# SPORE

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SONIA JORGE, Executive Director of the Alliance for Affordable Internet (A4AI)

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CTA

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# Editorial

## A year to celebrate

2014 has been designated the International Year of Family Farming (IYFF) and the African Year of Agriculture and Food Security. For CTA, the year has a special significance as the Centre celebrates its 30th Anniversary. These occasions provide a unique opportunity to raise the profile of smallholder agriculture as a vehicle for addressing food and nutritional security challenges and achieving sustainable economic growth in many of the world's low-income countries.

We should also use the occasion to ask ourselves whether the renewed attention on agriculture by governments, donor agencies and the private sector has been translated into concrete action on the ground – action which makes a difference for smallholders.

In July 2003, African leaders signed the Maputo Declaration. In doing so, they pledged to allocate 10% of their national budgets to agriculture and achieve 6% annual growth in the sector. In 2009, G8 donors pledged US$22 billion to agriculture and food security in Africa.

A report produced by the advocacy organisation, ONE, looked at 19 African countries with national agriculture investment plans and assessed their progress in poverty reduction, agricultural investment and inclusiveness. The report also reviewed the performance of eight donors and evaluated the quantity and quality of agriculture assistance. The results are mixed. Where political will, domestic investment, donor support and effective plans have been combined, the agriculture sector has delivered growth and poverty reduction. However, only a few countries have met the 10% target and donors have disbursed only half of their commitments, leaving national agriculture plans about 50% funded.

The African Year of Agriculture and Food Security should encourage leaders to renew their commitments and meet their pledges, while the IYFF will provide the platform for sharing lessons to advance sustainable smallholder agriculture.

Michael Hailu
Director – CTA

LESSONS FROM CAADP

# 10 years of Africa's big push

**Ten years into the Comprehensive Africa Agriculture Development Programme (CAADP), the Africa owned and led initiative to boost agricultural productivity, what is working? There's no doubt that it's been a period of rapid growth in economies and in agriculture but is Africa doing development differently?**

In 2003, leaders of the African Union met in Maputo, Mozambique in a time of crisis. Harvests were failing across Central and Eastern Africa; famine haunted Ethiopia; and agricultural sectors stagnated in many countries. The resulting Maputo Declaration set a new course for a wholly African programme to tackle the problems of food security at national, regional and continental levels.

Led by the New Partnership for Africa's Development (NEPAD), CAADP cut through the tangle of issues with two simple targets: members would commit at least 10% of national budgets to agriculture, and thereby achieve growth in the sector of 6% per year. Such growth would be built on four 'pillars': sustainable land management and water control; rural infrastructure and market access; greater food supply to reduce hunger; and agricultural research, technology dissemination and adoption.

Ten years later, CAADP continues to grow in membership and influence although it is notable that 4 years passed before Rwanda signed the first country compact in 2007, and this remained the only one in effect until 2009. However, progress has since accelerated: there are now 34 country compacts (in September 2013, Lesotho became the latest compact signatory), 29 countries have created investment plans, and the majority of African countries are now actively using CAADP as the framework for their agricultural development.

Of the two targets declared by CAADP, one gives reason to celebrate. Many members have in fact met or exceeded the target of 6% annual growth in the agricultural sector in one or more recent years, and a handful have sustained this average over the last 5 years, according to World Bank data. However, rather interestingly, in most cases this growth has occurred without national governments meeting the 10% budget allocation to agriculture - the investment that was supposed to drive growth. A study of 19 countries from ONE, an advocacy organisation, found that only four had achieved this, and "seven countries are seriously off track [and] have actually lowered their agriculture expenditure."

## Early leads

Since its adoption of CAADP, Rwanda's budgets have also fallen short of the target but it has served as a role model for others and its stronger coordination and focus on agriculture have had evident impacts. A previous strategic plan to increase food production in the country was not detailed enough to drive policy. A revised CAADP-supported plan was based on analysis of best-bet technologies and incentives to adopt these. The key crops identified in the

revised plan have expanded widely, albeit mostly on new land brought into cultivation. Average maize and wheat yields more than doubled between 2006 and 2009 as new varieties and technologies were taken up.

Ghana is a more recent CAADP adopter becoming a signatory in 2009. CAADP was closely involved in creating a multi-stakeholder Country Team and drawing up a medium-term investment plan of nearly US$800 million over 5 years, with a strong focus on irrigation and commercialisation. Agricultural growth has been spectacular, averaging over 17% between 2008 and 2011. The exact role of CAADP is hard to determine, and Ghana too has fallen far short of its 10% budget target. Nevertheless, the target is important in coordinating spending across ministries, says Lena Otoo of Ghana's Ministry of Food and Agriculture. "We assess progress towards the 10% goal to determine the level of participation by sector ministries and agencies, and to orient the others on their roles."

## Sticking points

CAADP's sticking points are all about money - and dishearteningly familiar. While ministries struggle with budgets, private investment continues to be constrained by poor infrastructure, institutions and information services. For individual farmers, finance remains out of reach: in Ghana, only 6% of commercial lending is to agriculture, with nominal interest rates of 25-40%.

