

# SPORE

The magazine  
for agricultural and  
rural development  
in ACP countries

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**INTERVIEW**  
Sithembile  
Mwamakamba,  
Advocate for youth  
and women farmers

**N°161**  
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**RESEARCH**

**Public-private  
partnerships, a fair deal?**

**HOT PEPPER**

**A piquant passion**

**AGRICULTURAL GROWTH CORRIDORS**

**New routes  
to opportunity?**







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## RESEARCH



## Public-private partnerships, a fair deal?

4

COVER STORY

## SITHEMBILE MWAMAKAMBA



## Engaging youth in agriculture

12

INTERVIEW

## Editorial

## Research that matters

The challenge of feeding nine billion people by 2050 against the backdrop of a changing climate, a dynamic global socio-economic environment and an ever-shrinking natural resource base requires research and innovative partnerships of higher magnitude than we have seen before. Traditional ways of doing research in labs and experiment stations and publishing the papers in academic journals will not be enough. Neither will we meet the challenge by continuing to have farmers producing small surpluses whenever the rains come, waiting for buyers and then selling at throwaway prices. We need research and partnerships that address the constraints smallholders face along the entire value chain – from improving productivity to reducing post-harvest losses and enhancing processing, transport and marketing – so that they can improve their income and ensure food security for all.



Some of the world's most prominent figures in agricultural research met at the Second Global Conference on Agricultural Research for Development (GCARD2) at the end of October in Punta del Este, Uruguay and discussed these issues.

Under the theme, "Foresight and partnership for innovation and impact on smallholder livelihoods", they discussed how research must be reshaped to better answer the needs of farmers and make agricultural value chains more effective. Bringing together researchers, education and extension specialists, government officials, civil society and the private sector, the conference highlighted the need to forge innovative partnerships at different levels and build the competencies of women and young people to bring about transformative changes in the agricultural sector.

CTA hosted a side event during GCARD2 on *Managing Water for Agriculture and Food in ACP countries* addressing water security, climate change, green growth, gender and youth issues.

Michael Hailu  
Director – CTA



13

## AGRICULTURAL GROWTH CORRIDORS

## New routes to opportunity?

DOSSIER

4 | Cover story

6 | News

7 | Crops

8 | Fisheries and livestock

9 | Environment

10 | Research

11 | Business and trade

12 | Interview

13 | DOSSIER

## Agricultural growth corridors: new routes to opportunity?

Can smallholder farmers benefit from Africa's new 'trade super highways'?

17 | Viewpoint

## Mark Pearson: a new vision for Africa's trade corridors

Improving trade and competitiveness in East and Southern Africa.

18 | Field report

## Mozambique: funding catalyst for commercialisation

Private sector investment transforms smallholder agriculture in the Beira corridor.

20 | Sector

## Hot pepper: a piquant passion

21 | Publications

25 | Get on board with CTA

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# Public-private partnerships, a fair deal?

During the past 10 years, multinational food corporations have taken a greater part in agricultural research within ACP countries, often partnering with public research institutes in need of funding. Does this mean that they dictate the law to them? Many farmer organisations and NGOs think so, pointing out that these partnerships are almost exclusively about cash crops, usually genetically modified, ignore local farmers' needs and raise major intellectual property issues within these countries.



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Although the entry of agribusiness in ACP public agricultural research is not yet quantifiable, it is nonetheless real, following a developing trend within industrialised countries. This private sector interest is a consequence of cutbacks in public agricultural research spending, especially in Africa. According to the International Food Policy Research Institute (IFPRI), the situation has improved since 2000, however major challenges still constrain African agricultural research development. For instance, growth in investments – 20% between 2001 and 2008 – has only occurred in a few of the 32 countries examined by IFPRI, namely Ghana, Nigeria, Sudan, Tanzania and Uganda. Furthermore, the majority of funds have been used to raise low salaries and restore infrastructure after years of neglect.

The brain drain and ageing of highly qualified and experienced researchers is another tremendous challenge for Africa considering the high number of senior executives who will retire within the next decade. In addition, in 2008, only eight of the examined countries – Botswana, Burundi, Kenya, Mauritius, Mauritania, Namibia, South Africa and Uganda – had invested more than 1% of their agricultural GDP in research, meeting the goal set by the New Partnership for Africa's Development (NEPAD). To increase investment in the agricultural sector, NEPAD established the Comprehensive Africa Agriculture Development

Programme with the fourth pillar – dedicated to research – entrusted to the Forum for Agricultural Research in Africa (FARA), which has a mandate to coordinate agricultural research among national, sub-regional and international organisations.

To address these deficits, research centres (whether national, regional or international institutes, universities or NGOs) are increasingly teaming up with the private sector. The former organisations focus on increasing agricultural output and improving farmer livelihoods, whilst the private sector primarily seeks a profit. The benefits of such public-private partnerships (PPP) are numerous: not only supplying additional funding, but allowing local researchers to increase their skills and creating a good environment for promoting research findings. PPPs also enable knowledge exchange and identification of new research areas.

Some of the major international research organisations such as the International Livestock Research Institute or the World Agroforestry Center, for example, are located in Kenya. According to IFPRI, the presence of a critical mass of researchers and public investments – Monsanto, Syngenta, DuPont – or foundations such as Rockefeller, Bill and Melinda Gates and recently Google, is a key factor to attracting agrifood giants. Syngenta, a world leader in crop protection, is developing a variety of genetically modified maize in partnership with the Kenya Agricultural Research Institute in collaboration with the International Maize and Wheat Improvement Center.

In Côte d'Ivoire, Nestlé took the lead by launching its *Cocoa plan*. The Swiss group opened a research and development centre in Abidjan that is working closely with some 30 cooperatives, more than 18,000 producers and the research institute CNRA to improve quality and productivity of cocoa (see *Spore* no. 160). Affected by a severe deterioration in plantation productivity, along with a disruption of the coffee-cocoa chain which accounts for about 20% of GDP, Côte d'Ivoire had to take urgent action; for ►

A farm manager of the Kenya Agricultural Research Institute's Kiboko Research Station and a maize breeder from the International Maize and Wheat Improvement Center (CYMMIT) discussing experimental plots. They are developing drought tolerant top-cross hybrids as part of the Water Efficient Maize for Africa (WEMA) project. This is run by the African Agricultural Technology Foundation (AATF) in partnership with Monsanto and CIMMYT, which supplies germplasm and expertise

► Nestlé, it was the opportunity to guarantee its supply of raw material.

Other PPP's have been launched, focusing on new sectors, e.g. organic products. This is particularly the case in the Caribbean. In the Dominican Republic, a PPP agreement has been concluded between the Dominican agricultural and forestry research institute IRDIAF and the cooperative Francisco del Rosario to produce bananas that are organically certified.

### Towards fair partnerships?

Biotechnology intellectual property (IP) rights are a major issue for public institutes that collaborate on research programmes with the private sector. Varieties obtained by farmers are considered to be within the public domain, whereas varieties developed by public or private research centres are increasingly under patent protection. In 2008, Monty Jones, executive director of FARA, expressed the concerns of his organisation about the consequences of IP on access to seeds and knowledge for research and development. National agricultural research institutes (NARI) have been created to conduct research into priority products in agriculture, livestock and fisheries, and natural resources management in their respective countries. These products are essential components of poor farmers' food and nutrition even if they are not necessarily of commercial value. IP can lead publicly funded NARIs to redirect research towards more commercially profitable products but do not necessarily address the agricultural and nutritional challenges of their country. However, these institutes can also reap the benefits as IP enables them to protect their rights to use their innovations as well as their efforts to protect local knowledge and crops of low commercial value such as legumes and tubers.

On the ground, PPP's which benefit local communities have also been developed in the environmental sector. In the Fiji islands for example, one project is combining environmental conservation with drug research and economic development. Villagers immerse artificial corals into the sea, which are quickly colonised by plants and other living organisms to be sold to specialist suppliers for aquariums. In this way, the villagers secure an income and are able to conserve their natural corals, while scientists at the Georgia Institute of Technology in the USA (Georgia Tech) may continue to search for new drugs in species colonising the coral reefs.

### Farmers are key players

A PPP may also fail if it ignores the interests of the primary stakeholders - farmers and the local community. In Senegal, Senhuile (a group owned by the Italian group Tampieri Financial and Senegalese private stakeholders with 51% and 49% shares respectively) together with the Senegalese agricultural research institute INRA launched, in 2011, a sunflower plantation project with part of the production to be processed into biofuel. The partnership ended in a violent conflict between supporters and opposers of the project in Fanaye, a village in the Senegal River Valley, in which two people died. According to the Fanaye land defense committee, the 20,000 ha granted to the project constituted one-third of the total farmland. NGOs have denounced land grabbing by politicians and businessmen that occurred without the consent of the affected population.

The Fanaye tragedy reminds us how important it is to take farmers' interests and their indigenous knowledge into account when developing public - private agricultural research programmes. The Platform for African-European partnership on Agricultural Research for Development (PAEPARD) programme aims to address the marginalisation of ACP researchers. Overseen by FARA, PAEPARD notes that agricultural research between Europe and Africa primarily serves European researchers' interests and does not take sufficient account of other players. PAEPARD, principally funded by the EU (contributing 80%), has €5 million for 2010-2013 and aims to facilitate partnerships between farmer organisations, civil society groups, private and public research institutes, and help partners prepare research proposals to address the real needs of farmers.

In Nigeria, a pilot project involving European and Nigerian researchers with farmer organisations and local industries proves that the local PPP can work. The Nigeria Poultry Feed Research and Development project, launched in the southern state of Imo, "aims to reduce poultry feed production costs by 30% to 40% by replacing maize flour supplements imported from Denmark with locally produced vegetables and by improving the quality of local maize flour," explains Ifeanyi Charles Okoli, professor at the Federal University of Technology in Owerri. According to François Stepman, European co-manager, "The project is still in its test phase, however the close working relationship between the researchers and industry players, notably poultry organisations, is very encouraging." ■

## To find out more

### ASTI/IFPRI-FARA

Agricultural Science and Technology Indicators initiative *Agricultural R&D: Investing in Africa's Future - Analyzing Trends, Challenges, and Opportunities*  
<http://tinyurl.com/b5j6gdn>

### FARA

Forum for Agricultural Research in Africa  
<http://fara-africa.org>

### GFAR

The Global Forum on Agricultural Research  
<http://www.egfar.org>

### IFPRI

International Food Policy Research Institute  
*Private Investment in Agricultural Research and Technology Transfer in Africa*  
<http://tinyurl.com/cvyvejv>

### NEPAD (CAADP)

Comprehensive Africa Agriculture Development Programme - Pillar 4 (Agricultural Research)  
<http://www.nepad-caadp.net/pillar-4.php>

### PAEPARD

Platform for African-European Partnership on Agricultural Research for Development  
<http://paepard.org>



## BREEDING

## Improving sweet potato

In a bid to reduce imports of sweet potato, the Caribbean Agricultural Research and Development Institute (CARDI) is collaborating with the Trinidad and Tobago Agribusiness Association (TTABA) in a sweet potato breeding programme. Selection of improved plant material will be complemented by work on propagation techniques and cultural

control of sweet potato weevil. The work will support use of sweet potato by the fast food industry; sweet potato chips are a popular snack food, and are comparable in price to white (Irish) potato chips, but the preferred landrace in Trinidad and Tobago currently suffers inconsistency in size and flesh quality.

