students in the developing world with access to full-text articles from over 275 scientific journals dealing with agriculture and related sciences. It is estimated that the annual

subscriptions to all the journals provided on TEEAL, if subscribed to individually by an institution, would cost more than US\$1 million. Thanks to CTA support since 2009, 200 universities and research organisations in ACP countries – one of the latest applicants being a university in war-ravaged Somalia – had received the TEEAL database by the end of 2013. This represents nearly half of the TEEAL database distributed in the developing world by Cornell University.

The database comes on an external hard drive which can be accessed off-line on a local area network, so there is no need for Internet access. “In many developing countries, scientists can only read the abstracts of journals online, and then only if they have access to the Internet, and most institutions simply can’t afford the full subscriptions,” says Thierry Doudet, head of CTA’s Knowledge Management and Communications Programme.

Feedback about the use of TEEAL has been overwhelmingly positive. Take, for example, the way in which the database has been used by the University of the South Pacific (USP). Although CTA did not directly fund the acquisition of TEEAL by the campus

in Alafua, Samoa, and specifically the library at the School of Agriculture and Food Technology, USP senior librarian Angela Jowitt was so impressed by the TEEAL collection that she worked hard to get CTA sponsorship for campuses in Fiji, the Solomon Islands and Vanuatu.

In a message to Erica Reniff, head of TEEAL Outreach and Client Relations, Angela Jowitt wrote: “TEEAL is very important to us at USP as it is a cost-effective way of providing agricultural information to our staff and students. It is also very valuable as it is completely full text. We really appreciate the CTA sponsorship, which has also enabled us to put TEEAL in three more of our regional campuses where agricultural research students are based, to give them access to quality agricultural information.”

In the past, CTA used to deliver various databases free of charge. However, when it asked recipients to fill out a questionnaire to renew their subscriptions, less than 10% responded. “We couldn’t justify the expense if organisations did not reply,” says Thierry Doudet. This has influenced CTA’s approach to providing databases. As a bulk buyer, CTA pays Cornell a reduced price for the TEEAL database collection. The database is then provided free of charge to successful applicants in ACP countries. In exchange, recipients have to pay a small subscription fee to get updates for their database each year. Many – including USP – are now doing this.

Many universities and research institutions whose TEEAL databases have been sponsored by CTA hold training events for their staff. To give just one example, the University of Eastern Africa, Baraton (UEAB) held a workshop at its Eldoret Extension Centre in June 2013. The workshop was attended by faculty members and students. At the end of



TEEAL PROVIDES SCIENTISTS AND STUDENTS IN THE DEVELOPING WORLD WITH ACCESS TO FULL-TEXT ARTICLES FROM OVER 275 SCIENTIFIC JOURNALS DEALING WITH AGRICULTURE AND RELATED SCIENCES.”



© CTA

TEEAL is a cost-effective way of providing students with access to agricultural research.

the workshop, they were invited to evaluate their experience. Some had not even been aware of the existence of TEEAL before the workshop. According to the summary report, “All the participants... were very excited after they discovered that they were able to enrich their learning experience by downloading full-text articles from TEEAL and eventually writing quality research papers.”

Besides enabling users to improve their research abilities, TEEAL is providing significant access to scientific papers published in ACP countries. Of the 18 most commonly accessed journals, three focus on African agricultural research issues. ■



## CHAPTER 5

# GETTING INFORMATION AND KNOW-HOW TO FARMERS

► CTA's bimonthly magazine, *Spore*, goes to over 60,000 subscribers, but it is read by a great many more people. Blending news and reviews with lengthy articles, the magazine is a valuable source of information for farmers in ACP countries. CTA has also published over 100 practical publications on agricultural matters, and supported a range of projects which have encouraged extension agencies to work more closely with farmers. This chapter begins with a description of one of CTA's longest-running programmes, its Question & Answer Service, launched in 1985. By providing customised answers to specific requests, the service has enabled tens of thousands of farmers to improve their productivity and tackle the diseases and pests that threaten their crops and livestock.

# Catching up with the future

In many countries, CTA is best known for its publications, especially the bimonthly magazine, *Spore*, whose paper version goes to over 60,000 subscribers, but which is read by a great many more. *Spore* blends articles with news items, book reviews, comment pieces and more lengthy 'dossiers' on specific issues. From time to time, the magazine also produces special issues on topical subjects in which CTA has a particular interest.

*Spore* reaches places where other magazines find it difficult or impossible to gain a readership. Take for example, the experience in South Kivu, Democratic Republic of Congo (DRC). This region suffered greatly from armed conflict during the period 1998–2003, and even now communications remain difficult. "The postal service is so poor that the chances of copies reaching addressees are remote, especially outside the capital," explains Murielle Vandreck, who oversees the distribution of CTA's publications. Poor internet connections also mean that it is difficult to access *Spore* on-line.

To get round this problem, CTA struck a distribution deal with Proximédias Libres, a local company with a good network of partners. Before the partnership was launched in 2010, there were just 100 *Spore* subscribers in South Kivu. There are now 1500, including NGOs, churches, radio clubs, schools, government departments and individuals. The magazines are shipped to the capital, Bukavu, and distributed by bus, motorbike and pirogue. Subscribers also collect their copies from radio stations and churches. The response from

readers has been overwhelmingly positive. The magazine is put to good use by educational institutions, and information from *Spore* is regularly transmitted by local radios.

Following the success of the South Kivu experiment, CTA has continued to explore new ways of promoting the magazine. In Cameroon, the number of subscribers receiving *Spore* rose from 3000 to over 7500, thanks to an innovative partnership with the monthly newspaper *La Voix du Paysan/The Farmers' Voice*. The newspaper is now distributing the magazine free of charge.