Another longstanding issue is that CAADP set out to tackle the continent-wide need for capacity building, which began with the appointment of four lead institutions to support policy development and backstop technical efforts. Unfortunately, according to a 2010 NEPAD report, "most of the institutions lacked the financial and management resources to make a major impression on national and regional policies. The exception was the Forum for Agricultural Research in Africa (FARA) which has helped to strengthen agricultural research institutions and develop stronger links between research and the delivery of technology."

According to CAADP head, Martin Bwalya, "we can't talk about optimal solutions at national level without embracing regional advancement." However, at this level progress has been much slower. The exception is the Economic Community of West African States (ECOWAS), which had already been developing a common regional policy for West Africa at the time of the Maputo Declaration. In 2009, ECOWAS launched a regional compact as well as providing support to its member states in creating their own compacts. As such, ECOWAS has established a commanding development role in West Africa - making the lack of action by other regional bodies all the more puzzling.


© ONE/M Wingard

In eastern Liberia, farmers are being encouraged to rotate crops and better utilise soil by planting in rows to improve production and decrease environmental impacts

## Era of participation?

CAADP is a vision of participation by the entire agricultural sector, with stakeholders aligning under the two targets and four pillars of the programme. The push for growth, and in many countries the reality of growth, does seem to be aligning efforts, at least between governments and the private sector. In Ghana, for example, private sector representatives on the Country Team contribute to the preparation of the agricultural budget and targeting of priority policy issues. Whether or not this cooperation will carry countries towards their goals, it represents a new experiment in African development. The unspoken assumption that all private investment will contribute to growth, food security and nutrition, will be tested.

Meanwhile, the most uneven presence is that of small farmers, women and civil society. Studies by development organisations such as APRODEV and ActionAid have found that gender considerations remain symbolic, and the invitation extended to smaller non-state actors has not noticeably changed outcomes. Indeed, NEPAD's 2010 report found "only limited evidence that stakeholder participation in CAADP implementation is generating the required representativeness and the desired substantive contributions to policy design and implementation."

In CAADP's second decade, these voices may need to lead a reconsideration of the programme's central targets: from reaching 6% growth in agriculture, to ensuring that the transformation of agricultural economies is leading to equitable and sustainable systems; and from committing 10% of public budgets, to seeing that all money spent is truly invested in a food-secure future.

At CTA's Brussels Briefing on key drivers of success for agricultural transformation in Africa, held in October 2013, Bwalya concluded, "agriculture is back on the agenda - the issue is, how do we keep it there?" ■

**By T Paul Cox**

WOMEN AND LAND ACCESS

## Making the law a reality

A rural land tenure law, adopted in June 2009 in Burkina Faso, was met with great interest by women who hoped to secure access to land. But what impact has it had in reality? Encouraging results have been achieved by a pilot project implemented in 2011 in the mid-western rural municipality of Cassou by the Groupe de recherche et d'action sur le foncier (GRAF), a local organisation working on rural and urban land issues. Negotiations have taken place with owners of customary land titles in order that they transfer or rent their properties to women who request it. To date, 70 owners have agreed to hand over their land - of between 1 and more than 5 ha - to 164 women, generally their wives, sisters, daughters or daughters-in-law, who will soon receive their land titles. "It was really not easy to help women become landowners just like men. I can even say that nobody really believed it at first," admits Pierre Aimé Ouédraogo, GRAF's executive secretary.


© I Maïga

Fatimata Zio now owns 2 ha of land, handed over by her husband


© N Ackbarally

HEALTH

## The virtues of green tea and papaya

Green tea and fermented papaya have the potential to prevent cardiovascular diseases and diabetes, the leading causes of death in Mauritius. Clinical studies carried out by researchers of the African Network for Drugs and Diagnostics Innovation show that these two products reduce sugar content and raise antioxidant levels in the blood. According to Professor Theeshan Bahorun who supervised the study, fermented papaya also lowers blood pressure and helps to reduce the bacteria that multiply because of high blood sugar levels and affect oral microflora.

MUSHROOM

## Alternatives to bagasse

Bagasse, a by-product of sugarcane, is the main substrate used for mushroom production but is increasingly being used to generate power. To respond to the increasing scarcity of this raw material, alternatives have been found which are showing promising results: elephant grass, Guatemala grass and agricultural waste, such as coir, rice straw and banana leaves.

PROTECTING MANGOES

## Bottle traps to fight fruit flies

Mango farmers in eastern Kenya are using traps made from low-cost plastic bottles to fight fruit flies, leading to a significant drop in insect-infected fruit and a reduction in pesticide use. The trap is made by punching small holes in the side of a plastic bottle containing a cotton or cloth ball soaked in female fruit fly hormones, sticky sugar or vinegar. Costing around KSh90 (€0.80) the trap is capable of catching over 50,000 flies in 2 weeks.

Female fruit flies lay eggs in ripening fruit, releasing maggots which cause the fruit to rot and fall to the ground. More than four-fifths of Kenyan mango harvests are lost to the pest each year. The Africa Alternative Pest Control Group (AAPCG) is training farmers on how to use this biological pest control technology. "If farmers can hit these flies before their numbers increase, they are in a safer position than waiting for the fruit to near ripening, because by then nothing can stop the fertile egg-laying females," says AAPCG's Lucas Wanderi.