## CARBON CREDITS

## Zimbabwe's first REDD+ project

■ Zimbabwe has registered its first carbon project along the southern shoreline of Lake Kariba. Owned by four rural communities in north-western Zimbabwe, the Kariba

Zimbabwean farmer from Matabeleland North Province involved in Kariba REDD+ project

REDD+ (Reducing Emissions from Deforestation and Forest Degradation) project has been implemented with the help of experienced project developers, South Pole Carbon and Carbon



Green Africa. REDD+ works by allowing local communities to look after, restore and preserve their forests in exchange for economic incentives, commonly known as carbon credits, paid to them for this stewardship by international companies. More than 300,000 people, comprising mostly smallholder farmers, have begun to benefit from the project, which was initiated in 2011.

Under the project, wildlife-rich Mopane and Miombo woodlands are being protected from agricultural encroachment, unsustainable firewood consumption and wildfire. Funds will be distributed via Four Rural District Councils (RDCs), to improve community, educational and medical facilities as well as infrastructure, such as bridges. The project has a 30 year time span.

## HEALTH

## Insurance for coffee farmers

Over 10,000 households engaged in coffee production in Tanzania have benefited from health insurance facilities introduced by the Kilimanjaro Native Cooperative Union (KNCU). The health plan is provided by MicroEnsure, the world's largest microinsurance provider. By paying a small annual premium, households can avoid selling valued assets when ill-health strikes.

## PALM WINE

## Successful bottling

■ In Cameroon, thanks to an innovative process, bottled palm and raffia wine keeps its natural flavour for over a year after bottling, and Cameroonian consumers like it. This success is the result of a new technology to stop wine fermentation developed by a local firm, Sève et vin d'Afrique (Sevina). "Immediately after its extraction from palm trees or raffia palms, the fermentation of collected juice begins, caused by the action of the ambient air temperature and micro-organisms. After two days, it becomes undrinkable," explains Albert Tsafack, executive director of Sevina.

Under the new process, the juice is filtered within three hours of collection to remove contaminants. "Presence of extraneous matter in the wine accelerates fermentation," says the Cameroonian businessman. Heat has the same effect, hence the product is stored out of direct sunlight at a precise temperature and finally bottled. To prevent any contamination, all equipment used for the production is sterilised. Thanks to this process, Sevina produces 300 bottles of wine each day, 20% of which is exported to Belgium, France and Gabon.



Cameroonian palm and raffia wine bottled for commercialisation

## BURUNDI

## Forest under threat

According to the National Institute for the Environment and Nature Conservation (INECN) in Burundi, more than 25% of the Vyanda forest reserve, a 6 sq. km protected area in Bururu province, is under threat from illegal human activities such as cutting of timber or building of schools and health centres. INECN has asked the Government to create a committee responsible for the protection of this environmental heritage.



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## CLIMATE

## Early warning

In Benin, tens of thousands of hectares of food crops have been devastated by bad weather conditions. From 2010 to 2012, floods have caused damage valued at more than CFAF 500 billion (€762,000). To prevent damage in rural areas, the Government of Benin has developed an early warning system, in order to provide agricultural producers with reliable real-time rainfall data. The system includes agro-meteorological equipment which will be set up by the end of 2013. Data collected by the agronomical services on a long-term basis will help farmers to adapt their crop production cycle to rainfall patterns.





RICE

## New crop technology for farmers

A new partnership between the African Agricultural Technology Foundation (AATF) and Japan Tobacco (JT) will enable the development of rice varieties with enhanced nitrogen and water-use efficiency and salt tolerance. The Nitrogen Use Efficient Water Use

Efficient and Salt Tolerant (NEWEST) Rice Project will make use of JT's PureIntro® gene transfer technology to benefit smallholder farmers in Burkina Faso, Ghana, Nigeria and Uganda. Nitrogen deficiency and drought are major constraints to African upland rice production, while high salinity is increasingly becoming a major problem in many rice-growing areas.



Kiosk in Uganda advertising health benefits of vitamin A sweet potato

HEALTH

## Better nutrition through sweet potatoes

■ A study published in the *Journal of Nutrition* has revealed that vitamin A-rich orange-fleshed sweet potato (OSP), developed using conventional breeding methods, provided significant amounts of vitamin A to malnourished women and children in Uganda. Globally, Vitamin A deficiency accounts for more than 600,000 deaths a year in children under five. In Uganda, 28% of children and 23% of women are estimated to be vitamin A deficient.

Between 2007–2009, OSP was disseminated to more than 10,000 households in Uganda. Over 60% of recipients substituted more than one-third of their traditional sweet potato varieties with OSP. The study found that vitamin A intake increased by two-thirds for older children and nearly doubled for younger children and women. For children 6–35 months, OSP contributed more than 50% of their total vitamin A intake. HarvestPlus is aiming to reach another 225,000 households in Uganda by 2016 and the International Potato Center (CIP) plans to reach more than 10 million households across 17 sub-Saharan countries by 2020.

AWARD

## Micro irrigation World Food Prize

■ The 2012 World Food Prize has been awarded to Dr. Daniel Hillel, an Israeli-America researcher, who has been described as the man who made the desert bloom. The World Food Prize – considered the Nobel Prize for food – was created by Nobel Peace Prize laureate and celebrated plant breeder, Norman E. Borlaug. It honours individuals who have made significant and measurable contributions to improving the world's food supply. Dr. Hillel's 'micro irrigation' technique has enabled growing of crops with the application of small but continuous amounts of water directly to plant roots. This has revolutionised food production in some of the driest places on earth. The 'more crop per drop' technique, initially practised in Israel has been adopted globally, including in Africa, where it has maximised water use efficiency, increased crop yields and minimised environmental degradation. The technology he advanced, including drip, trickle and continuous feed irrigation, has been credited with improving the livelihoods of farmers around the world.



TECHNOLOGY

## Mobile phone farming advice

Cable company SEACOM is supporting the local development of a new smartphone application for Tanzanian farmers. Dar es Salaam-based Nuru Infocomm has developed the app in English and Swahili to allow market information to be collected on commodity prices from major markets and disseminated to farmers in real time to help secure the best prices. In a pilot project, farmers in Shinyanga, northern Tanzania, have received training ahead of the app being rolled out countrywide. Besides linking farmers to potential markets and increasing their bargaining power, the app also provides information on weather and input availability.

FOOD SECURITY

## Village seed banks

Savings and credit groups in Iganga district, Uganda, are setting up village seed banks to produce better quality seeds for themselves and to sell to other farmers. The groups, mainly comprising women members, are initially multiplying high yielding, iron-rich beans in order to provide iron-enriched food and generate additional income.

SEEDS

## New alliance

The Alliance of the Seed Industry in East and Southern Africa has been recently formed to develop a viable and competitive seed industry in the region. An initiative of the African Seed Trade Association and the Common Market of East and Southern Africa (COMESA), the Alliance will address challenges such as seed counterfeiting and use of poor quality seeds.

Zimbabwean farmers using flood irrigation to water their crops but this could be improved through micro irrigation



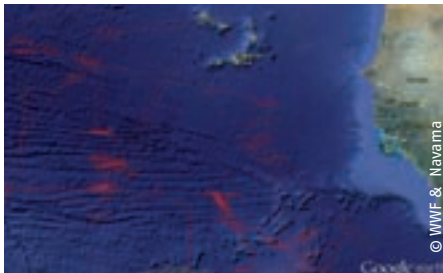
# FISHERIES AND LIVESTOCK

## QUOTAS

### Fighting illegal fishing from outer space

■ In order to fight illegal fishing and protect marine and oceanic fish stocks, the World Wildlife Fund (WWF) has developed a satellite-based system to monitor illegal fishing, in particular off the West African coast. The monitoring system is based on the Automatic Identification Service (AIS), an automated information exchange system between vessels designed to prevent collisions, which was launched by the International Maritime Organization (IMO) in 2000. The AIS provides real-time information via satellite concerning vessels, including their identity, current position, followed course and speed. But this is not the way WWF intends to use this system. A first analysis of the data collected by AIS during the last 11 months shows that 111 commercial vessels operating off the West African coast have delivered almost all their catches in EU countries. "There's nothing illegal about such activities," clarifies Alfred Schumm, manager of the WWF Smart Fishing Initiative. "But with these data we'll be able to check if vessels exporting to the EU are respecting fishing quotas."

Satellite map tracking vessels around Cape Verde



## INSECTS

### Farmed flies to feed fish

■ A South African business is breeding common house flies (*Musca domestica*) to use as meal for commercial fish farms. AgriProtein feeds its breeding stock waste human food, while the larvae produced consume slaughterhouse blood. It has taken five years to develop the larvae farming process. Around one million flies are kept in a cage of about 100 cubic metres producing about 1,000 eggs each. The larvae are hatched, harvested, dried and flaked, providing the same amount of edible protein as other widely used feeds. On a monthly basis the company currently produces 100 tonnes of wet larvae and 24.5 tonnes of feed.

## NUTRITION

### Feeding livestock with briquettes



The National Agricultural Research Institute of Niger (INRAN) has developed a highly nutritious animal feed from fodder, agro-industrial by-products (such as brewer's spent grain), cooking salt, gum arabic and cassava flour. This brownish multi-nutrient feeding block looks like a briquette but "has a higher nutritional value and greater keeping qualities compared to fodder, the most commonly used animal feed in Niger," says researcher Abdou Dan Gomm. "Keeping qualities of such feed are a major advantage when surpluses are produced, in order to prevent shortfalls in supply," he adds. Small ruminants need 1.5 to 2 kg of multi-nutrient blocks each day, while cattle need 2.5 to 3 kg.

## COCOA

### Valuing waste

■ Cocoa farmers in Bouba, southeast Cameroon, have begun turning cocoa shells – the hard, brown covering on cocoa beans – into livestock feed. Once beans have been shelled, the empty shells are dried in the sun on tarpaulins or in advanced dryers and then ground in a mill to a powder that may be fed to livestock. Cocoa shells contain theobromine, fat and vitamin D, and have a better nutritional output when dried and ground. This shell flour may be served as a substitute to maize to feed poultry, cattle and pigs up to 35% of their ration. Simon Crépin Bikelé, director of CIMAR (Centre d'insertion aux métiers agricoles et ruraux), the institution that initiated this process in Bouba, explains: "With shell recycling, livestock farmers can find animal feed in their environment. Cocoa farmers make a valuable use of the shells and do not use them only as crop fertiliser. This gives them the opportunity to develop a new activity in addition to cocoa production: livestock farming."



## CONSERVATION

### Increasing catches

Artisan fishing catches on the island of Maio, in Cape Verde, have increased by 30% in six months since 110 Concentrated Fish Feeding Devices (CFD) were installed on five of the country's 10 islands, where around 1,000 families depend on this work for their livelihood. In Ponta do Sol, Santo Antão, women from the Associação de Pescadores e Peixeiros (Association of Fishermen and Fishwives) are setting up a fish conservation movement against overfishing.