Reader surveys in Cameroon and Uganda revealed a high level of satisfaction. In the former, over 50% said the magazine provided them with useful information about agricultural and rural development worldwide and in neighbouring countries. Approximately 16% benefited from technical information and 10% from references and useful addresses. Readers also used the magazine as a way of improving their career development and getting training material. The Uganda survey provided a number of examples of specific activities inspired by articles in *Spore*. Among other things, readers had benefited from articles on post-harvest practices, biogas, fruit growing, fish farming and vegetable production. *Spore* is also used in literacy and adult education programmes.

It would take a big book to catalogue all the feedback received over the years. The following two stories give a good insight into what *Spore* has meant to its readers. In 2010, the June/July issue of *Spore* (No.147) featured a short article which reported that quail farming had recently taken off in Cameroon. This article caught the attention of Thomas Munyoro, a retired policeman in Kenya's Nyeri District and a leading light in a small NGO for retired civil servants, the 2010 Strategic Self-Help Group.

Thomas read the article in the offices of KEN-FAP (see Chapter 1 page 13). "My colleagues and I had been rearing rabbits as a way of raising income, but we'd had problems," he recalls. "They were affected by many diseases, so we were looking for other activities." They liked the idea of quail farming, and after reading the article in *Spore* they researched the topic on the Internet. They found a quail producer in Nairobi and bought some chicks. Since then they have established a business selling quails' eggs, which are now in great demand for their medicinal properties. Thomas now has over 100 laying quail and his business is thriving. "All of this dates back to reading an issue of *Spore*," he says.

*Spore* has also proved highly popular among those involved in education and research. Take, for example, John Gushit, a lecturer in the Faculty of Natural Sciences at the University of Jos, Nigeria.

John got in touch with CTA's Giacomo Rambaldi, who he had come across during an e-conference. "I write to notify you and also thank you for how your publication (*Spore* magazine) has reshaped and guided me in my researches," he wrote and cited a specific article about a project in Kenya that had featured in the June/July 2012 issue of *Spore*. The information in the article helped him to design his research project on helping peasant farmers to make better and safer use of pesticides. "This project, which is ongoing, will have a positive impact on the users of these chemicals, as it will enhance good farming practice and healthy living among the peasant farmers," he informed Giacomo.

Printed versions of *Spore* are distributed free of charge to persons and organisation based in ACP countries. *Spore* is also available online to anyone who wishes to read it (<http://spore.cta.int>). ■

## A new way of reaching farmers

When the Rural Empowerment Network (REN) asked Jane Naluwayiro if she would like to become a field agent on a new project to get information to farmers, she jumped at the chance. "I wanted to do whatever I could to help farmers in my area," she says. "For us farmers in Africa, whatever we grow, whatever livestock we rear, we get problems with pests and diseases, and we need help to tackle them."

She believed the Question and Answer (Q&A) 'voucher system', piloted in Uganda in 2006 and fully launched in 2008, would

compensate for the lack of state-funded agricultural extension services. The vast majority of farmers in and around Jane's home district Kayunga had never met an extension agent or received advice about how to improve their farming systems.

The Q&A project has a long history. It was first launched by CTA in 1985, providing the opportunity for farmers in ACP countries to send a written question to CTA's headquarters in the Netherlands. They received their answers by post in those days. Then in 2004, CTA launched Q&A pilot projects in Benin, Ethiopia, Kenya, Tanzania and Uganda. These

were locally managed. Following a workshop in Nairobi in 2005, the decision was made to scale-up the Q&A project in Uganda.

This involved the introduction of a voucher system at 14 sites in seven districts. "A voucher," explains REN programmes coordinator Patrick Kasangaki, "represents the right given to a farmer to receive a customised answer to a specific request." The aim was to improve food security and rural livelihoods by providing timely and accurate responses to specific questions. By the time the project came to an end in 2011, it had responded to 900 specific questions.

### LINKING FARMERS TO EXPERTISE

Sitting in the office from which she manages Patience Pays Initiative, a pineapple processing company she established together with her husband, Jane flicks through a file which contains all the questions asked by farmers in her district and the answers they were given. For example, Question 6379: Why are my pineapples rotting? Question 6409: Why are my goats unproductive? Question 6046: Why is my sheep's skin so

rough? These and all the other questions and answers can be found on <http://www.erails.net/UG/ren/qas-2009/>.

"Once I started work, I visited as many farmers in the district as I could," she says. "If they asked a question I couldn't answer, I would make a record of it, take photographs, and take the questions to the REN office in Kayunga." Here, as in other districts, REN passed the questions on to local rural information brokers, such as the owners of Internet cafes, who 'published' them on the Internet. These were sent to Eria Bwana-Simba, who works in the library of the government-run National Agricultural Research Organisation (NARO).

"My role was to identify the experts who could respond to the questions," he says. Getting them to respond wasn't easy, and after a while Eria decided the most effective way of getting answers was to visit the experts in person. Once he had the answers, he posted them on the web and the rural information broker passed them to the field agent, who returned to the farmers with a written record of the answers. "I'd often go back later, just to make sure that farmers had worked out how to make best use of the advice," recalls Jane. Indeed, the various links in the chain – field agents, rural information brokers, experts, REN and NARO – were only paid once the farmers were fully satisfied with the answers.

### TESTIMONY FROM THE FIELD

In terms of the amount of land she farms and the difficulties she faces, Fatuma Kasi-bante's situation is typical for many living and farming in the area round Kayunga. A mother of five young children, she struggles to make ends meet. "When Jane came, it was the first time anybody ever approached me offering help," she says. Her question was about her rotting pineapples. The expert's advised her to uproot and burn the affected pineapples,



© REN

Field agents provide farmers with timely and accurate responses to their questions.

and plant new ones after soaking the roots with insecticide. "I'm very happy now, and all my pineapples are healthy," she says.

A few minutes' walk down a dirt track, Haminsi Kibunga and his wife are enjoying the last rays of the evening sun outside their shack, chatting with their seven children. Haminsi's question related to the rough skin on his sheep. The experts advised him to use a de-wormer and before long his three sheep were healthy enough to sell. "I used the money to pay for school fees," he says. "I think it's a very good system, and I hope it continues."