For more information see: http://tinyurl.com/oa3hqs8

URBAN AGRICULTURE

## City farming in Kigali

With more than 40,000 residents of Rwanda's capital already involved in urban farming, farming has recently been added to the city's master plan, which will guide activities for the next 50 years. The new plan envisages spaces where each residential plot allocates at least 20% of the area to farming activities. Horticulture is currently the dominant farming activity.


© R Willaert

GOOD PRACTICE

## The 'maize around the shack' project

In Burkina Faso, the Ministry of Agriculture and Food Self-Sufficiency launched the 'maize around the shack' project during the 2012 farming season. The project encourages farmers to grow improved varieties of early and very early maturing maize around their shacks by using soil and water conservation, and soil defence and restoration techniques. Farmers are also encouraged to collect water runoff to provide supplementary irrigation during droughts. This has increased yields by 45%, bringing them up to 3 t/ha. The Ministry wants to ensure widespread uptake of the techniques and construction of water collection ponds.

DISEASE

## Banana under threat

Researchers in West Africa have raised the alarm over the increasing spread of banana bunchy top virus. "If not checked, the virus will devastate banana farms, and jeopardise the livelihoods of millions of farmers," explains Dr Lava Kumar, a virologist at the International Institute of Tropical Agriculture. The disease has been recognised in 13 countries in sub-Saharan Africa, representing a combined banana production area of 2.28 million ha, which contributes 19.75 million t of fruit per year.

In the Caribbean, Black Sigatoka (leaf spot disease) is threatening Caribbean banana and plantain crops, causing some farmers to abandon production. In response, FAO has given training on effective use of fungicides to control and eliminate the disease. The disease affects the leaves of plants, reducing their ability to produce high quality fruit and causing premature ripening. According to a report from *The St Lucia Mirror*, since the disease was detected in the region in 1991, the value of banana exports from St Vincent and the Grenadines has been reduced by 90%.


© Afroweeds

WEEDS

## Fighting with knowledge

Weeds are one of the main constraints to rice production in Africa causing losses estimated at more than €1 billion. Improving knowledge about weeds, through identification and documentation, will help farmers control them better. The French research centre, CIRAD, and AfricaRice – supported by the EU and the ACP Science and Technology Programme – have developed a collaborative platform that lists almost 200 different lowland weed species in Eastern and West Africa. The knowledge base is available online (www.afroweeds.org), on CD-Rom, and via smartphone and tablet applications.


© A da Silva

In Mele, farmers learn through practical exercises

WEST AFRICA

## Rebuilding the quality of seed

West Africa is working hard to improve seed quality. In Mali, improved varieties of cereals, legumes and tubers have been introduced. In Senegal, more than 200 millet and groundnut varieties are in an advanced test stage, including a cross between the *sanio* (*Pennisetum glaucum*) and the *souna* variety of pearl millet. In Côte d'Ivoire, research is focusing on hybrid cocoa plants resistant to 'swollen shoot' disease.

CONSERVATION AGRICULTURE

## Education boosts production

Farmer Field Schools (FFS), known as *Escola na Machamba do Camponês* in Mozambique, have been adopted by civil society organisations to improve agricultural extension. Technology and know-how are disseminated through practical exercises on a farming plot (*machamba*) belonging to the entire community, and later applied on each farmer's land, backed up by extension techniques. In the Mele community, Meconta district (Nampula province), it is generally the women who attend FFS.

Training focuses on conservation agriculture, fighting uncontrolled slash-and-burn clearance and water conservation. Conservation agriculture was first introduced 3 years ago and consists of the application of mulch (compost), crop rotation and intercropping, minimum soil disturbance and the control of slash-and-burn, "with a view to improving the physical, chemical and biological structure of the soil," explains Anastácia António, one of the farmers. "As a result of this practice, my production has significantly increased. On my 1 ha plot, I produce 300 kg of groundnuts compared to 100 kg before, 750 kg of beans against 60 kg prior to that, and over 200 kg of cassava compared with 50 kg before."


© A Carvalho Santos

BANANA

## More quantity and quality

The re-launch of banana cultivation in Cabo Verde in 2013 has substantially increased the availability of quality and reasonably priced bananas. One kg of bananas can be purchased for about 100 escudos (less than €1). The high number of women selling banana in the streets is an indicator that this is one of the Cabo Verdean's main staples. Once one of the archipelago's main exports, banana production declined due to prolonged droughts and pests that destroyed many plantations. This project, subsidised by the EU with €600,000 and by the Government of Cabo Verde with €100,000, has also enabled the introduction of new species of fruit trees such as mango and pineapple plants.

ORGANIC

## A model farm

The Kayié agricultural cooperative (COOPAK), in southeastern Gabon, intends to mobilise farmers in the area and encourage them to grow local, organic, sustainable and quality products. No fertiliser will be used for the main crops. Land for coffee, cocoa and cassava cultivation will be enriched with compost made from leaves, and cuttings will be planted immediately after ploughing, which is a traditional and organic farming technique.