## DISEASE

### Livestock research funding

The Kenya Agricultural Research Institute (KARI) and the International Livestock Research Institute (ILRI) are collaborating with Canada's Vaccines and Infectious Diseases Organization to develop a vaccine against Contagious Bovine Pleuropneumonia, also known as lung plague. The disease is prevalent in 26 African countries, costing US\$2 billion annually.





## CLIMATE CHANGE

### Seasonal forecasts in local languages

■ A pilot project to communicate seasonal forecasts in local languages for small-scale farmers in Uganda is soon to be expanded to Ethiopia and Kenya. The African Climate Change Resilience Alliance (ACCRA), a consortium of NGOs, is supporting the translation of the forecasts in 12 local languages in Uganda. The translated scripts are disseminated through workshops, farmers' meetings, NGOs, schools and local government networks. The forecasts are also supplied on audio CD to FM stations broadcasting in local languages.

Dr Teshome, who heads the Ethiopian Meteorological Agency in Addis Ababa says that climate information must be available in local languages to make it useful for small-scale farmers. Programme coordinator, Professor John Muthama, believes the potential benefits of the intervention, in boosting productivity in the Greater Horn of Africa and enabling farmers to cope better with recurrent droughts, will see it being replicated in other countries. The project is also looking at innovative ways to provide information on health, agriculture, energy and infrastructure.

Ugandans community-based radio will have a crucial role in spreading seasonal forecasts in local languages



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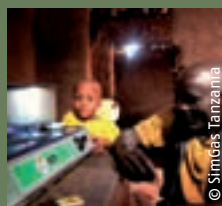
## BIODIVERSITY

### New marine species

A recent expedition discovered 734 different species of fish in the waters of East Timor, including six unknown species, and 360 coral species. For biologist, Rui Pinto, the survey "enables better management of areas that could benefit the country through eco and diving tourism." Timor waters are also colder than others in the region, which reduces the impact of rising sea water temperatures.

## ENERGY

### Biogas from domestic and farming waste



© Simoes Tanzania

In Tanzania, SIMGAS has developed two affordable biogas systems: GesiSafi is designed for households and digests organic kitchen waste; GesiShamba systems are intended for farms, and are fed with manure, kitchen and crop waste. GesiSafi is available in three sizes to meet the needs of different users with the smallest designed to use the waste produced by an average family household, saving 60% of daily charcoal costs. Larger systems are suitable for schools and hospitals. SIMGAS aims to have over 1,000 rural and urban households using the biogas systems to provide fuel for cooking and lighting by the end of 2012.

## DAMS

### Capturing rain water

■ Four dams are being built in Cape Verde to improve the agriculture and livestock sectors, supply water to the population preventing urban migration and combat desertification. The Figueira Gorda, Salineiro, Faveta and Saquinho dams on the island of Santiago have been built with funding from the Portuguese Government. Figueira Gorda will be the largest dam in the country, with a storage capacity of 1.8 million m<sup>3</sup> of water, which should provide water for 480 farmers, occupying a total area of 150 ha. These dams are mainly supplied by rainwater which only falls between July and October.

The first dam built in Cape Verde, in Poilão, also on Santiago Island, was finished in 2006 and paid for by China. It now benefits around 300 farming families. After it was completed it enabled drip irrigation systems to be installed, replacing the earlier system using flooding, which has resulted in higher and better quality agricultural produce, including potato, and led to the emergence of fresh fruits and vegetables in the island's markets. The Cape-Verdian Government has plans to build a total of 17 dams and over 70 dykes by 2016.



© L Soares

The Poilão Dam, Cape Verde

## FORESTS

### Evaluating threats

Ten countries in the Congo Basin – Burundi, Cameroon, Chad, Congo, Gabon, Equatorial Guinea, The Central African Republic, The Democratic Republic of the Congo, Rwanda and São Tomé and Príncipe – are creating a system for monitoring their forests to evaluate the impact of direct threats. The project will be managed in partnership with the Comissão das Florestas da África Central (Central African Forest Commission) and FAO and financed by the Congo Basin Forest Fund.

## PACIFIC

### Leaders discuss agriculture and forestry

Ministers of Agriculture and Forestry representing all 22 Pacific Island Countries and Territories, met recently to discuss priority issues for the region. The leaders recognised the need for improved nutrition, by encouraging people to make healthier food choices and boosting production and consumption of local foods. Other issues included the need to enhance biosecurity, build resistance to climate change, improve national land use policies, increase the contribution of agroforestry systems, strengthen national and regional research capacity, address zoonotic diseases and develop policies to promote organic production.

## COCOA

### Quality products for a fair price

Thanks to the cocoa bean drying techniques developed by the Institute of Agricultural Research for Development (IRAD) in Cameroon, cocoa farmers in Bouba (southwest Cameroon) are getting a better price for their product. The process consists of putting the beans in cabin dryers or in Samoan ovens that keep the beans safe from smoke, unlike traditional ovens.

## POULTRY

### Improved diet

■ A study carried out by the Institute of Agricultural Research for Development (IRAD, Cameroon) has revealed that oil palm slurry, an agricultural waste generally disposed of in the natural environment, can be used as a partial replacement for maize in broiler chicken feed, thereby reducing feed costs. Maize normally constitutes 90% of broiler feed, but is becoming more and more expensive on the Cameroonian market. In order to achieve high growth rates, researchers advise farmers to substitute 7% of the maize component with oil palm slurry, in making feed for 20 to 50-day-old chickens. With this diet, broiler chickens gain nearly three times more weight than chickens fed with traditional feed and their fat levels remains normal. At the same time, farmers reduce their feed costs for broiler chickens in final stage of growth by 17%. This is good news for poultry farming in Cameroon, a sector that every year has to face a shortage of maize, due to constantly rising demand.



Palm oil seeds are being used to feed poultry

## ENERGY

### Innovative rural energy solution

A new 'green' energy innovation that generates potable water, electricity, biogas and organic fertiliser from untreated water, solar energy and animal manure is being tested in western Kenya. The inventors of the KUDURA rural village energy system believe the innovation will reduce deforestation and carbon emissions, and improve health and agricultural output in the region.

## CLIMATE

### Defying droughts

In Tanzania's central plateau, maize has not been widely cultivated for many years because of severe and recurrent dry spells. Crops that suffer less under drought conditions, including millet and sorghum, have instead been grown. But in September 2012, farmers in Dodoma achieved a successful harvest from five maize varieties being tested under the Water Efficient Maize for Africa (WEMA) project. WEMA is currently being implemented in Kenya, Mozambique, South Africa, Tanzania and Uganda, identifying maize varieties that will increase food production and help farmers cope with climate change.



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## CATTLE

### Successful crossbreeding

■ The Experimental Centre in Toukounouss, northwest Niger, has developed an artificial insemination programme to improve meat and milk productivity from the Azawak cattle breed. Launched in 2009, this program has proven to be successful. Thirteen of the 40 female Azawak cattle inseminated in the first year with Pardo Alpino semen (a Swiss cattle breed), have given birth in 2010. In 2011, 36 more females were inseminated, raising the total number of births to 16 in September 2012. Mahaman El Hadj Ousmane, Minister of Livestock, is delighted: "The new born cattle have adapted to climate and environment without any additional inputs and they have survived." He has promised to develop free extension services in insemination, in order to make the programme sustainable. Azawak female cattle produce 5 to 10 litres of milk a day during the rainy season. However, a daily production of 10 to 15 litres can be expected, even outside of the rainy season, from a female crossed with the Pardo Alpino. The successful program was made possible through a partnership between Belgium, Italy and Niger.

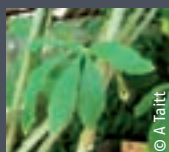
Artificial insemination is improving productivity of Azawak cattle



© R Faldutti

## CASSAVA

### New livestock feed



© A Taitt

Scientists from Jamaica's Ministry of Agriculture and Fisheries' Bodles Research Station have made inroads towards successfully developing animal feeds from cassava. The scientists have been experimenting with feeds containing 30% cassava, in place of imported maize. Recent trials have found that pigs receiving the alternative feed develop at a similar rate to animals consuming conventional feeds. Other locally-grown feed inputs, including sorghum, are also being studied, with Jamaica keen to increase the competitiveness of its livestock industry in the face of imports, and strengthen its position in global markets.



## SERVICES

### Electronic wallet increases access to fertiliser

■ Using an electronic wallet system, almost one million farmers in Nigeria have bought fertiliser at subsidised rates from accredited agrodealers. The system sends an alert to a farmer's phone, detailing how much fertiliser they can purchase at the subsidised price. On payment at a bank, farmers are given a slip which can be redeemed at local accredited agrodealers, who are then reimbursed by the government. Fertiliser companies and the International Fund for Agricultural Development (IFAD) have provided training for agrodealers in giving extension advice to farmers when they collect their fertiliser. To expand the project, the government plans to register more farmers, increase the number of inputs available through the system and disseminate vital information, such as meteorological reports. Access to fertiliser at an affordable rate was almost impossible for smallholder farmers in Nigeria until 2011. The service is designed to prevent middlemen selling fertiliser to farmers at exploitative prices and to stop fraudulent distribution of fertilisers by government officials.

## TECHNOLOGY

### Smartphones for community workers

In Uganda, community knowledge workers (CKW) equipped with smartphones are providing up-to-date information on market prices, weather, pests and diseases and best farming practices to 16,500 farmers. The agricultural information is held in a central database run by Grameen AppLab. The CKWs also collect data on farmers' needs from farming villages to pass to NGOs and the Government.

These 6 pages were produced with contributions from: **E Aidasso** (Benin), **O Alawode** (Nigeria), **B Bafana** (Zimbabwe), **O Djibo** (Niger), **G Kamadi** (Kenya), **J Karuga** (Kenya), **O Kiishwelo** (Tanzania), **P Luganda** (Uganda), **A Matho** (Cameroon), **M Mohale** (Lesotho), **A Moorhead** (Fiji), **C Nfongang** (Cameroon), **P Pink** (Jamaica), **V Prasad** (Fiji), **F Tafuna'i** (Samoa) and **E Xavier** (Timor Leste).

## EXPORTS

### Baked breadfruit

A new heat treatment for breadfruit, based on traditional cooking methods, has been approved by Australian Biosecurity and is under assessment by New Zealand, for shipments from Samoa. Expert advice was provided by the AusAID-funded Pacific Horticultural



© H Barrison

and Agricultural Market Access (PHAMA) Programme to develop the simple protocol which uses commercial ovens in a large bakery in the capital Apia. Fruits are baked and packed hygienically for transport to Australia and hopefully soon to New Zealand. Breadfruit is a fruitfly host, and without treatment larvae may contaminate shipments and spread the pest.

## PROCESSING

### Diversifying into fruit

■ The Private Sector Competitiveness Project (PSCP) is rolling out a fruit production programme in Mahobong, Leribe District in Lesotho. This initiative follows three pilot projects which tested whether fruit production could thrive in the area. With the help of horticulture experts, farmers were able to produce and sell high quality peaches, gooseberries, cherries, apples and plums to supermarkets in Lesotho and South Africa. The World Bank is injecting €1.62 million to help create an investor-friendly business climate and to support economic diversification in Lesotho. Mahobong was selected for the roll-out due to the area's accessibility, easy access to water and electricity and the availability of a nearby storage facility. Nine farmers have already combined their land and embarked on production of apples, plums and peaches. In September 2012 they planted 14,000 fruit trees on 11.4 hectares, which will be producing harvestable fruit within three years. The farmers plan to form an association and eventually operate as a company.