On their smallholding near the main road, mother of six Jane Nambejja has to do most of the agricultural work herself as her husband is an invalid. She told Jane that her pawpaws produced just a few tiny fruits; she wanted to know why. She was advised to apply minerals and compost. "I didn't realise that the soil was in such poor condition. Now that I'm making compost, I'm getting much better fruit," she says.

According to Jane, at least two-thirds of the 100 farmers who asked questions in her area have improved their productivity and incomes as result of the Q&A service. Although it has come to an end, she and other field agents have retained a large database of all the questions and answers, and farmers regularly come to her office to consult it.

Equally important is her archive of 72 15-minute radio programmes covering 12 themes in six different languages. These are based on the questions and answers generated by the project. "In my sub-county, there are six farmer listening groups, with up to 20 members in each group, and they meet once a month to listen to CDs of the radio programmes and discuss them," she says. Patrick Kasangaki estimates that some 5 million

people in all project sites across the country have listened to the programmes, either on air or as members of listening groups.

## EXPERT OPINION

Agronomist Peter Sajjabi and vet Hamiisi Semanda, two experts who provided answers for farmers in Kayunga, have first-hand experience of the difficulties farmers face in the sub-county. "There's just one extension worker for every 30,000 households, and farmers have very little knowledge about crop diseases, which are a major problem," says Peter. "I think the Q&A project has been very helpful as it's reached farmers who would never have been reached by the extension services."

To satisfy his own interest, Hamiisi not only answered the questions sent to him, he frequently dropped in to see farmers to discuss their problems face-to-face. As a result, the project gave him a better insight into the problems farmers had to deal with in this area. Peter agrees: "It's been an important learning process for me too. My experience with the Q&A service has meant that I am now able to alert local agricultural advisers about unusual diseases they need to look out for."

An independent evaluation, conducted in 2011, concluded that the service had provided timely, up-to-date and relevant information to farmers, even though its impact hadn't been properly documented. The vast majority of farmers were satisfied with the answers they received.

"My feeling is that the programme was a success, and many farmers would like it to continue," says Patrick Kasangaki. "The Q&A service is just one of several approaches that need to be taken to improve the information farmers receive but Q&A services will only be a real success in future if more development partners and the government embrace them and provide financial support." ■

## Listening to farmers

After decades of under-investment, governments and development organisations now recognise the importance of revitalising extension services. This is not just a matter of increasing financial support. "It is also about reforming the way they work, and making sure that the reforms that are underway are cost-effective and sustainable," said CTA director Michael Hailu on the opening day of a major conference on Innovations in Extension and Advisory Services. Held in Nairobi in November 2011 and co-organised by CTA and 17 partners, the conference attracted over 450 delegates from 85 countries.

The findings of the conference were enshrined in the Nairobi Declaration, which calls on governments to develop clear policies for extension in consultation with farmers, to increase funding, and to introduce mechanisms that ensure better coordination and sustainability of high-quality services. "Efficient, demand-driven extension services are the key to improving the productivity and incomes of the world's smallholder farmers," says CTA senior programme coordinator Judith Ann Francis.

In 2013, the Kenyan-based company Inter-media Development Consultants submitted to CTA the findings of a study which examined the impact of the conference on participants and their organisations. It also assessed progress in implementing the Nairobi Declaration. The majority of participants who responded to the online survey said that the conference had made them more aware of new ICT tools and approaches. The conference had also rekindled interest in agricultural extension, and encouraged participants to keep in touch with one another over the coming years. Most of

the respondents had made and maintained contact with at least 10 fellow participants. "The extension conference was a torch to find out what I want to do," wrote one participant from Malawi. "It has changed my way of thinking."

A good example of how to involve farmers in the delivery of extension materials comes from Papua New Guinea. In 2011, CTA, the Institute for Research, Extension and Training in Agriculture (IRETA) and PNG's Department of Agriculture and Livestock organised a training course on the production of agricultural extension materials. "The aim was to showcase an approach which encourages extension office to work closely with farming communities," says Rodger Obubo, CTA's training programmes manager at the time.

During the course, 21 extension workers and researchers from PNG, Vanuatu and the Solomon Islands learned how to use a farmer-participatory approach to producing extension materials. This had already been successfully tried and tested during similar CTA organised courses in Fiji, Ghana, Guinea, Sierra Leone and Zambia.

The trainees invited a selected group of farmers from Madang Province to catalogue their agricultural activities and describe the challenges they faced. The farmers discussed what sort of information would be most helpful, and identified priorities. They were keen to have written material on the control of the taro beetle, on how to identify and control taro leaf blight, and on techniques for pruning cocoa.

The extension workers then began the task of writing and designing booklets and

posters. The aim was to provide simple messages in English and pidgin with plentiful use of drawings and photographs for those who have difficulty reading. The farmers scrutinised the drafts and further changes were made before the final versions were produced. "The aim must always be to produce materials that farmers really feel part of, and will be proud to use," says Rodger.

During the weeks that followed, course participants listed a range of activities they had undertaken, or were about to undertake, using the knowledge they had gained. These included revising existing extension materials, publishing new brochures about root crops, cocoa and coconut, producing radio programmes, and training colleagues in the farmer-based approach to producing extension materials. ■

## On practical matters

From the moment it was established in 1984, CTA has been thinking about ways of getting practical information to the people who need it most: small-scale farmers, farmers' organisations, extension workers, and teachers and trainers in rural areas. Over the past 30 years, it has been closely involved in the production and promotion of more than 100 practical publications.

The majority of titles – 50 by 2013 – fall under the heading of Agrodok, a series produced in partnership with Agromisa, a non-profit knowledge centre that supports small-scale farmers and organisations. Based in Wageningen, Agromisa has close links to Wageningen University and local and international research centres. Agrodok handbooks provide practical and accessible information on a wide range of subjects including water harvesting, agroforestry, seed production storage, animal husbandry and marketing.