SHEEP

## Improving production for export

Environmental programmes to improve the quality of local skins through improved husbandry and treatment against parasites of Ethiopian hair sheep are helping to improve leather exports and increasing meat production. Leather exports amounted to US$123 million in 2012 and the government is aiming to increase this to US$500 million by the end of 2015.

ANIMAL FEED

## Multi-purpose shredder

Tibila Omar Rouamba, an inventor from Burkina Faso, has designed a versatile mill that turns all kinds of agricultural by-products, such as vegetation or cereal haulms, into cattle feed. The innovation adds value to by-products as well as generating income. Made up of a frame with a vertical hopper, a motor and a generator, the mill is able to convert up to 5 t of cattle feed per day, consuming 5 litres of diesel.

RODENT FARMING

## Livestock research

■ In Trinidad and Tobago, livestock researchers have employed microchip technology to monitor and track agouti (large native rodents) production. Using the technology, researchers from the University of the West Indies are able record and communicate important data, such as genealogy, size and growth rate, which will support their research activities. The researchers are seeking to produce scientific information which will inform agouti farmers on 'best practices' to increase production in captivity, thereby increasing farmers' profits and conserving wild populations.

The researchers have established an agouti production system similar to that used for rabbit production. The aim is to build a value chain for the meat, which is in high demand throughout the region. Caribbean Community and Common Market countries are now promoting the development of production units for animals sought after as 'wild meat' as a means of achieving food security. St Lucia has recently requested training in agouti production from the University, to strengthen its production systems.

© World Concern/K Ranck

FISHING

## Better practices

In Warrap State, South Sudan, over 12,000 fishermen are catching on average 588 kg per fisherman per month during the peak fishing season, after receiving training on better fishing practices, boosting their incomes and food supply. Prior to 2011 when the training commenced, fishermen used spears to catch fish from rivers and lakes, which resulted in very small catches. They also fished using baskets, which destroyed young fingerlings. World Concern has provided twine, hooks and training in fishing net construction. Fishing associations have benefited from refrigeration equipment, and have also been taught how to smoke and sun-dry the fish.

LAND LEGISLATION

## Pastoral code for Cameroon's livestock farmers

■ A new Pastoral Code in Cameroon has given the Mbororos, and other livestock herding communities, rights to land that they have been using for close to a century. In 2010, the government began consultations to revise the 1974 land tenure ordinance in which all unregistered land was classified as national land, including farm and communal land held under customary law. The legislation also contained lengthy, complicated and expensive procedures for obtaining title deeds.

New procedures to enable livestock farmers to obtain title deeds will support the demarcation of boundaries between farm and grazing land, helping to put an end to conflict between farmers and cattle herders. "The code has mapped out corridors for cattle," explains Dr Taiga, Minister of Livestock, Fisheries and Animal Husbandry. "Transhumance corridors have been traced and water sources where animals may go have been identified." The code also outlines procedures for the establishment and management of community pastures.

© CIFOR/D Tiveau

Livestock herders have been given greater rights to land

SUSTAINABLE FISHERIES

## New trap boosts profits and fish populations

A modified fish trap that allows small fish to escape is boosting fishermen's profits and improving the sustainability of fishing in Kenya's coral reefs. A 40 week study revealed that fish caught were 31% longer and 55% heavier than fish caught with traditional traps, and incomes were increased by 55%. "Reducing the catch of juveniles can increase long-term sustainability by allowing fish to grow and reproduce before they are caught," says Emmanual Mbaru from the Kenya Marine and Fisheries Research Institute. "The presence of escape gaps has no significant effect on the number of high-value species caught, thus profitability is maintained."

REDD+

# Incentives for forest protection

Conservation efforts are underway to halt deforestation in a 1 million ha wildlife corridor in Kariba, northern Zimbabwe. Drivers of deforestation in the corridor include forest fires and shifting agriculture, practised by around 200,000 people in the area.

To encourage locals to buy into conservation, Carbon Green Africa is supplying locals with farm inputs and training them on better agronomic techniques. "By offering alternative farming methods as well as supplying inputs, this will allow people to see the conservation benefits for themselves, increase yields and sell excess maize and sorghum for cash," says Steve Wentzel, the director of Carbon Green Africa.

Local people are also given free bee hives, which has heightened their vigilance to stop forest fires. So far 60 people have been employed by the REDD+ initiative and €440,000 spent on inputs, bursaries, school repairs and medical supplies, provided to local clinics since 2011. Rural councils are also appreciating the benefits and are conducting awareness drives, urging communities not to destroy surrounding forests.

Carbon Green Africa is providing training on better agronomic techniques

© Carbon Green Africa


© B Ruggles

RICE

## Converting waste into clean energy

Cameroon's Institute of Agricultural Research for Development (IRAD) has designed a manual hydraulic press to make briquettes out of ground rice husks. The briquettes are energy efficient and can be used in simple, locally made stoves, supplying valuable energy from husks and reducing pollution caused by uncontrolled burning. IRAD has also designed a complementary, energy efficient, stainless steel vessel to parboil rice, to prevent the grains from breaking before processing. Ash from burnt husks has also been found to be a good supplement in cement making and tests are currently being carried out to determine its suitability.