## NEW MARKET

### Boost for Fijian ginger

Nearly 10 years after it first submitted a formal request, Fiji has been given approval to export fresh ginger to Australia. This is very good news for Fijian farmers, who are seeking higher value alternatives to sugar. The approval process was delayed because Australia also grows the commodity, raising biological and political concerns about ginger imports.



© M Mohale

Women farmers water newly planted trees at the roll-out site in Mahobong

## SUGAR CANE

### Fairtrade in Fiji

Fairtrade certification of sugar cane is producing significant economic benefits for around 4,000 smallholder farmers in Vanua Levu, Fiji. Tate and Lyle Sugars is paying a premium of US\$60 (€45) per tonne to the Labasa Cane Producers Association, in addition to the standard price of around US\$29 (€22) paid by the Fiji Sugar



© D Weekly

Corporation. Benefits already realised from the premium include subsidies for farm inputs and funding for community projects, including water tanks and electronic equipment for schools, public toilets and the restoration of bridges. In 2012, Fairtrade funds will go towards replanting more productive varieties of cane.



**Sithembile Ndema Mwamakamba**, from Zimbabwe, works at the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) where she coordinates the Youth in Agriculture project. She also manages the Women Accessing Realigned Markets (WARM) project designed to strengthen the capacity of women farmers to influence agricultural policy development in Southern Africa.

*In September 2012, the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) convened a regional policy dialogue about the engagement of youth in agriculture value chains. What guidelines came out from the meeting?*

The meeting recommended that governments implement existing agricultural policies and ensure better coordination among institutions in the roll out of programmes, as well as provide incentives targeted to youths such as loan facilities, access to land, markets and training. Other recommendations were to encourage use of ICT in agriculture and promote new technologies and encourage youth leadership and volunteering in agriculture to enable them to develop their skills and trigger their interest. It was also recommended to introduce mentorship and pre-job training programmes and to include the youth in policy decisions.

*Have concrete measures been taken to involve young people in decision making?*

A number of high level youth conferences and policy dialogues have been held. In 2011, the 17th African Union Summit was on the theme “Accelerating Youth Empowerment for Sustainable Development”. Prior to the summit, young people discussed key issues they wanted addressed by the heads of state. FANRPAN has also been instrumental in engaging young people in its food security policy dialogue. In 2011, FANRPAN convened its Annual Food Security Policy Dialogue under the theme “Advocating for the Active Engagement of the Youth in the Agricultural Value Chain” and, in 2012, our dialogue focused on moving from policies to practice in that engagement. In these

SITHEMBILE NDEMA MWAMAKAMBA

## Engaging youth in agriculture

With a greater focus on value chains in recent years, there are now far more opportunities for young people to find rewarding careers in the food and farming sector. However, governments need to formulate policies that capitalise on the energy and entrepreneurship of the youth to successfully attract them to the sector.

platforms young people shared their aspirations and what they want to see change in order for them to be active participants with policy makers, farmers, researchers and civil society representatives.

*Agriculture is often seen as employment only for the very poor and illiterate. What does FANRPAN propose to overcome that prejudice?*

Many young people have little or no skills and are excluded from productive economic and social life. It is estimated that about 133 million young people (more than 50% of the youth population) in Africa are illiterate. FANRPAN has launched a programme to engage youths in the agriculture sector through capacity building and networking, action research to generate evidence and inform policy processes, and policy advocacy in food security, agriculture and natural resources. Key activities include: building and/or strengthening the knowledge and capacity of youths to contribute to agricultural policy development, training them in the value chain approach and its application for the development of selected agricultural products and creating awareness among stakeholders of the potential contribution of youth to agriculture, economy and poverty reduction.

*Could you give an example of a concrete result from that programme?*

At FANRPAN, young people are recognised as a major stakeholder group and we use policy dialogues to enhance the voices of the youths, by equipping them with skills for effective engagement.

*Are governments conscious of the importance of engaging young people in agribusiness?*

Governments are very aware of the importance of engaging young people in agriculture, especially given the high incidence of youth unemployment in sub-Saharan Africa, estimated to be over 20%. In 2006, African heads of state signed the African Youth Charter, which recognises the right of young people to be free from hunger and calls on governments to take measures to enhance the attractiveness of rural areas to young people; train them to take up agricultural, mineral, commercial and industrial production using contemporary systems and promote the benefits of new ICTs to gain access to markets. Through the Charter, governments also agreed to provide land as grants and access to credit and facilitate the participation of young people in the design and implementation of national development policies and poverty reduction strategies.

*Could you mention a successful case of engagement of young people in the agricultural sector?*

Calvin Kamchacha, 28 years old, is the founder and executive director of Farmers Forum For Trade & Social Justice (FAFOTRAJ), an NGO in Ghana and Malawi working to develop market-linked trading systems, policies and structures that promote fair trade and create sustainable wealth and decent self-employment opportunities for women and young farmers. He also leads an agribusiness development programme which aims to strengthen the capacity of youths and women farmers in the value chain by training them in entrepreneurship and facilitating their linkage to input suppliers, financial institutions, regulators and other key service providers in the agribusiness sector. ■



Agricultural growth corridors across Africa are gathering momentum as private investors, governments and donors seek to accelerate investment in African agriculture. Ambitious public-private partnerships aim to boost agricultural productivity and improve trade opportunities in order to drive wealth creation, poverty reduction and improved food security. But with these initiatives still in their infancy, the proven benefits to smallholder farmers are yet to be realised.

## Agricultural Growth Corridors New routes to opportunity?



17 | **VIEWPOINT**  
Mark Pearson: A new vision for  
Africa's trade corridors

18 | **FIELD REPORT FROM MOZAMBIQUE**  
Funding catalyst for  
commercialisation

**T**he concept of corridors dates back many decades in Africa and addresses one of the largest continuing problems with developing agricultural economies in much of the continent: access to large markets and ports. For some landlocked countries, transport costs can equal 77% of the value of exported goods themselves. To overcome this, corridors have typically involved the establishment of transportation networks along which the production of trade-oriented goods is promoted and established. In the past, corridors were often associated with extractive policies, serving as channels through which natural resources and agricultural products were taken out of countries. But the concept is now being revisited as a tool for agricultural development, bringing market and input access to farmers in more parts of Africa. Governments are linking up with some very large private partners and donors to bring investment to agribusinesses in these areas of their countries.

The new vision of agricultural growth corridors has involved public-private partnerships (PPPs) from its inception. The idea has long been promoted by agribusiness; in Mozambique and Tanzania, a major instigator was Norwegian fertiliser company YARA. And many investments in farms follow in the wake of the larger economic needs behind multi-billion-dollar transport investments. Kenya's new corridor is being built along an oil pipeline from Southern Sudan to Ethiopia, while upgrades in Mozambique have facilitated the transport of coal to the coast. In each country, this has opened the question of who stands to benefit from these "trade super highways": smallholders, or large commercial ventures with the resources to invest in valuable crops and inputs and to reach out to distant – even international – buyers. The architects have addressed this with plans to link businesses together in clusters, guide investment to promising value chains, and provide catalytic funding for new ventures by small farmers.

## An invitation to agribusiness

The Southern Agricultural Growth Corridor of Tanzania (SAGCOT) is a partnership to develop the agricultural potential of a southern Tanzanian corridor, stretching through a region that has long been at the country's economic margins. Initiated at the 2010 World Economic Forum Africa by the Government of Tanzania and a group of agribusiness and other private companies, it represents the largest agricultural PPP in the nation's history. The plan involves some new state investment in roads and dams, as well as reducing tax burdens on agribusinesses and clarifying the allocation of land in the region. But its main thrust is in developing investment partnerships, particularly between international investors and agribusiness projects. These projects, in turn, are expected to connect with small farmers through contract models, by providing outgrower schemes or irrigated land in farm blocks.



The government is tying this directly to the Comprehensive Africa Agriculture Development Programme (CAADP), and is intent on smallholders sharing in the growth. To do this, they are identifying and promoting clusters of businesses, infrastructure and outgrower programmes tied together in value chains. Six fast-track areas are mapped out on the SAGCOT website. In one, rice growing schemes are building mills to draw on a European Commission-funded small hydroelectric project. SAGCOT is young, and highlighting positive opportunities has not yet translated into investment. The only large venture so far has been by YARA, which is building a US\$20 million (€15.3 million) fertiliser terminal at the port. However, a cooperation framework signed at the 2012 G8 Summit includes letters of intent from 19 other companies, including Monsanto and Unilever. More investment was sought at a Tanzania Agribusiness ►



Map of the Southern Agricultural Growth Corridor of Tanzania (SAGCOT)



are promoting investments in activities such as farming and milling rice, banking on unmet domestic demand and future irrigation projects. The Nacala Corridor is attracting interest for bananas and other export crops. The Zambezi Valley is targeted for cotton, maize, rice and soybeans. A number of large multinationals have signed on or expressed interest in the corridors, including SAB Miller, Nestlé, TATA, Chiquita, carbon-offset forestry firm Green Resources

and bioethanol producer Principle Energy. A Country Cooperation Framework released in September 2012 outlined many such intentions, as well as public and donor commitments.

Kenya is in the midst of a vast infrastructural project, at an estimated cost of over US\$20 billion (€15.6 billion), to develop the Lamu Port-South Sudan-Ethiopia Transport Corridor (LAPSSET). This project of rail, roads, port expansion, and airports is being built alongside new oil pipelines running from South Sudan and Ethiopia to the port of Lamu. While it is years from completion, Kenya is already planning to harness the 1,700 km route for agriculture through PPP efforts. The government has identified six growth areas with untapped agricultural potential along the corridor in northern Kenya. Early analysis suggests nine value chains that may prove attractive for investment: mangoes, sugarcane, beef, pineapples, avocados, rice, French beans, Asian vegetables and cattle hides.

### Making corridors work for all

It seems quite certain that the investments surrounding corridors will transform these regions. It's not a foregone conclusion, however, that smallholder farmers will share in the benefits or the partnerships. Many fear that large investments in agribusiness by transnational companies are unlikely to be in their interests or the interests of their communities. The corridors have echoed with talk of land grabs, vested corporate interests and resource extraction. It will take concerted effort to ensure that opportunities exist for small farmers, as well as small traders, processors and transporters. Several partners are working on this. Grow Africa, a platform created by the African Union New Partnership for Africa's Development (NEPAD) and the World Economic Forum, is taking a coordinating role in all of the new corridors to see that they support the goals of the CAADP.

Grow Africa is developing partnership initiatives in Burkina Faso, Ethiopia, Ghana, Kenya, Mozambique, ►

Irrigation in the Beira Corridor to improve yields. Along the Beira Corridor, partners are promoting investments in activities such as farming and milling rice

► Showcase in November 2012 in Dar es Salaam, promoting opportunities in livestock, rice and sugar.