An impact study conducted in 2011 by Esmé Stuart revealed a high level of satisfaction among CTA subscribers and other users of the Agrodok series. The study, based on a questionnaire, provides over 250 examples of

how Agrodok publications have benefited farmers and others. One respondent had trained 300 farmers on rabbit rearing, using information gained from an Agrodok handbook. Another had used knowledge from an Agrodok handbook to write a manual and flyers on the composting of cattle manure, for use by extension workers and farmers. Another replied that Agrodok handbooks had "helped me improve my understanding, as well as my training abilities, on a lot of topics, like snail rearing, mushroom farming and many other topics." Many respondents said they handed on the Agrodok guides once they had used them to friends, neighbours and colleagues.

"Most of the handbooks have been published in English, French and Portuguese, but they also attracted interest in other parts the world," says Jenessi Matturi in CTA's publication department. For example, a book on goat-keeping has been translated into Japanese; a book on fruit growing into Chinese; and books on bee-keeping and mushroom cultivation into Swahili. In 2013, an organisation from Eritrea asked CTA and Agromisa for permission to translate eight of the booklets into the local language.

CTA's Practical Guides – 18 titles had been published by 2013 – are specifically designed for use in the field. These eight-page, fold-out leaflets provide information for small-scale farmers on topics such as enriching compost for high yields, establishing tree nurseries, controlling stem-borer in maize, intensive rice cultivation and making banana chips and flour.

One of the most popular guides in recent years focused on how to control the mango fruit fly, and was first published in 2007. The year before, CTA had supported a workshop in Conakry, Guinea, on the battle to control the fruit-fly in West Africa. According to CTA's José Fonseca, the workshop and other activities helped to alert mango producers and sellers of the danger posed by the fruit fly, a native of East Asia which had made its way to West Africa via East Africa.

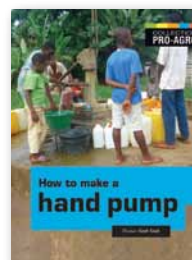
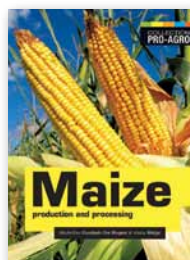
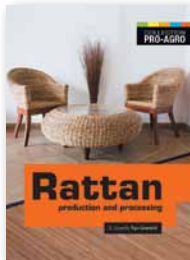
After the workshop, José got in touch with COLEACP, an organisation which brings together professionals concerned with establishing a sustainable horticultural trade for ACP producers and exporters. "The mango fruit fly posed a serious threat to trade, so I went to COLEACP and said: 'We have a problem, and you have the expertise.'" COLEACP commissioned a scientist to write a Practical Guide on the subject. This proved so popular that it was recently reprinted.

In 2011, CTA and the Cameroon-based organisation Ingénieurs sans frontières (Engineers without Borders) launched a

new series of guides under the title PRO-AGRO. Aimed at extension workers, market gardeners and small-scale producers, six had been published in English and French by mid-2013, and another eight were in the pipeline. Among the most popular are those on rearing grasscutters – or cane rats – for meat; improving the production of plantains; and making a hand pump. Although most of the subscribers and readers are in West Africa, some of the booklets have proved popular elsewhere, with the hand pump booklet being ordered by CTA subscribers in Ethiopia and Kenya.

CTA's Cameroonian partners are responsible for choosing the topics and commissioning the writers. CTA then has the drafts peer-reviewed, and takes responsibility for editing and design. A PDF of the final product is sent to Cameroon so the printing can be done locally. The PDF versions, published on the CTA website, are proving very popular. As a result of the partnership, Ingénieurs sans frontières has significantly improved its publishing skills.

"I think the PRO-AGRO guides are popular for two reasons," says Jenessi. "First, they provide step-by-step instructions that anyone can follow. And second, some of the titles deal with very practical matters that can help people improve their incomes." An example of the latter is the guide on soap-making, something which anybody in rural Africa can do if they have access to vegetable oil. ■



# Modelling a brighter future

People with low levels of education and poor literacy skills have difficulty making themselves heard. This is particularly true for indigenous communities. Their ancestral knowledge and rights are often ignored by governments, mineral companies and others who wish to exploit their lands. However, it needn't be like this. Working with local partners, CTA has helped to pioneer a process, known as Participatory 3-D Modelling, which is helping local communities not only to document the areas where they live, but influence the way decisions are made about land-use and tenure.

"Traditionally, maps were made by governments, and the data was controlled by governments," says CTA's Giacomo Rambaldi. "But there has been a huge change recently as civil society groups have acquired the ability to make their own maps and videos." They have benefited from access to Google Earth and YouTube and participatory 3-D modelling as a way of creating accurate, geo-referenced maps.

The first CTA-supported modelling exercise in the Pacific was held in Fiji in 2005. The 11-day event in Lavuka focused on Ovalau Island, where local communities were suffering from the over-exploitation of their fishery grounds, especially by foreign fleets. During the first three days, 30 high-school students and six teachers constructed a 3-D model of the island with the assistance of 15 facilitators and trainees. Ninety men and women from 26 villages then 'populated' the model with mountains, roads, rivers, fishing grounds, croplands, cultural sites and other

features. By the time they had finished, the model had 79 features and 83 places of cultural significance.

The model was subsequently used as a basis for an island-wide management plan and three districts management plans. The process identified 16 'taboo' areas in which there is now total protection of marine life. Local people have also begun to clear ceremonial pathways which had become overgrown. During the course of three years of research, the Museum of Fiji only managed to identify 20 places of cultural significance – a quarter of the number identified by villagers during the modelling process.

In many ways, the process is as important as the finished article. "It helps people to visualise and localise their spatial knowledge, and this is very empowering," says Giacomo. "And, of course, it enables them to make their case more persuasively." In the past, indigenous communities might produce sketch maps laying claims to their land, but decisions-makers seldom took much notice. The 3-D models providing intricate details of landscape features and resource use are much harder to ignore.