© CIAT/N Palmer

Mealybugs weaken plants and lower root yields

CLIMATE CHANGE

# Pests moving towards the Poles

Crop pests are moving towards the North and South Poles at an average rate of 3 km a year, due to global warming. This finding comes from a study of the distribution of 612 crop pests over the last 50 year, by researchers from the University of Exeter and University of Oxford. The study reveals that pests are becoming established in areas that were previously too cold for them to survive. "If crop pests continue to march polewards as the Earth warms, the combined effects of a growing world population and the increased loss of crops to pests will pose a serious threat to global food security," explains Dr Dan Bebber from the University of Exeter.

The researchers believe that the global trade in crops is primarily responsible for the spread of pests and warming temperatures are allowing pests and diseases to become established in previously unsuitable regions. "Renewed efforts are required to monitor the spread of crop pests and to control their movement from region to region if we are to halt the relentless destruction of crops across the world in the face of climate change," adds University of Exeter Professor Sarah Gurr.

WATER MANAGEMENT

## Collecting and spreading information

The Agri-hub network in Benin identifies water management innovations and disseminates them widely among farmers, particularly through videos. These are simple technologies such as tube and artesian wells, large-diameter wells with motor pump set, surface irrigation and solar water suction systems.

FUEL

## Alternatives to firewood

In Madagascar, more than 80% of households use firewood or charcoal to cook. It is therefore important to control the fuel value chain. Wood consumption has been cut by 15% over the last 5 years thanks to cookers that use less charcoal, tripod stoves made of clay, restructuring of the wood-fuel sector, training of charcoal-burners and reafforestation.


© Águas de Ponta Preta

SOLAR ENERGY

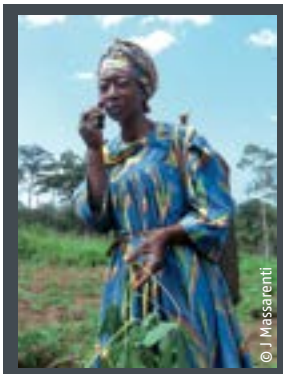
## Reducing emissions

A solar power facility, installed in the fishing village of Monte Trigo on the island of Santo Antão (Cabo Verde), has saved 12,000 litres of diesel and avoided 30 t of $CO_2$ emissions in 18 months. Monte Trigo, with a population of 300, is the first location in the country to be supplied with renewable energy 24 hours a day; before they had a diesel generator that worked 5 hours a day. The facility has a capacity of 200 kWh during sunlight hours for a 100 kWh demand. Surplus energy is used in ice production for fish preservation. The project was financed by the EU-ACP Energy Facility, which aims to reduce poverty by bringing electricity to isolated areas.

PESTICIDES

## Effective and sustainable pest management

No more postharvest losses due to rice weevils (*Sitophilus oryzae*) and pyralid moths is a possibility. Studies conducted by AfricaRice showed that it takes only 90 days to destroy these pests by using the essential oil of eucalyptus (*Eucalyptus globulus*) or lemongrass (*Cymbopogon citratus*) diluted in alcohol. The procedure consists of storing the rice in a jute bag impregnated with a mixture of 75 ml of alcohol and 3.9 ml of oil.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ICTs

## Survey calls for better agricultural information

Swiss researchers have revealed that while most smallholder farmers in Kenya own a radio and rely on it to access information, agricultural broadcasting is not useful enough. The study found that farmers were getting technical 'how to' information from radio programmes, but would have preferred information on market prices, disease prevention and income opportunities. Farmers trusted word of mouth from fellow farmers, family and government extension workers more than any other source of knowledge on farming. And even with over 60% owning mobile phones, less than 10% used their phone to access agricultural information.

NEW VARIETIES

## Marketing through flavour

■ The East Timor Ministry of Agriculture and Fisheries' Seeds of Life programme is marketing new high yielding varieties of bean and sweet potato to farmers by taste. "Farmers like to plant, sell and consume products with a good flavour and high income yield," explains programme researcher, Felisberto Soares. Eight varieties of tropical green winged bean (*Psophocarpus tetragonolobus*) and sweet potato are being tasted at research centres in Loes (Liquiça) and Betano (Manufahi), which have sought to improve native varieties and adapt foreign varieties to Timor soils.

The tropical green winged bean is nutritional with the advantage that "all of it is edible, including the flowers, tubers, bean pods and the seeds," says researcher Marcos Vidal. "It improves soil fertility, eliminates weeds and boosts the level of nitrogen in the soils." The Hohrae 1 variety of sweet potato, which is now available to farmers, produces over 13 t/ha and can be harvested after 4 months instead of the typical 6-8 months.


© ACIAR

Domingas Lucia Felipe sells sweet potato varieties that were introduced through the Seeds of Life programme

PROPAGATION

## Coffee plantlets without any defect

The French research centre, CIRAD, and its partner Ecom Agroindustrial have developed a fast and cutting-edge propagation method for Arabica coffee: 'cell suspension' enables the large-scale production of *in vitro* plantlets true-to-type in relation to the mother plant. With 800,000 *in vitro* plantlets tested, this method shows that 99% of the regenerated coffee plants are true-to-type. The technique may also be used to propagate other plants species.