### Clusters and value chains

Mozambique is investing in three corridors, the most prominent of which is a high profile rail and road project extending from the Zimbabwean border and coal-rich northwest of the country to the port of Beira. The Nacala Corridor in the northwest, and the Zambezi Valley Corridor, which follows the border with Zimbabwe, are also results of infrastructural investments led by the mining and petroleum industries. The expenditures between all three areas extend to some US\$4 billion (€3 billion). The cluster approach is being implemented here as well, tying businesses and outgrowers together in value chains that can attract investment with a likelihood of quick returns. Along the Beira Corridor, the partners



Rwanda and Tanzania. In the corridors, Grow Africa is introducing potential partners to clusters and value chains that incorporate small producers. The platform has helped develop pro-poor investment blueprints, and is sponsoring investment forums and information sharing. However, it has yet to prove on a large scale that investors are interested in these clusters, or that they will remain profitable.

The not-for-profit agricultural development company AgDevCo has also played a leading role through the style of investment it employs in managing the Beira Agricultural Growth Corridor (BAGC) catalytic fund. With this US\$20 million (€15.7 million) fund, it seeks out investments that will benefit small farmers and local communities,

Above: President Jakaya Mrisho Kikwete with Yara International CEO Jorgen Ole Haslestad planting a mango tree during a ceremony to launch the fertiliser terminal at Dar es Salaam port

Below: BAGC extends from the Zimbabwean border and coal-rich northwest of Mozambique to the port of Beira

## A hub for trade

West Africa is seeing efforts to improve transport corridors for cross-border trade through the African Union Commission's Programme for Infrastructure Development in Africa (PIDA). This programme, planned in partnership with the UN Economic Commission for Africa, African Development Bank and NEPAD, is to be implemented between 2012 and 2040. Investments in areas such as the Abidjan-Lagos Coastal Corridor and Dakar-Niamey Multimodal Corridor make up part of the US\$25 billion (about €19 billion) being spent to ease transportation around the continent. However, these transport routes have not been directly tied to investment for agricultural growth. Instead, a regional approach has been taken by USAID in West Africa. This has been led by trade rather than investment, linking producers with international buyers. Launched in 2003, the West Africa Trade Hub is promoting the development of trade-oriented industries across a span of 21 countries through a programme of technical assistance and consulting. Its aim is simply to lower the costs of doing business and of international trade – seeking out improvements from packaging and quality standards to transportation and banking. Thousands of companies, banks, governments, and other organisations have received targeted training from the West Africa Trade Hub, and between 2007 and 2011 the initiative can claim to have facilitated some US\$175 million in exports and nearly 10,000 jobs. Instead of a single corridor of trade, the focus is kept on six target product groups and their flows across the region. These include cashews, shea, seafood, and West African specialty foods.

securing long term, concessionary “patient capital” to get new value chains up and running. The BAGC catalytic fund is targeting a large number of small, early-stage operations with venture capital ranging from US\$50,000 (€38,400) to US\$500,000 (€384,000). AgDevCo undertakes each

investment as a joint venture, and asks that each applicant demonstrate direct benefits to smallholder farmers and local communities. A similar US\$65 million (€51 million) catalytic fund is under design for SAGCOT, with commitments from the Government, USAID and the World Bank. As a partner in joint ventures, AgDevCo is bound to provide ongoing support and to see that the projects become self-sustaining and sustainable. This, in a nutshell, is a model for the kind of investment that will be needed if small farmers are to thrive in the corridors – but again, it is too early to say whether other venture capitalists outside of the donor-fuelled catalytic funds will be as committed in their support.

For instance, it is evident that YARA, an early participant, has its own guiding ►





► interest in delivering fertiliser to new markets. The company had a central role in creating the BAGC, but despite talk of “patient capital”, YARA backed out of the partnership early on. Upon receiving unfavourable reports on the suitability of the building site for their fertiliser terminal in Beira, the company moved their plans to Tanzania and their support to SAGCOT. This is the norm of international investment, and “patient” capital is not. The success of Kenya, Mozambique and Tanzania in keeping big investors interested in smallholders and social venture capital will reveal how far PPPs can go towards meeting development goals. While companies wait for the corridors to produce packages ripe for investment, donors and farmers are still looking for evidence of the oversight, long term commitment and pro-poor outcomes that justify public expenditure for private investments. ■



In the corridors, SAGCOT is introducing potential partners to clusters and value chains that incorporate small producers

## Viewpoint

Mark Pearson is programme director of TradeMark Southern Africa (TMSA), which aims to improve trade performance and competitiveness in the Eastern and Southern Africa regions.



### A new vision for Africa's trade corridors

#### What are TMSA's key achievements in supporting development of corridors?

We have done some very pioneering work in the North-South corridor, introducing a holistic approach to reducing the cost of doing business in sub-Saharan Africa. When we talk about corridors, this is not just improving the infrastructure but also trade facilitation. So we don't just fix a bridge but we work on how trade can be improved and costs reduced by fixing the bridge, which translates into improved investment opportunities, better incomes and job creation. We also provide technical and policy support in preparing countries for the Tripartite Free Trade Agreement, which aims to liberalise trade amongst the 26 Member States of the East and Southern African region.

#### Who benefits from new trade corridors?

At TMSA, we identify the bottlenecks to trade. If you improve phytosanitary measures across borders, for example, then smallholders and agribusinesses stand to benefit. If you improve infrastructure and reduce trading time, then commercial ventures and international buyers also gain. One of the challenges in Africa is the cost of doing business; if it costs around US\$1,500 (€1,150) to ship a container from Asia to the eastern coast of Africa, it costs a further US\$8,000 (€6,180) to move it from Durban to Lusaka. So by tackling the bottlenecks, we can improve the potential for trade.

#### What are the next steps for working on corridors?

We need to look at how people living along the corridor benefit from improved transport and trade facilitation. What are the constraints for small-scale traders? Are they looking to export or to use the corridors for domestic or regional trading and what are the issues that need to be addressed?

#### And the challenges for the further development of trade corridors?

One challenge is in keeping targets, meeting targets and ensuring that corridors are benefiting the small players. Also, understanding what Africa's transport needs will be in the future. In the past, we've focused on extraction of minerals for export. In the future those minerals could be used to drive new businesses within Africa, requiring a wholly different infrastructure model. The other big challenge is who supplies the financing, so that Africa can grow at the pace we all expect.

## KEY FIGURES

**4,100** km of transport routes in Kenya, Mozambique and Tanzania are the focus of PPP efforts.

**€1,277** is the average cost of moving a 20 foot container of goods out of Kenya, Mozambique and Tanzania for export.

**€66.9** million of catalytic funds in Tanzania and Mozambique will kick-start agribusinesses.



# Funding catalyst for commercialisation

Launched in 2009 at the World Economic Forum, the Beira Agricultural Growth Corridor (BAGC) is a multi-stakeholder initiative in Mozambique. BAGC seeks to stimulate a major increase in agricultural production and trade involving smallholder farmers in an area whose growth potential has yet to be fully realised.

**T**owering steel cranes lower containers of fertiliser bound for Malawi, in the busy port of Beira, Mozambique. Hours later, the cranes offload rice into freight containers heading west to Zimbabwe, while Mozambican cashew nuts bound for the European market are loaded onto a cargo ship. The port is a vital part of the BAGC initiative, which aims to transform local and regional trade and enable Mozambican smallholder farmers to break into commercial production. One of three trade corridors in Mozambique, the BAGC also provides a vital link between the land-locked countries of Malawi, Zambia and Zimbabwe and overseas markets.

Under a public-private partnership involving the Government of Mozambique, the private sector, local

farmers and international investors, about 4,000 smallholders have so far signed outgrower contracts, which guarantee a market for their maize, groundnuts and honey. Spearheading one of the most ambitious agriculture development projects in post-war Mozambique, the BAGC initiative aims to have 50,000 smallholder farmers benefiting by 2015. A total investment of US\$1.7 billion (€1.3 billion) from international business – including Agriterra, SABMiller, Green Resources, Olam International, and YARA International – is expected to generate US\$1 billion (€0.77 billion) annually in farming revenue and stimulate investment along the entire agriculture value chain.

For Emerson Zhou, BAGC executive director, the initiative represents a significant opportunity for increased ►

Below: In the busy port of Beira (Mozambique), containers of fertiliser are offloaded

On page 19: Transport in Beira port, a crucial trade gateway located near Mutare (Zimbabwe) and Durban





► food production, trade growth and economic expansion, both for Mozambique and the Southern African region. “The Beira Corridor is the route of choice for regional imports and for stimulating agricultural productivity in Mozambique,” says Zhou. “Beira port is also crucial in terms of its location, just 300 km from Mutare (Zimbabwe’s fourth largest city) and closer than Harare to Durban. The challenge has been sorting out the infrastructure inefficiencies, the rail and road infrastructure, which are the target of current investments.” Piggybacking on the Beira Corridor’s reputation as the transport hub and trade gateway for the region, the BAGC initiative has bolstered Southern Africa as a target for investment in infrastructure and mining, but also for agriculture. The corridor incorporates about a third of Mozambique’s 36 million ha of arable land, 85% of which is unutilised, largely through lack of irrigation and other infrastructure.

### Commercial catalyst

To kick-start commercially-viable agriculture in the corridor region, BAGC has created a US\$20 million (€15.7 million) social venture capital fund, which supports early-stage businesses. Managed by AgDevCo, the catalytic fund provides low-cost funding between US\$200,000 (€154,000) and US\$1 million (€0.77 million) to businesses that satisfy social criteria in providing direct benefits to smallholder farmers and local communities. “The fund has been operating for 18 months now and we have made 12 investments to date in Mozambique, in a range of agriculture businesses, including horticulture, livestock and grain production. We have disbursed US\$2.8 million (€2.15 million) and plan to invest a further US\$8 million (€6.2 million) in 2013,” says AgDevCo Mozambique country director, Chris Isaac.

Busani Bafana

## To find out more

### SAGCOT

Southern Agricultural Growth Corridor of Tanzania  
[www.sagcot.com](http://www.sagcot.com)

### BAGC

Beira Agricultural Growth Corridor, Mozambique  
[www.beiracorridor.com](http://www.beiracorridor.com)

### LAPSSET

Lamu Port–South Sudan–Ethiopia Transport Corridor  
on Kenya’s Vision 2030 website  
<http://tinyurl.com/9avm79l>

### CAADP

NEPAD’s Comprehensive African Agricultural  
Development Programme  
[www.nepad-caadp.net](http://www.nepad-caadp.net)

### Grow Africa

Partnership platform supporting the achievement  
of CAADP in seven countries  
[www.growafrica.com](http://www.growafrica.com)

### AgDevCo

Non-profit “social venture capital” company that is  
managing and supporting the catalytic funds  
[www.agdevco.com](http://www.agdevco.com)

### USAID West Africa Trade Hub

[www.watradehub.com](http://www.watradehub.com)

### PIDA

Programme for Infrastructure Development in Africa,  
the African Union Commission’s plan for 2012–2040  
<http://tinyurl.com/9cay4pg>

### Agriculture Green Growth Portal

SAGCOT’s online portal for discussion of green  
growth innovations in the corridor  
[www.agriculturegreengrowth.com](http://www.agriculturegreengrowth.com)

### Transformational Partnerships: Innovative Approaches to Addressing Food Security in Africa

A report by the German Marshall Fund of the United  
States, using SAGCOT as a case study in PPPs  
<http://tinyurl.com/9rgbnh6>

### Agricultural Growth and Poverty Reduction in Africa: The Case for Patient Capital

Briefing by AgDevCo  
<http://tinyurl.com/9rpd77l>

### Agricultural Growth Corridors Equals Land-grabbing? Models, Roles and Accountabilities in a Mozambican case

BAGC study by Randi Kaarhus, Norwegian University  
of Life Sciences  
<http://tinyurl.com/8wgrznh>



# A piquant passion

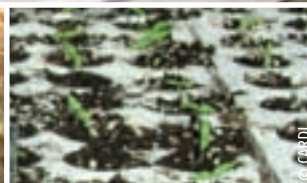
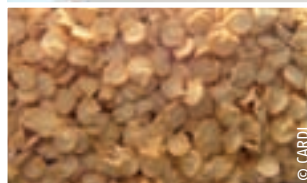
While the Caribbean can boast the hottest peppers in the world, exports have been hampered by variable quality and quantity. But now the industry is being fired up by a range of initiatives.