## ACROSS THE PACIFIC

Kenn Mondiai, who runs Partners with Melanesians, an NGO based in Papua New Guinea, was among those to benefit from the training in Fiji. Since then he has played an important role in promoting participatory 3-D modelling across the Pacific. With support from the World Bank, he helped local communities on PNG's Managalas Plateau, home to around 150 clans, to create a 3-D

model of their ancestral lands. This was used as part of the evidence to promote the Managalas Conservation Area, whose official recognition is anticipated around the time of going to press.

In 2011, The Nature Conservancy hired Kenn to conduct trainings in the Solomon Islands. The modelling exercise at the coastal village of Boe Boe focused on climate change and its possible impact. Such was the enthusiasm of the school children and students who helped to build the model that some would stay until 5 a.m. in the morning and return to work on the model after just a few hours' sleep. The model showed the extent of the last tsunami in 2007 and recent king-tide levels that had inundated parts of the village. The community then used the model to discuss the potential impact of rises in sea-level and other climate-related events.

"The model showed the younger generation that we need to think about climate change," reflected Winifred Piatamama after the exercise. "It's important to realise that in a few years time the sea level won't be the same as it is now." Following discussions, the villagers decided that instead of building along the coastline, as they have done in the past, they would look towards the higher land further from the sea. In short, the model helped them to devise plans which will help them adapt to climate change.

According to Winifred, the modelling process was particularly important for the women in the community. "At the beginning it was a bit challenging for women, because they don't raise their concerns, they are generally quiet," she said. However, the modelling process encouraged them to share their views more openly. "When everyone contributes to the model, they share pride and ownership," reflected Gabriel Kulwaum

of The Nature Conservancy (TNC) in a short film about the Boe Boe exercise. "TNC or the government don't own it." The community does.

### TRAINING IN THE CARIBBEAN

CTA was keen to encourage participatory 3-D modelling in the Caribbean, but was obliged to import expertise from elsewhere. In October 2012, the first Caribbean modelling exercise was held in Tobago, hosted by the Caribbean Natural Resources Institute (CANARI) and facilitated by Kenn Mondiai. This led to follow-up modelling workshops on Union Island and Granada.

According to Gillian Stanislaus of the Department of Natural Resources and Environment in Trinidad and Tobago, the Tobago 3-D model will help the authorities manage future developments more efficiently. "Because of the modelling process, we have a much greater depth of knowledge about the way in which the land is used and its significance for local people," she says.

Terrence Phillips attended one of the modelling workshops – its focus was on adapting to climate change – as a representative of the Caribbean Regional Fisheries Mechanism. He was impressed. "I think this is a very useful tool," he says. "The communities were able to describe what had happened to their marine resources in the past and the state of the resources now." The modelling encouraged them to consider the possible impact of sea-level rises and climate change, and devise strategies to help them adapt. The modelling exercise helped to create a constructive dialogue between the government and the local community, ensuring that they work together effectively in future. ■

## Justice for Kenya's hunter-gatherers

Africa's first participatory 3-D mapping exercise took some 10 months to organise. Held in the village of Nessuit in Kenya's Nakuru County, it was managed by Environmental Research Mapping and Information Systems in Africa (ERMIS-Africa), with financial and technical support from CTA. Over the course of 11 days in August 2006, some 120 men and women belonging to 21 Ogiek clans constructed a 3-D model of the Eastern Mau Forest Complex.

The Mau Forest had suffered from decades of commercial logging and encroachment. These activities had destroyed much of the landscape, as well as many Ogiek cultural sites, and for some years the Ogiek had been attempting to assert their rights to the land in court. "The court cases had been dragging on, with no real resolution," explains Julius Muchemi, director of ERMIS-Africa. "What the Ogiek needed was concrete evidence to support their claims, and the modelling exercise helped to provide that."

The evidence was persuasive enough to convince the government of the Ogiek's right to the land, and the need to protect the area from further degradation. When a conservation process was launched in 2007, all those occupying the forest apart from the Ogiek were evicted. Since then, ERMIS-Africa and its partners have produced the Ogiek Peoples Ancestral Territories Atlas. This provides the most comprehensive description to date about the Ogiek's culture and their links to the land.

Among the organisations which supported the mapping exercise was the Indigenous Peoples of Africa Coordinating Committee (IPACC). According to its director, Nigel Crawhall, this was a key event in the life of IPACC. The mapping exercise, and CTA's support for the organisation, led to a series of important developments for indigenous people, including IPACC's engagement with the UN Framework Convention on Climate Change and the launching of a multi-country training programme on climate change mitigation and adaptation.

"From a professional perspective," said Dr Crawhall, in a written summary about the impact of CTA, "the relationship with CTA has brought important changes, new tools and opportunities... Exposure and partnering with CTA has transformed the work, practice and knowledge of Africa's only regional indigenous peoples network, it has touched the lives of people in more than a dozen countries, it has created new career and advocacy opportunities for indigenous leaders, and it has opened new horizons for me professionally."

Since the Mau Forest mapping exercise, CTA has supported similar initiatives in Ethiopia, Gabon, Chad and Uganda. Supported by an e-handbook published in English, French, Spanish, Portuguese and Amharic, and a vibrant online community, modelling exercises have also taken place in other parts of Kenya, the Democratic Republic of Congo, Ghana and Morocco.



## CHAPTER 6

# MAKING THE MOST OF MARKETS

► **This chapter provides an insight into CTA's support for a wide range of activities designed to strengthen national and regional value chains.** As international markets become increasingly competitive, producers need to find ways of differentiating themselves and their products, for example, through the use of Geographical Indications (GI), which link quality and uniqueness with location. Workshops and discussion forums supported by CTA, and the publication of a practical manual, provide ACP countries with valuable guidance on the benefits of GIs. CTA's *Agritrade* website has established a reputation as a unique source of information and analysis on ACP-European Union agricultural trade issues. Other stories in this chapter cover CTA's support for a journalists' study tour investigating trade barriers in West Africa, and initiatives on structured trade.