RICE

## Improvement of parboiling

■ In Ndop, northwestern Cameroon, farmers are selling better quality rice thanks to an improved parboiling technique developed by the Institute of Agricultural Research for Development (IRAD). This technique reduces the amount of impurities and broken rice produced when using traditional ovens. The new oven is composed of a burning chamber, a cooking tube and a stack. "Using briquettes, wood or coal helps to save fuel thanks to an even distribution of the steam in the tube, unlike the traditional oven which burns a lot of wood and wastes fuel," explains Sali Atanga Ndindeng, an IRAD postharvest technology specialist. A survey by the Institute revealed that consumers would pay 5% more for rice produced with this parboiling technique. Also, 63% of the people that tested this parboiled rice mistook it for imported rice, valued for its quality.


© ZACOZA Bénin-Productions

ENVIRONMENT

## Stoves and renewable energy

The ZACOZA Bénin-Productions group has developed a stove for cooking and heating rooms using renewable energy. Named *Atinga do zosi* (the tree saved from the fire), this stove is energy efficient (using one-fifth less energy than traditional stoves) and works with renewable fuel: coal made from palm nut shells. With its automatic blower system running on an electric or solar rechargeable battery, the stove turns on automatically, without matches, thanks to an incandescent filament.

© GVC

SLOW FOOD

## Maputo's organic markets

The Earth Market in Maputo, Mozambique, the first in Africa and held for the fourth time, has enjoyed the participation of 15 small organic producers and the attendance of hundreds of people who bought vegetables, peanut butter, fresh fish, rice and natural fruit juices. Each event has earned farmers, on average, 20,000 Mozambican meticais (almost €500). Earth Markets, an initiative of Italian NGOs, Gruppo di Volontariato Civile (GVC) and Slow Food, are run by farmers. Products must be "natural, obtained by traditional processes and respect the environment. These quality criteria are set out in self-certified documents that the producers sign," says GVC's Erica Beuzer.

PINEAPPLE PARTNERSHIP

## Boosting production and processing in Cameroon

A joint effort by pineapple producers and the Cameroon government has increased production from 12,000 t per season on 150 ha of land in 2010 to 26,000 t on 325 ha of land in 2013. With a modern processing plant, pineapple is being treated, packaged with the trade mark *Ananas du Cameroun*, and exported within Africa and beyond. About 150 youths in Awae, central Cameroon, have gained employment.

ONIONS

## New venture in Samoa

Farmer Arona Palamo has become the first Samoan to harvest a batch of locally grown onions and is currently trialling 34 different varieties to determine which ones to commercialise. "I want Samoans to eat the best quality onions and stop importing poor quality onions for the same price that high quality onions are sold in America," he says. His target is to sustainably produce 900 t per year to satisfy Samoa's demand.

BETTER BREEDING

## Jamaica's pig business revamp

■ Following a survey in 2002, which highlighted problems within Jamaica's pig industry, the Ministry of Agriculture (MoA) was approached for assistance. As a result, the Pork Association of Jamaica was formed, the Newport Genetics company was provided with 30 acres of land for a breeding and artificial insemination facility, and new breeds were sourced to strengthen the swine population.

The introduction of new ICT systems enabled the company to better manage its large breeding herd, by tracking the genetic status and breeding potential of each animal. Caribbean Broilers, the parent company of Newport Genetics, also upgraded its processing plants, introduced a range of value-added products, and introduced a quality assurance department to ensure compliance with international standards. Over the last 10 years, farms using Newport Genetic animals have seen litter sizes increase from 9 to 12 piglets, pre-weaning mortality drop from 20% to 8%, finishing times decrease from 8 to 5 months and finishing weights rise from 50-55 kg to 109-118 kg. With the increase in productivity and production, Jamaica is not only self-sufficient in fresh/frozen pork but will begin exporting pork products to Caribbean markets in 2014.

LUCRATIVE EXPORT

## Bottled coconut water

A farmers' group from Pomeroon, in Guyana's coconut growing region on the west coast, has developed a lucrative trade from coconut water. The farmers, whose farms average 20 ha in size and who were originally growing nuts for the oil market, now harvest and process coconuts to extract the water, which is bottled, frozen and shipped to Trinidad and Tobago. Here it is labelled and sold as a high-value, no-added-sugar, preservative-free product in leading supermarket chains. The farmers group is also exploring the production of extra virgin coconut oil and ways of using coconut by-products as fertiliser and organic mulch.

TRAINING FOR WOMEN

## Building business skills in PNG


© K Mikhailovich

Young women from Vunapalading, participating in a community workshop

■ Finding ways of helping female horticulturists in Papua New Guinea (PNG) to develop their business acumen and operate small, profitable businesses, is the aim of research being conducted by the University of Canberra with funding from the Australian Centre for International Agricultural Research. The research team is investigating the most effective means of building women's skills and learning. "We've called it *'liklik busnis thinking*', which means 'small business thinking' in pidgin," explains Professor Barbara Pamphilon. The research is in response to the very low level of financial literacy and poor access to markets amongst PNG's female horticulturists. Women are also being left behind when it comes to training. After receiving training in basic financial literacy, crop management, and postharvest and marketing techniques, one farmer involved in the project, Veronica Briggs was then helped to build links to markets and given the opportunity to open accounts with micro-banking services. Briggs is now a facilitator, training other men and women in her community.