With traditional Caribbean commodities facing stiff competition in world markets, Caribbean countries are recognising the need to diversify their export portfolio. Of great potential are the indigenous pepper landraces, used to make the hot pepper sauce synonymous with Caribbean cooking. Belonging to the *Capsicum chinense* Jacquin species, they span the entire range of pungency levels from mild to superhot. Most popular are the hotter varieties, which surpass the *C. annuum* L. types grown in Mexico, Europe and Asia, in pungency and capsaicin content. The Trinidad Moruga Scorpion variety currently occupies top spot as the 'hottest pepper on the planet'. And beyond food production, Caribbean capsaicin has great potential for making value added products, such as nutraceuticals (food product with health benefits).

According to a 2007 study commissioned by the Caribbean Community (CARICOM), the United States is by far the most attractive international market, in terms of size, proximity and potential for growth in pepper exports. Miami, in particular, offers lower freight costs and high, relatively stable prices. Currently, around 0.45 million kg of fresh hot peppers are exported each year from the Caribbean to the US, but to compete effectively and increase market share, the Caribbean pepper industry must overcome problems with both variable quality and quantity of production.

## Firing up production

To meet this target, the Caribbean Agricultural Research and Development Institute (CARDI) has been mandated to develop the industry with a programme designed to address challenges in the value chain. These include seed



Above: Grading hot peppers for export  
Below: Hot pepper seeds, seedlings and cross-sections of the Trinidad Scorpion variety

quality, poor yields and the improvement of key pepper varieties. Currently, quality seeds of two varieties – West Indies Red and CARDI Green – are being produced and marketed by the Institute, with these varieties now dominating exports, together with Caribbean Red and Yellow Scotch Bonnet. Several other varieties have been identified for commercialisation, including Tiger Teeth, Pimento, Seven Pod and Trinidad Scorpion. In 2010, CARDI signed a memorandum of understanding with Caribbean Chemicals and Agencies Limited (CCAL), the largest agricultural input supplier in the region. As a result, the company is using its distribution networks to market CARDI-produced hot pepper seeds to Brazil, Costa Rica, Guatemala, India and Taiwan.

For high yields and quality, adequate irrigation of pepper crops is essential. Planting densities in the Caribbean tend to be low, contributing to disappointing yields of between 15,000-40,000 kg per ha. Pests and diseases also pose a challenge, with whitefly and cucumber beetle affecting production in Belize and viruses impacting on crops in several countries, including Barbados. To address

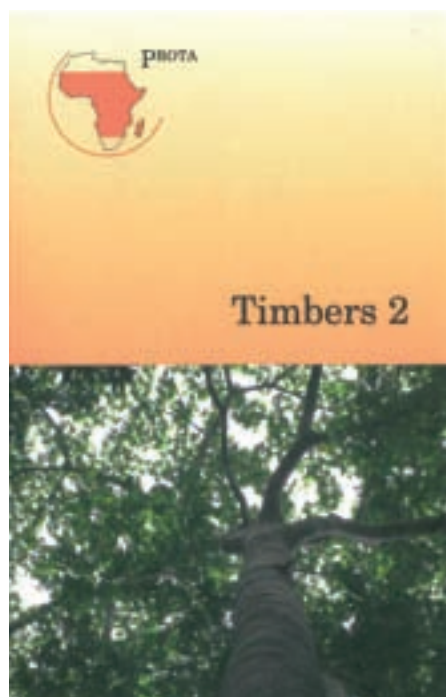
challenges and boost production, a hot pepper production manual for farmers has been developed by CARDI including choice of variety, field and soil preparation, disease management, harvesting and post-harvest operations.

## Communication is key

According to the CARDI marketing unit, enhancing the flow of information throughout the pepper value chain would have a radical impact on the fortunes of the industry. This conclusion is supported by a 2011 University of the West Indies study, conducted in Dominica, which urges the island to improve information sharing and communication among all stakeholders within the supply chain in order to boost production and competitiveness. Meanwhile in Trinidad and Tobago, the authorities are actively pursuing an intellectual property claim on the Scorpion variety. CARDI experts believe such protection is vital in the context of work being done to promote the use of capsaicin in nutraceuticals and other value added products. This, they believe, is an area where much future market expansion lies, and where the Caribbean hot pepper industry can compete most successfully in world markets. ■



# Useful timbers



## Timbers 2: Plant Resources of Tropical Africa 7(2)

Edited by R H M J Lemmens, D Louppe & A A Oteng-Amoako  
 PROTA/CTA, 2012; 804 pp. + CD-ROM  
 ISBN 978-92-9081-496-2  
 CTA no. 1695  
 60 credit points

diagrams of the major plant features. The level of detail across a range of subjects is highly impressive. As well as technical sections on wood anatomy and plant description, there are sections covering propagation and planting, management methods and threats to genetic diversity.

The volume reaffirms the extraordinarily diverse uses that trees provide. The African Oak (*Azela africana*), for example, has orange to golden brown heartwood that resists fungal, termite and borer attacks. Equally resistant to many chemical products, it is even preferred to metals and synthetics for making vats and precision industrial equipment. And beyond its primary value as a timber, the tree is used to supply fodder, soil fertility, medicines and ornaments. For a comprehensive treatment of African trees, look no further.



The Plant Resources of Tropical Africa programme aims to produce an encyclopaedia on more than 7,000 useful plants. This latest addition completes a two part volume on trees whose primary use is timber, detailing 693 species from 60 families. Comprehensive descriptions of the 150 most important species include useful distribution maps and



# Sustainable food system



## Organic Agriculture for Sustainable Livelihoods

Edited by N Halberg & A Muller  
 Earthscan from Routledge, 2012; 296 pp.  
 ISBN 978-18-4971-296-5  
 £29.99 • €37  
 CTA no. 1691  
 20 credit points  
 Routledge  
 130 Milton Park  
 Abingdon  
 OX14 4SB - UK  
 Fax: +44 1235 400 401  
 www.routledge.com



Agro-ecology and organic farming methods have achieved growing recognition as a vital part of sustainable intensification efforts for poor, smallholder farmers in difficult environments. But to what extent do these farming systems - founded on soil and livestock health, diverse ecology, fairness in use of resources and care of the environment - fulfil the expectations placed on them? Gathering experience from around the world, including case studies for Brazil, Costa Rica, Sri Lanka and Uganda, *Organic Agriculture for Sustainable Livelihoods* offers comprehensive answers across a number of key areas.

The first half focuses on farm and value chain level activities, including a review of literature on what impact organic adoption has on food security, and the potential for organic farming practices to help farmers adapt to climate change. Later chapters take a wider view, in terms of societal and policy aspects. A final chapter examines the research agenda for organic farming systems in sub-Saharan Africa.

## ▼ Understanding the misunderstood



@ Pastoralism supports tens of millions of people, makes the best use of harsh environments and provides many economic and social benefits. However, policy-making tends to favour sedentary populations and marginalise pastoralist communities. To improve the welfare of pastoralist communities a wide range of policies are needed, including: securing rights to grazing lands and water resources; insurance policies; measures to promote the trade of pastoral livestock; investment in education; and encouraging policy dialogue.

## Protecting and Promoting Pastoralism in Africa

By C Pye-Smith  
 CTA, 2012; 4 pp.  
 CTA no. PB006E  
 Downloadable as PDF file from:  
<http://tinyurl.com/gmm6qj5>

## ▼ Strengthening voices

Evidence shows that enabling farmers and other citizens to design policies and institutions, decide on strategic research priorities and investments, and assess the risks of new technologies can lead to more sustainable livelihoods and environments. This briefing describes six tried and tested ways that can amplify the voice and influence of marginalised citizens in framing the food and agricultural policies that affect them.

## Putting Citizens at the Heart of Food System Governance

By M Pimbert  
 IIED, 2012; 4 pp.  
 Downloadable as PDF file from:  
<http://tinyurl.com/8wa4k9q>

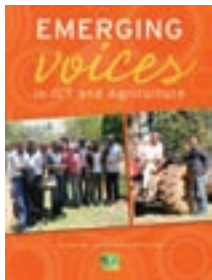
## ▼ Green economies

With contributions from UN agencies - working together under the umbrella UN-Water - this publication brings together case studies, best practices and lessons learned on capacity development in the context of water management and the green economy. Chapters deal with the safe use of wastewater in agriculture, rainwater harvesting, natural infrastructure solutions and the eco-tank model for sanitation and improved water quality.

## Water and the Green Economy: Capacity Development Aspects

Edited by R Ardakanian & D Jaeger  
 UNW-DPC, 2012; 190 pp.  
 Downloadable as PDF file from:  
<http://tinyurl.com/g2wt2qg>

## Young people speak out



**Emerging Voices in ICT and Agriculture**  
 Edited by A Downes  
 CTA, 2012; 54 pp.  
 ISBN 978-92-9081-502-0  
 CTA no. 1703  
 5 credit points  
 Downloadable as PDF file from:  
<http://tinyurl.com/clvqa54>

While youth unemployment is at critical levels across much of Africa, the Caribbean and Pacific (ACP), few young people see agriculture as an attractive career option. Some, however, are bucking the trend, as witnessed by this new booklet from CTA's "Agriculture, Rural Development and Youth in the Information Society" (ARDYIS) project. Featuring the perspectives and experiences of 20 young people and three organisations, it highlights how use of ICTs in agriculture offers exciting opportunities, potentially helping to create a new generation of dynamic young farmers.

The booklet also presents summaries of the best essays submitted to the *Youth finding solutions to challenges in agriculture and rural development using ICTs* contest, organised in 2010 and presents the results of the Youth in Agriculture Blog Competition (*YoBloCo Awards*) completed in 2012. CTA believes that among the young people featured in this booklet are the future leaders of ACP agricultural and rural development. Some of them are already making a difference in their communities and they will certainly achieve more in the future.

### ▼ Land deals

In the past decade, land eight times the size of the UK was sold off globally, enough to grow food for 1 billion people. Oxfam argues that this rush for land has not been adequately regulated or policed, resulting in poor people being evicted without consultation or compensation. In this briefing note, Oxfam calls on the World Bank to temporarily freeze investments involving large-scale land deals to review its advice to developing countries, help set standards for investors and introduce more robust policies to stop land grabs.