# Standing out from the crowd

**T**he international market for agricultural goods has become increasingly competitive, with Brazil and other emerging economies posing a significant threat to producers elsewhere. To give just one example, Africa's share of world coffee exports has fallen by almost a half over the past 20 years, largely because of increased competition from non-ACP countries such as Indonesia and Vietnam.

"This is a serious problem for many of the countries where we work," says Vincent Fautrel, CTA's senior programme coordinator for trade and value chain development. "If producers want to retain their market share, they need to find ways of differentiating themselves, of finding a specific niche that attracts consumers." The need to stand out from the crowd has led to a surge of interest in Origin-Linked Products and particularly Geographical Indications (GIs) which link the quality, reputation and uniqueness of particular products to a specific location or terroir.

Think, for example, of French champagne, Parma ham and Darjeeling tea. Their GI status, recognised under EU law, guarantees their authenticity, protects them from counterfeits, and adds value for producers. Most products afforded GI protection come from Europe, but producers in ACP countries are increasingly looking at Origin-Linked Products and in some cases GIs as a way to better differentiate themselves. Jamaican Blue Mountain Coffee, Macenta coffee in Guinea, Penja pepper and Oku honey in Cameroon are just a few recent examples of ACP Origin-Linked Products.

## RAISING AWARENESS

CTA's work on this subject began in 2005 with the production of a discussion paper to inform ACP countries about the challenges and opportunities of GIs in the context of the World Trade Organization (WTO) negotiations. This eventually led to the first ACP/EU workshop on GIs, which was held in Montpellier in March 2009 and jointly organised by CTA, the Agence française de développement (AFD) and the Centre de coopération internationale en recherche agronomique pour le développement (CIRAD).

The workshop attracted over 60 participants, including farmers and representatives of producer organisations from many ACP countries. During the course of the week, they learned how GIs can contribute to rural development, and explored the legal and institutional framework for GIs and the steps needed to create them. There were field visits to see the production of bull meat in the Camargue, sweet onions in the Cevennes and olive oil in Nyons, three local products which had benefited from GI status.

The following year, CTA was contacted by Cameroon's National Coffee and Cocoa Board (NCCB). "At that time, NCCB was developing a new strategy for their coffee and cocoa and were keen to learn more about GIs and how it could help Cameroon to better position itself on the market," recalls Vincent. This led to a three-day expert technical workshop in Yaoundé, during which representatives of both public and private sectors from Cameroon, Côte d'Ivoire, France, Ghana, Guinea and Kenya explored the potential of GIs for coffee and cocoa growers. This indirectly led to contacts between cocoa growers in Cameroon and one of the finest manufacturers of Belgian chocolate, Pierre Marcolini, who was interested in sourcing a specific type of dark red cocoa from Cameroon's North West region.

## MAKING CONNECTIONS

To increase the outreach of the Montpellier workshop, CTA commissioned a documentary film based on the discussions and field visits. This has been used at CIRAD's annual training sessions on GIs for officials from developing countries. According to CIRAD, the documentary has been highly appreciated by trainees as a good introduction to the subject. After the Montpellier workshop CTA funded the participation of ACP experts at the General Assembly of the Organisation for an International Geographical Indications Network (OriGIn), and in partnership with OriGIn it established an electronic discussion forum which by 2013 had 225 members from 62 countries – a clear sign of growing interest.

The e-discussions and associated training modules not only helped to build the capacity of the individuals and organisations involved, they provided the raw material for *The Practical Manual on Geographical Indications for ACP Countries*, which was launched in Geneva parallel to the 8th WTO Ministerial Conference in December 2011. Jointly published by CTA and OriGIn, this provides policymakers, farmers' groups and others with a comprehensive guide to the economic, legal and operational issues involved in adopting a GI approach.

In 2013, CTA convened a high-level panel discussion in Brussels that looked at origin-linked products for ACP countries. During the same week CTA launched a capacity building programme, and trainings were subsequently held in Africa and the Caribbean.

According to Vincent, CTA's main achievement has been to create greater awareness in ACP countries about the potential of Origin-Linked Products and more specifically GIs, as well as the considerable challenges. "Origin-Linked Products, and GIs in parti-

cular, provide interesting opportunities for ACP countries, but it is often a lengthy and costly process," he says. "Producers have to consider the various protection options available – such as trademarks, collective marks, certification marks and GIs – and decide which strategy to adopt based on their specific contexts." Building capacities at the national and regional level is a key priority. ■



IF ACP PRODUCERS WANT TO RETAIN THEIR MARKET SHARE, THEY NEED TO FIND WAYS OF DIFFERENTIATING THEMSELVES, OF FINDING A SPECIFIC NICHE THAT ATTRACTS CONSUMERS. THEY ARE INCREASINGLY LOOKING AT ORIGIN-LINKED PRODUCTS AND IN SOME CASES GEOGRAPHICAL INDICATIONS AS A WAY TO BETTER DIFFERENTIATE THEMSELVES."

# Making trade work for Africa's smallholders

In many parts of Africa, farmers are not producing nearly as much of the staple food crops as they could and should. Take, for example, the situation in Kenya. "Every soul in this country consumes around 90 kg of maize each year, which amounts to 40 million bags," says Gerald Masila, director of the Eastern Africa Grain Council (EAGC). "But our farmers are only producing around 29 million bags." There is an even greater shortfall for wheat, with the country importing some 60% of its needs.

There are a number of reasons why farmers, here and elsewhere on the continent, are failing to fulfil their potential. Most obviously, poor farming practices and declining soil fertility mean that many struggle to produce decent yields. While yields of staple crops have risen four-fold in East Asia over the past four decades, they have scarcely risen over much of sub-Saharan Africa.