*These 6 pages were produced with contributions from:* **N Ackbarally** (Mauritius), **E Aidasso** (Benin), **M Andriatiana** (Madagascar), **B Bafana** (Zimbabwe), **K Bascombe** (Trinidad and Tobago), **R Best** (Trinidad and Tobago), **G Kamadi** (Kenya), **E D Karinganire** (Rwanda), **J Karuga** (Kenya), **M A Konte** (Senegal), **A Lawson** (Gabon), **I Maiga** (Burkina Faso), **B Monjane** (Mozambique), **A M Motsou** (Cameroon), **E Ntungwe** (Cameroon), **A C Santos** (Cabo Verde), **P Sawa** (Kenya), **A da Silva** (Mozambique), **T Tiemtore** (Burkina Faso) and **M Waruru** (Kenya).

SONIA JORGE

# Internet access for all

Founded in 2012, the Alliance for Affordable Internet (A4AI), is a coalition of diverse members, such as USAID, Google and the Grameen Foundation, with a common objective – to provide internet access to the poor. This is a major challenge, especially for rural areas in ACP countries.


**Sonia Jorge** is executive director of A4AI, a project that aims to promote policy and regulation reforms in developing countries to allow as many people as possible to have access to the internet. Rural areas are primarily concerned.

***What is A4AI's main objective? What do you mean by 'affordable internet'?***

Our goal is to support and advance internet policies and regulations worldwide so that the internet will be affordable for all. Did you know that two-thirds of the world's people are not connected to the internet? This figure is especially worrying since many of those without internet access are the poorest in the world and live in areas without infrastructure - a situation that does not bode well for a quick change. The 'accessibility' concept varies between global regions and countries. From the outset, we set a benchmark (not an end in itself) whereby the price of internet access would not exceed 5% of the average per-capita monthly income.

***Does affordable internet access have a special meaning for rural and agricultural communities in developing countries? Why?***

Certainly. Most rural dwellers in developing countries live below the poverty line in isolated areas. We feel that the internet offers a useful platform for economic activities, while also being a source of information and services. Rural and often marginalised people who have internet access may benefit from services but they can also voice their opinions like full citizens. Accessibility is not simply a matter of cables and networks, it is a combination of factors, requiring electricity, network maintenance and content. All stakeholders - not only governments - should be mobilised, including civil society, NGOs and local contractors.

***According to the GSM Association*, the telecom market is currently growing at a rate of 30% a year in Africa. How can equipment suppliers be persuaded to focus on rural areas and not just urban centres?***

Policymakers should implement incentive mechanisms to reduce costs, for instance tax cuts, especially to companies providing services in rural areas, or subsidies for infrastructure development in rural areas so as to offset the higher investment costs. They should also promote and support the development of public-private partnerships for infrastructure investments geared towards open access, thus broadening the range of services and giving smaller and recent operators greater scope for covering remote rural areas.

***Could you outline some 'good practices' identified by A4AI?***

Two specific areas were identified: first, a liberalised market with an open competitive environment - whereby healthy market competition is fostered, regulations are drawn up by an efficient independent agency, and sound policies and regulatory processes with substantial citizen participation are promoted. Secondly, policies and practices designed to reduce the industry's structural costs. In these areas, it is also necessary to comply with principles that may seem obvious but still warrant mention, such as the protection of internet freedom and fundamental online rights of expression, assembly and association.

***What are the main conclusions of the 2013 Affordability Report you've just published?***

First, competition is not a panacea. The introduction of new stakeholders on the market is not sufficient to lower prices and improve accessibility. The lack of infrastructure is also still an obstacle that must be given priority to boost internet access. Investment is currently not sufficient to connect rural and peri-urban areas. States have a key role to play in ensuring benefits to those who invest in infrastructure for isolated areas. They could lower taxes in the telecommunications sector. Finally, national leadership is essential to maximise the positive impact of broadband on employment, productivity, growth and innovation. Many countries have taken positive steps by implementing broadband policies, but these are not sufficient to enhance accessibility. ■

* Spanning 219 countries, the GSMA unites nearly 800 of the world's mobile operators, as well as more than 200 companies in the broader mobile ecosystem.

The *2013 Affordability Report* is available at: http://tinyurl.com/pdl6a4t.

**By Anne Perrin**

Population growth and the steadily increasing demand for protein that comes with the enhanced standard of living of communities in developing countries has triggered the need to develop livestock production. This is a challenge for many ACP countries. Genetic livestock improvement is an essential but incomplete solution.

## GENETIC LIVESTOCK IMPROVEMENT

# Major forthcoming changes

Livestock production is of major socio-economic importance in ACP countries, contributing significantly to peoples' livelihoods while playing a key role in food security and rural development, often with a critical socio-cultural dimension.