#### 'Our Land, Our Lives': Time Out on the Global Land Rush

By K Geary  
 Oxfam International Briefing Note, 2012; 26pp.  
 Downloadable as PDF file from:  
<http://tinyurl.com/gd3fakf>

## Spice guide



**Vanilla Handbook**  
 By P Bianchessi  
 CTA/Venui Vanilla, 2012;  
 128 pp.  
 ISBN 978-982-98068-1-9  
 AUD\$35 • €28  
 CTA no. 1697  
 20 credit points  
 Venui Vanilla Company  
 Venui Plantation  
 South Santo Road  
 PO Box 162  
 Luganville  
 Santo  
 PO Box 162  
 Vanuatu  
[enquiries@venuivannila.com](mailto:enquiries@venuivannila.com)

With over 20 years experience of growing and processing vanilla and helping large numbers of farmers in the South Pacific to do the same, Piero Bianchessi has distilled his knowledge into this highly practical handbook. Finding other vanilla books too wordy, and lacking in explanatory diagrams to really 'spell out' the principles described, he has succeeded in combining clear text, photos and illustrations that offer an invaluable resource for new or inexperienced vanilla growers.

Vanilla, Bianchessi emphasises, needs timely and careful maintenance or it simply won't produce any yield. This includes understanding the needs of the crop roots, which are planted in mulch rather than soil, and knowing how and when to induce flowering. Equally important is knowing how to cure the beans for sale. Taking around four months, curing is a time-consuming and exacting process involving fermentation, sweating and slow-drying. Successful cultivation and curing of vanilla therefore demands careful attention to detail; those wanting an accessible guide to those details need look no further.

### ▼ Financing forests

This book provides analysis of REDD+ design and implementation, including how and why REDD+ has changed, what it looks like in practice, and the main political and practical challenges in designing and implementing effective, efficient and equitable REDD+ policies and projects. Despite uncertainty about the future of REDD+, the authors state that 'no regret' policy options that reduce deforestation and degradation – regardless of climate objectives – should be a priority.

#### Analysing REDD+: Challenges and Choices

By A Angelsen, M Brockhaus, W D Suderlin & L V Verchot  
 CIFOR, 2012; 426 pp.  
 Downloadable as PDF file from:  
<http://tinyurl.com/8t5ezzh>

## Policy matters



**Agricultural Extension: A Time For Change Linking Knowledge to Policy and Action for Food and Livelihoods**  
 By C Pye-Smith  
 CTA, 2012; 30 pp.  
 ISSN 2212-6333  
 CTA no. 1689  
 2 credit points

Smallholder farmers, fisherfolk and livestock keepers produce 50-80% of the staple foods consumed in developing countries, but many are inadequately served by research, extension and advisory services. These rural producers need support so that they can improve their knowledge and skills and take advantage of new technologies, policies and market opportunities.

The future of extension and advisory services was explored at a landmark conference held in Nairobi in 2011. It brought together farmers, extension agents, scientists, politicians, policymakers and representatives of development organisations from 85 countries. The aim was to share knowledge and experiences, and identify ways of transforming extension and advisory services for the benefit of smallholder farmers. This book details some promising initiatives and opportunities, extension policies and practices that were discussed during the conference. The conference findings were enshrined in the Nairobi Declaration, which is printed in full at the end of this booklet.

### ▼ A call to action

Despite being defined by water scarcity, drylands contain a great variety of biodiversity, much of which is highly adapted to an arid ecology. This is vital to the livelihoods of many dryland inhabitants, playing an important role in risk management and the provision of ecosystem services. This publication raises awareness of the importance of sustainably developing drylands and conserving dryland biodiversity, for example by promoting ecologically-sensitive farming practices, such as agroforestry, pastoralism and conservation agriculture.

#### Conserving Dryland Biodiversity

By J Davies, L Poulsen, B Schulte-Herbruggen, K Mackinnon, N Crawhall, W D Henwood, N Dudley, J Smith & M Gudka  
 IUCN, 2012; 85pp.  
 Downloadable as PDF file from:  
<http://tinyurl.com/gzv6xe>



## Profitable rodents



**Rearing Grasscutters**  
By E L Ngo-Samnick  
CTA/ISF, 2012;  
28 pp.  
ISBN 978-92-9081-491-7  
CTA no. 1687  
5 credit points

Commonly known as 'hedge-hogs' in Central Africa, 'agouti' in French-speaking West Africa and 'cane rats' in English-speaking West Africa, grasscutters (*Thryonomys swinderianus*) are widely hunted for their protein-rich and valuable meat. But as placid and relatively prolific rodents, they are easy to rear and grow quickly in intensive conditions. This simple, practical manual provides basic information to support extension officers and farmers in establishing and managing a grasscutter enterprise.

Topics covered include construction of pens, handling methods and feeding plans, including use of by-products from crop processing. Maintaining a healthy grasscutter depends primarily on providing a balanced diet and good hygiene, including weekly cleaning of feeding troughs and monthly disinfection of pens. As well as disease control, the handbook gives guidelines on grasscutter breeding, production planning and financial management. Able to reproduce at six months, with litters of up to 12 young, grasscutter rearing is recommended as a good alternative to bushmeat poaching.

### ▼ Minimising loss

One-third of all food produced for human consumption is lost or wasted. Tackling food loss and waste could therefore make a significant contribution to combating hunger and increasing farm incomes in developing countries. This policy brief highlights solutions, including making affordable post-harvest and processing technologies available to producers and improving access to markets.

#### Going to Waste - Missed Opportunities in the Battle to Improve Food Security

By C Pedrick  
CTA, 2012; 4 pp.  
CTA no. PB007E  
Downloadable as PDF file from:  
<http://tinyurl.com/8j3agsp>

## Getting into oil



**Setting Up and Running a Small-scale Cooking Oil Business**  
Edited by P Fellows & B Axtell  
CTA, 2012;  
302 pp.  
ISBN 978-92-9081-478-8  
CTA no. 1684  
40 credit points

A 'small scale' cooking oil business is one that employs between five and 15 people, based on a capital investment of US\$1000 - US\$50,000 (€780 - €39,170). Intended to be read in combination with *Opportunities in Food Processing, Volume 1 - Setting Up and Running a Small Food Business*, this volume emphasises that setting up a cooking oil business needs very careful consideration. Potential entrepreneurs need to assess their control over raw material supply, the availability and affordability of improved oil processing technology, competition from large-scale producers and imported oils, as well as the policy environment, before deciding to invest in a cooking oil business.

Whether establishing a new operation or improving an existing one, this reader-friendly handbook will be invaluable. Recognising that operating a food processing business is a full time job, the authors have made it as easy as possible for readers to learn the essential points they need, including boxes of top tips and summaries of the most important points, case studies featuring real life examples, and checklists of action to be taken.

### ▼ Livestock nutrition

Ethanol and biodiesel are predominantly derived from agricultural commodities, such as grain, sugar and oilseeds. To be successful, this approach must be economically sustainable and must not conflict with the use of agricultural land to produce food and feed for humans and livestock. This book outlines how both criteria can be met by utilising the residues of biofuel production (co-products) as livestock feed.

#### Biofuel Co-products as Livestock Feed: Opportunities and Challenges

Edited by H P S Makkar  
FAO, 2012; 533 pp.  
Downloadable as PDF file from:  
<http://tinyurl.com/gkhkgbp>

## Creating space for women



#### Challenging Chains to Change: Gender equity in Agricultural Value Chain Development

By the Royal Tropical Institute (KIT), Agri-ProFocus & the International Institute of Rural Reconstruction (IIRR)  
KIT Publishers, 2012; 367 pp.  
ISBN 978-94-6022-212-2  
€25  
KIT Publishers  
PO Box 95001  
1090 HA Amsterdam  
The Netherlands  
[www.kit.nl](http://www.kit.nl)  
[publishers@kit.nl](mailto:publishers@kit.nl)

Efforts to improve value chains very often miss out half of the population - the female half. Women do much of the work, but they see few of the benefits when it is the men who sell the products and keep the money. Focusing on value chains, *Challenging Chains to Change* addresses gender as a justice issue, in which both men and women should benefit from value chain gains, and as a means of building more robust and efficient chains.

Drawing on dozens of cases from all over the world, this book outlines five strategies for development organisations and private entrepreneurs to ensure that small-scale women farmers and processors participate in value chains as full partners and decision makers. A wide range of crop and livestock products are also detailed, ranging from subsistence products (rice), small-scale cash items (honey and vegetables), to export commodities (artichokes and coffee) and biofuels (jatropha). The book also includes a range of tools and methodologies for analysing and developing value chains with gender in mind.

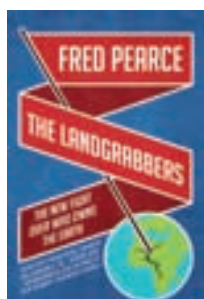
### ▼ Positive investment

Investment in agriculture is vital for farmers to cope with changing climates, ecological degradation, population growth, rising energy prices, rising demand for meat and dairy products, and competition for land. Oxfam argues that private sector investment can play a vital role in delivering inclusive economic growth, environmental sustainability and poverty reduction. But to achieve this it must be adequately regulated and follow key principles, focusing on local food markets, working with producer organisations and respecting the rights of small-scale producers, workers and communities.

#### Private Investment in Agriculture: Why it's Essential, and What's Needed

By E Sahan & M Mikhail  
Oxfam International Discussion Paper, 2012; 17pp.  
Downloadable as PDF file from:  
<http://tinyurl.com/8jjq44t>

## Land wars



**The Landgrabbers: The New Fight Over Who Owns The Earth**  
By F Pearce  
Transworld Publishers,  
2012; 400 pp.  
ISBN 978-190581173-1  
£20 • €25  
Transworld Publishers  
61-63 Uxbridge Road  
London, W5 5SA  
Fax: +44 20 8579 5479  
[www.booksattransworld.co.uk](http://www.booksattransworld.co.uk)

■ With good land increasingly at a premium, the economically strong are acquiring land in countries that cannot afford to relinquish its ownership. The buyers are foreign governments and investors, the sellers invariably governments who see land sale and leasing as short term financial benefit to their country. The terms of agreements are seldom transparent and the future prospects of the poorest are impoverished as they are cleared from lands on which they crop, graze and gather fuel.

Apologists for land acquisition maintain that large-scale, mechanised and intensive agriculture is the only route to meeting the food deficit that another 2 billion people and rising dietary aspirations are presenting. This is despite 60 million African farmers currently providing 80% of the continent's food and Asian small farmers consistently achieving higher yields than large-scale producers. What holds back small farmers is not ignorance or sloth but access to capital and reliable markets, a situation too few governments address. This is an important book and deserves wide readership and discussion.

### ▼ Targeted policies

About 45% of the world's 750 million poor livestock keepers live in South Asia and 25% live in sub-Saharan Africa. Of these, only a small minority have been able to take advantage of the opportunities provided by increases in demand for animal products. This book identifies conditions under which livestock can help to reduce poverty sustainably but warns that the specific context of each country means that a blueprint approach does not work.