Furthermore, the transaction costs involved in buying and selling grain are relatively high in many African countries. This relates, in part, to a range of problems that affect both farmers and traders. These include poor post-harvest handling, pressure on farmers to sell crops immediately after they have been harvested – for example, to raise money to buy food or pay school fees – and the difficulties in sourcing grain from large numbers of scattered farmers.

Fortunately, there is a tried and tested solution to these marketing problems. Structured trading systems already play a key role in organising, regulating and financing trade in commodities in the developed world, and structured trading is now expanding in Africa. Since 2008, CTA has conducted a number of activities whose purpose has been to introduce the principles of structured trade to parts of the African continent where it has yet to take off.

Structured trade connects farmers to finance by establishing warehouse receipt systems. Farmers lodge their grain with a warehouse owned by a third party and they can use the receipt as a form of collateral to raise credit with banks, usually 60-80% of the value of the crop. This means they are not forced to sell their grain immediately after harvest, when there is often a glut and prices are at their lowest. At a later date, when prices will hopefully be higher, they can sell their grain. They can then repay their loans, pay the warehousing fees and possibly invest some of their savings.



Mwinchande Abdallah, the treasurer of the Mshikamano Savings and Credit Cooperative Societies (SACCOS), with stock receipts at the Magugu warehouse, Tanzania.

## SPREADING KNOWLEDGE FROM SOUTH TO WEST

In 2008, CTA and the Agence française de développement (AFD) funded a two-week study tour of warehouse receipt systems and agricultural commodity exchanges in South Africa and Tanzania. Organised by the Natural Resources Institute, the tour provided 23 individuals from West and Central Africa – policymakers and representatives of agricultural producers’ organisations, the banking sector and NGOs – with the opportunity to increase their knowledge about the challenges involved in setting up and running warehouse receipt systems and commodity exchanges.

South Africa has a particularly well-developed commodity trade and finance system, managed by the Agricultural Division of the Johannesburg Stock Exchange. Its silo certificate system enables farmers to sign forward contracts to sell fixed volumes of crops at the beginning of the planting season. This, in turn, enables the farmers to access finance from the banks. The system helps to reduce the cost of sourcing produce for traders and processors, while lowering the cost of accessing markets, especially for premium quality produce, for farmers.

From South Africa the tour moved on to Tanzania, where participants had the opportunity to study the benefits that small-scale agricultural producers gain from a regulated warehouse receipt system. “The tour proved very successful in achieving its main objectives,” says Vincent Fautrel, CTA’s senior programme coordinator on trade and value chain development. “It exposed participants to the benefits and critical requirements of developing warehouse receipt systems and commodity exchanges which are sustainable and accessible to smallholder farmers.” The study tour contributed to discussions and debates in West and Central

Africa on how to develop similar systems. The West African Economic and Monetary Union (UEMOA) and Economic Community Of West African States (ECOWAS) commissioned various studies as a result of these discussions. In Central Africa, Cameroon’s National Coffee and Cocoa Board, together with the commodities division of the United Nations Conference on Trade and Development (UNCTAD), worked on the setting up of a warehouse receipt system for coffee and cocoa. UNCTAD also used the report and video of the tour as background material for regional workshops in Africa.

## A STEP-BY-STEP GUIDE TO STRUCTURED TRADE

During recent years, the Eastern African Grain Council has become a powerful advocate of structured trade. “We believe that structured trading of grains, similar to the arrangements which already exist in this part of Africa for tea and coffee, could improve the way grain crops are marketed, with benefits to both producers and buyers,” says Gerald Masila. With support from CTA, EAGC organised a ‘writeshop’ to develop a training manual for structured trade in Arusha, Tanzania, in July 2012.

This was CTA’s first writeshop. “It was a very interesting and valuable experience,” says Vincent Fautrel. “We brought together a group of experts and organisations involved in agriculture and the grain trade, and during the course of an intensive four-day period we were able to produce a draft for a new manual on structured trade.”

Written in plain, jargon-free English, *Structured Grain Trading Systems in Africa*, which was published in 2013, is divided into eight chapters, covering topics such as grades and standards, post-harvest handling and warehouse receipts. “It’s a great piece of work,” says Gerald Masila, “and it’s an output that

we will use a lot in the future.” The manual has been circulated widely and is now used by the Eastern Africa Grain Institute (EAGI), which has offices at the headquarters of EAGC in Nairobi, to provide farmers, traders, millers and bankers with a thorough introduction on how to establish efficient structured trading systems.

At present, just a tiny fraction of grain in East Africa goes through a structured trading system. However, EAGC believes that the number of farmers taking advantage of

these arrangements could rise rapidly in the coming years. As these systems help to improve farmers’ access to finance and inputs like fertilisers, they offer a promising avenue for improving agricultural productivity, rural incomes and food security.

In 2013, a special edition of *Spore* was devoted to the subject of Structured Trading Systems: A New Vision for Trade. (see [http://spore.cta.int/images/stories/special\\_issue\\_2013/Spore-HS-2013-EN.pdf](http://spore.cta.int/images/stories/special_issue_2013/Spore-HS-2013-EN.pdf)) ■

# Breaking the barriers to trade

**T**rade within and between regions can play an important role in stimulating economic growth and reducing poverty, so governments should do their utmost to support the cross-border movement of goods and services. But in much of sub-Saharan Africa, this simply isn’t happening. Official figures for 2008 suggest intra-regional trade in Africa was just 10% of total trade, compared to 27% within Latin America and the Caribbean, 47% in Asia and 70% in the European Union, although this didn’t take into account substantial informal trade.

In Africa, non-tariff barriers to trade include high transport costs, poor infrastructure, excessive bureaucracy and bribery. A study by the United Nations Economic Commission for Africa (ECA) found that there were 69 checkpoints on the road between Lagos, Nigeria, and the Côte d’Ivoire capital of Abidjan – one for every 14 km. These provided the per-

fect opportunity for officials to demand bribes from organisations and individuals carrying freight on the road.

But how exactly do these ‘informal’ non-tariff barriers work? A journalists’ study tour of red tape and harassment along the 1325 km road between Bamako and Dakar, the capitals of Mali and Senegal, carried out in June 2008, provided some answers. The five-day tour was organised by the Conference of Ministers of Agriculture in West and Central Africa (CMA/WCA) and supported by CTA, in collaboration with the Regional Cattle and Meat Observatory and the West African Network of Agricultural Journalists.

Cattle, sheep and goats represent the main export from Mali to Senegal, with livestock from Mali helping to meet domestic shortages in Senegal. The trade provides a living and means of survival for tens of

thousands of pastoralists, marketeers, merchants, truck drivers and others working in the private sector.

Despite the existence of a regulatory framework on the free movement of agricultural products in West Africa, moving livestock is anything but free. Take, for example, the testimony heard by the journalists in the markets at Niamana and Kati, where cattle are loaded for the journey to Senegal. In both markets, the operators unanimously condemned harassment by the authorities. They explained that in order to gain the necessary export licences they were obliged to pay the authorities bribes of CFA 2000–5000 (€3.10–€7.80). The veterinary services also demanded bribes of between CFA 500–5000 CFA (€0.80–€7.80) before issuing health certificates which should have been issued free of charge. The national transport authority and the city council also demanded ‘informal payments’.

Over the next few days, as they travelled west, the journalists gathered more damning evidence. By the time the operators reached Dakar they had been forced to pay considerable sums of cash. And they were not the only ones to suffer: bribery on this scale inevitably has an effect on prices, and contributes, in part, to the high cost of meat in Dakar.

Many of the individuals working for law-enforcement authorities painted a very different picture. The journalists reported that all the policemen, customs officers and gendarmes whom they met at various checkpoints said precisely the same thing, as if they had learned by heart what to say when questioned. All said that their job consisted in ensuring the road users’ security – by checking the condition of vehicles and whether the paperwork was in order – and they categorically denied demanding and taking bribes, despite evidence to the contrary. However, it should be pointed out that in these sorts of situation

private operators also use the system to their advantage by not complying with the rules.

Bribery and extortion are not the only problems facing livestock traders and transporters. The study trip revealed that there are also legal and regulatory issues which needed to be addressed. For example, the export licence demanded by the Malian authorities was in direct contravention of the current regional regulations; in other words, Mali had signed up to an agreement which it was flouting. The journalists also recommended that both countries needed to harmonise the rules relating to the transport of cattle. At the time of the study tour, a truck carrying cattle in Mali could have up to five livestock handlers in the back to watch over the animals. In Senegal, this practice was illegal.

At the end of the trip, the journalists, who represented a wide range of media, including radio stations, daily papers and national television, were unanimous in their praise for the organisers and recommended that similar journeys should be repeated elsewhere in the region. The study tour had provided them with an opportunity to research a topic of considerable importance and create greater awareness about the problems confronting livestock traders in West Africa.

Since then, CTA has supported a variety of initiatives which encouraged West African countries and regional trade organisations to review their laws, and reduce regulations and taxes which restrict trade. For example, in April 2011, a workshop in Burkina Faso focused on harmonising the regulations governing agricultural trade. Jointly hosted with the Conference of Ministers of Agriculture in West and Central Africa, it attracted policymakers, traders, farmers’ organisations and journalists. “Progress has been made in reducing trade barriers, but much remains to be done,” says José Fonseca of CTA. ■

# Unravelling burning trade issues

In 2000, when the EU and the ACP group decided to negotiate new trading arrangements that would progressively replace long-standing preferential agreements, nobody knew exactly how this would affect the development of the agricultural sector in ACP countries. Furthermore, reforms of the EU Common Agricultural Policy (CAP) and the launch of the World Trade Organization (WTO) Doha round of talks also had serious implications for the agricultural and fisheries sectors of many ACP countries.

“Policymakers, trade negotiators and private sector representatives all expressed the need to have a much better understanding of the agricultural challenges at stake, and possible policy options,” says Vincent Fautrel, senior programme coordinator at CTA. “This inspired us to establish the *Agritrade* website in 2002.”

The website (<http://agritrade.cta.int/>) has established a reputation for being a unique source of non-partisan information and

analysis on ACP-EU agricultural and fisheries trade issues. It is used as a source of information for trade discussions by the ACP Secretariat and the ACP missions in Brussels and Geneva. ACP ministries use the *Agritrade Executive Briefs* as training material for their new staff.

Over the past decade, *Agritrade* has undergone various changes. The website initially focused on the agricultural implications of the WTO and the Economic Partnership Agreements (EPA) negotiations, CAP reform, and several ‘protocol’ commodities, including sugar, banana, rice and beef. In 2004, the website began to cover sanitary and phytosanitary (SPS) and food safety issues. In the same year, *Agritrade* launched an entirely new section dedicated to trade in the fishery sector. The following year, *Agritrade* played a critical role during the preparation and reporting of the Sixth WTO Ministerial Conference in Hong Kong, hosting special reports and producing various analytical documents.



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Since 2006, the *Agritrade* website has provided information on many new commodities and has also drawn attention to emerging topics such as aid for trade, product differentiation and biofuels. Recently, the site was completely revamped and it has become more interactive with the inclusion of a social platform – MyAgritrade – that allows subscribers to share common areas of interest and get access to more targeted information.

Since 2010, *Agritrade* has covered regional trade issues as well as corporate developments in various agro-food sectors. The *Agritrade* managers also recognise that the site could achieve more by providing

information directly to ongoing trade policy processes. "We need to make sure that our information is not only delivered to the right person, but is actually used in the decision-making process," says Michael Hailu, director of CTA. "*Agritrade* should be developed as a fully fledged service which goes beyond the website. Engaging more directly with various public and private bodies at regional level should help us to achieve this goal." ■

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