#### **Livestock Sector Development for Poverty Reduction: An Economic and Policy Perspective** **Livestock's Many Virtues**

By J Otte, A Costales, J Dijkman, U Pica-Ciamarra, T Robinson, V Ahuja, C Ly & D Roland-Holst  
FAO/PPLPI, 2012; 162 pp.  
Downloadable as PDF file from:  
<http://tinyurl.com/8fcdm>

## Pastoralism



**Pastoralism and Development in Africa: Dynamic Change at the Margins**  
Edited by A Catley, J Lind & I Scoones  
Earthscan from  
Routledge, 2012; 382 pp.  
ISBN 978-0-415-54072-8  
£24.95 • €31  
Routledge  
For Routledge's address, see page 21  
[www.routledge.com](http://www.routledge.com)

■ Pastoralism may be seen as at the margins of agriculture but the authors show it is far from a marginal activity. The numbers dependent on pastoralism, the extensive land area utilised and the output achieved, despite harsh and unpredictable environments, are important social, economic and political elements in a number of countries. This book does much to provide policymakers, advisors and donors with the basis of a better understanding of pastoralist life and priorities without which poverty and insecurity 'at the margins' will continue and potential national product will be lost. Although focused on the Greater Horn of Africa, the circumstances described, and the options discussed offer many lessons for not only of how pastoralism should be seen and understood and the development offered in these so-called 'marginal' areas but also in the more fertile heartlands of agricultural production. *Pastoralism and Development in Africa* grew from a conference on the future of pastoralism convened by the Future Agricultures Consortium and Tufts University in Addis Ababa in 2011.

### ▼ Livestock and livelihoods


This study analyses what happened to the livestock trade in the greater Darfur region during the conflict years, how it has responded, to what extent – if at all – it has recovered and how it can be supported in the long-term to sustain livelihoods. While reporting some positive trends, the study reveals many inefficiencies in the way that livestock are traded, which are exacerbated by the increased trading costs associated with the conflict, further reducing the competitiveness of Darfur's livestock exports.

#### **On the Hoof: Livestock Trade in Darfur**

By M Buchanan-Smith, A J A Fadal, A R Tahir & Y Aklilu  
United Nations Environment Programme, 2012; 67 pp.  
Downloadable as PDF file from:  
<http://tinyurl.com/8m8hta>

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Titles marked with the symbol ■ can be purchased from the publishers cited or from bookstores.





## New subscription conditions!

Through *Spore*, CTA aims to provide different actors with access to quality information on agricultural and rural development in ACP (African, Caribbean and Pacific) countries. While subscription requests to *Spore* are continuing to rise, CTA's budget for the production and distribution of the magazine is unfortunately not increasing to the same extent (see page 26).

## 5 QUESTIONS FOR CHRIS ADDISON

Senior Programme Coordinator, Knowledge Management



Chris Addison joined us in March 2012 from the International Food Policy Research Institute (IFPRI) in Washington DC, where he was head of web communications.

### Key dates

- 1969** Typed my name on a computer punch card and produced a Snoopy calendar
- 1983** Built a flight simulator for moths for my PhD studies in the UK
- 1995** Made my first web portal from a rural base in Ireland
- 2000** Learnt how to run a company in Holland - OneWorld Europe (BV)
- 2005** Learnt how to run one in Belgium
- 2009** Moved to the USA to work for the think tank IFPRI

### 1 What is your role at CTA?

I am responsible for how CTA supports partners in their use of the web to exchange information. This means not only helping the regional organisations go online with a website but more how they can hold e-discussions, manage their online information and link this all with social networks. It also means I am responsible for bringing CTA's information together online in a form that can be more easily used by our partners.

### 2 What does Knowledge Management in your job title really mean?

The support I provide focuses on managing the flow and exchange of knowledge, ensuring not only that people have access to the web but also that they can see its value to them and understand how they can best use it. This means I don't just work on the technologies needed to communicate on the internet but also the people and processes.

### 3 What do you do, day to day?

My day often starts by looking through Twitter and email lists for interesting articles from colleagues to go into ICTupdate. I have at least one Skype conversation to an ACP partner on one of the projects I am preparing or running. I am lucky enough to live close to work, so go home at lunchtime when possible, and with CTA situated in

farm countryside it's a great place to cycle. Some of my day is spent with paperwork, to finalise contracts, plan and produce budgets. I normally meet with colleagues in other departments to make sure my projects link with others where possible.

### 4 What do you think the future holds for Africa, the Caribbean and the Pacific online?

I think the regions already show more innovation than many projects in Europe, and the pace of change is so much faster. Already we see that countries have leapfrogged connectivity. I worked in Sudan in the 80s and the only way to talk with colleagues in other towns was by radio. Now half the population has a mobile phone. Major climate portals are going online in the Pacific, and the Caribbean continues to run the most innovative programs for youth online, such as Digital Jam.

### 5 How can Spore readers keep up with all the developments online?

I would suggest visiting and subscribing to the ICTupdate.cta.int site, where you will find links to interesting blogs and other websites. If you already know a bit about social media and want to know more, join web2fordev.net, and if you want to find agricultural information online, go to ciard.net.

## New subscription conditions!

(continued from page 25)

If we want to pursue our mandate for providing information, in particular to those who are most in need, we must make choices. One that seems most appropriate is to give ACP subscribers priority access to *Spore's* printed version, especially those who have limited access to the internet.

For this reason, individuals and organisations resident in non-ACP countries who wish to receive a printed version of *Spore* will now need to pay an annual subscription of €36, including distribution costs. Requests should be addressed to:

SMI (Distribution Services) Ltd

E-mail: [CTA@earthprint.co.uk](mailto:CTA@earthprint.co.uk)

Web site: [www.earthprint.com](http://www.earthprint.com)

Tel: + (44) 1438 748111

Fax: + (44) 1438 748844

Furthermore, current subscribers will not continue to receive *Spore's* printed version unless they actively indicate their interest.

How? It's very simple: just detach the reply slip attached to the address page of this issue of *Spore*, answer the question and post the reply slip without a stamp (postage will be charged to CTA). Alternatively, if you have an online account at <http://publications.cta.int>,

click on "My account" and answer the question relating to continuing your subscription.

It is important that we receive your reply slip or answer online **before 31st May 2013**. After this date, your print subscription will be automatically cancelled. Of course, *Spore* remains available online for free. Whether you are ACP resident or not, with a print subscription or not, *Spore's* online version keeps you posted with the latest news on agricultural and rural development in ACP countries. Just visit our websites, <http://publications.cta.int> or <http://spore.cta.int>, and subscribe for free to *Spore's* online version.

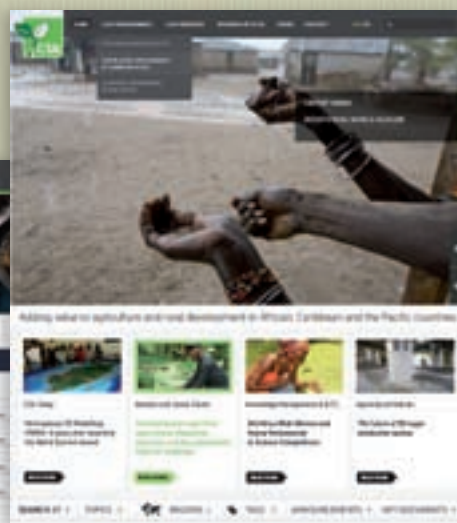
### CTA ONLINE

## A revamped website

It is an open secret that our corporate website has been in dire need of a redesign and functional refresh. The existing site has a very institutional look, which hardly reflects the new strategic choices and the renewed dynamism of the current team at CTA.

We've been hard at work laying the groundwork for a more flexible website, trying in the first place to make it easier to update and manage the content. And we have now reached the exciting stage where we can announce the new website's soft

launch. There is still some polishing to do, and we will continue to improve it over the next few weeks. Click on [www.cta.int](http://www.cta.int) to find out more.



### SMS

- After consulting with many partners and experts in October 2012, CTA is developing new knowledge management projects. More information to come in the next issue.
- Producer organisations: a new information and discussion platform is soon to be available – stay tuned.
- CTA Policy Brief No. 7 on food loss and waste has been published on [www.cta.int](http://www.cta.int)

### CAPACITY BUILDING

## Strengthening policy process in Africa

CTA launches a three-year project which will contribute to the process and implementation of agricultural and rural development (ARD) policies in Africa, especially the Comprehensive Africa Agriculture Development Program (CAADP). How? By promoting the empowerment and skills of regional farmer organisations, agribusiness and Members of Parliament for multi-stakeholder engagement in ARD policy processes.

This project comprises several activities: the first activity aims at redressing information asymmetry facing stakeholders; the goal of the second activity is to improve stakeholders' capacity to take informed positions on emerging topics that have implications for ARD policy. Thirdly, CTA wants to promote institution building and negotiation skills of farmers. The fourth activity is to enhance the evidence base to support appropriate ARD policies.



## Resisting disease

**Christine E. Lyimo** responds to the article on the work of the Kenyan geneticist Sheila Ommeh on disease tolerance in indigenous chickens, including Newcastle and Gumboro, in *Spore* No. 160: "Being a smallholder farmer in indigenous poultry, the possibility of having better chickens which are resistant to diseases is surely something to look forward to."

## Avoiding conflict

Also in *Spore* 160, the editorial on pastoralism by our Director has caught the attention of one of our readers who sent us the following comment: "I think efforts should be made by ACP governments to eliminate conflicts that always arise between pastoralists and crop farmers. Many times, pastoralists graze their flocks in crop farms."

## Keeping up-to-date

We strive to make *Spore* meet your expectations. One reader wrote: "The magazine has been and is still of immense assistance to me as a government field staff advisor. I left school a long time ago but the magazine keeps me abreast of the latest developments in agriculture." Do not hesitate to give us further feedback and suggestions for improvement!

The publication section of the magazine is always much appreciated. Concerning the Agrodok manual on 'Improving brooding and hatching in small-scale poultry keeping', a reader tells us: "The rural world is facing enormous problems of food insecurity linked to many diseases, which poultry are facing due to lack of attention. Improvements detailed in this book will reduce the risk of food insecurity and will be disseminated." We are delighted to know that our publications help you. Many more can be found in our publications catalogue at the following address: <http://publications.cta.int>

## Food policies

After reading the interview with Yamar Mbodj on food insecurity, published in the same issue, **Mr. Suleiman Matojo** writes: "I have read your contribution on food security. It's true, the international community comes at the last minute when the food situation is worst. I suggest that food security campaigns should be for all. Let us design policies that can encourage food production, food storage and provide food for the needy."



## Carbon markets for smallholders?

An article on carbon markets in issue 159 of *Spore* has led to the following reaction: "I am happy to note that a forest rehabilitation project is working in Mt Elgon area in Uganda where I work. The bottom line is that the concept of carbon markets, carbon credits and clean development mechanisms, to mention a few, are still on paper. Without critical analysis, it is clear that the majority of farmers are smallholders with an average of two acres per household. This means that any strategy which does not target this category has a very high failure rate. Over the past 10 years there have been several organisations (Care, Merecep, IUCN to mention but a few) working to conserve and promote agroforestry but the challenges remain... The issue is how can the carbon market be made easier for the smallholder farmers to access carbon credits?"



**Note:** A technical problem prevented us from collecting the names and contact information of some readers who have shared their comments on *Spore* articles. Please accept our apologies.

## Reader services

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