Global demand for animal protein will double by 2040 under the combined effect of population growth, urbanisation and changing consumption patterns, according to the FAO report *The State of Food and Agriculture 2009*. Within 30 years, developing countries will account for more than 50% of the growth in the demand for milk, meat and eggs. Average per capita meat consumption in China has increased by more than four-fold in 30 years, a trend that is expected to carry over to Africa, with FAO predicting a doubling of per capita meat consumption on this continent by 2050.

There is no doubt that the countries concerned will have to greatly increase their livestock production. Africa already has abundant fodder resources and a large livestock population but, apart from hides and skins, it is still a net importer of animal products. However, as noted by FAO, Africa's per capita meat consumption remains low because it has the highest population growth rate in the world, and indigenous breeds are also not very productive, epizootic disease outbreaks are frequent, livestock feed is hard to come by and sectoral policies are weak. Moreover, these are poor countries. Significant progress has nevertheless been made in countries like Botswana, Kenya, Namibia and South Africa.

Could genetic improvement help increase livestock production in ACP countries? This concerns many livestock species, including cattle, goats, sheep, pigs, poultry and fish, reared in a broad range of different livestock production systems: extensive, intensive, pastoral, agro-pastoral and peri-urban. The genetic improvement projects under way also differ, but two major trends involving different methods emerge: conservation and genetic improvement of local breeds through selection, and altering the gene pool of animals by introducing external genes via crossbreeding or using recent advanced tools.

"There is no point in having livestock with a high genetic potential if the rearing conditions are such that this potential cannot be tapped," says Professor Ahmadou Lamine Ndiaye, honorary director of the Interstate School of Veterinary Science and Medicine of Dakar and president of the African Academy of Sciences. For years, the focus has been on genetic improvement achieved through crossbreeding and importing and adapting highly productive breeds from temperate regions, but the results have often been mixed because the success of genetic improvement closely depends on the conditions and methods of livestock production. Introducing a productive breed is not sufficient: it is also essential to enhance the animals' diet and veterinary and other care in order to curb epidemics, and livestock pens must be tailored to local climatic conditions.

Women farmers from Kolda, in Senegal, receiving more productive cross-bred chickens

"Local cows produce 1-3 litres/day of milk in the southern Sahel, whereas 12-15 litres/day could be expected from a local breed crossbred with an improved breed. Moreover, 20-22 litres/day could be produced by a cow bred by embryo transfer from a dairy purebred. However, such animals have different needs - they have to be overfed," says José Baechler, president of Brune Génétique Services, France. Prior to the introduction of the Brune cattle breed, mainly through artificial insemination (AI) of local cattle breeds in Burkina Faso and Niger, livestock farmers had to be instructed on how to produce fodder and other essential products. This requires training as well as a change in lifestyle - farmers have to settle down and cease their transhumance activities. "This is a crucial and very demanding choice which farmers do not always readily understand," says Baechler. Farmers also have to separate male and female animals in their herds to avoid the risk of mating, which would quash the genetic benefit. This requires a major change in attitude.

## A new setting

There has been considerable growth in milk production due to the increase in crossbreeding. This trend now prevails in Africa, driven by enhanced feeding conditions, the market and sophisticated technology.

In Kenya, milk production doubled in 10 years (5.2




Top right: French white pigs crossbred with a local Beninese variety for better meat productivity and natural resistance to disease

Bottom right: By crossing N'Dama and Montbéliarde breeds, Hamidou Baldé has bred cows that produce more milk

billion litres in 2012) through dairy breed improvement via AI, the creation of areas devoted to fodder crops, and structuring of the sector, especially by setting up dairy producers' cooperatives. The country is now self-sufficient in milk and 80% is produced on small-scale livestock farms. The supply policy was also favourable for production - import duties on powdered milk were hiked up by 60% in 2005.

In Madagascar, the Armor de Fifamanor dairy farm has been disseminating the Pie Rouge Norvégienne cattle breed since 1972, first through mating stations, and then by AI performed on livestock farms in the Vakinankaratra region. Some 3,500 purebred cows and 10,000 halfbreeds were produced, which significantly boosted milk production and productivity. But this centre is still experiencing difficulties at several levels: malnourished animals, AI costs are too high for livestock farmers, some embryonic mortality or abortion-inducing diseases. In addition, milk collection and prices in Vakinankaratra are unsatisfactory for livestock farmers, which has led to a decrease in milk production in recent years as farmers are less inclined to use AI or purebred bulls. However, the genetic model is not under question, it is the deterioration of the economic situation of the country which has negatively impacted on the sector.

"In the suburbs of Dakar, government officials and investors create model farms with stable-kept livestock, intensive production and importation of exotic bovine semen. Pure breeding is an important investment and certain conditions have to be fulfilled, such as producing fodder and having access to a market to sell dairy products," says Ndiaye.

Supplying financially-sound high-demand urban markets is not just for peri-urban dairies. Intensive semi-industrial poultry production systems that use improved breeds for egg and meat production are increasing in the vicinity of urban centres.

Conventional poultry farming systems prevail in rural areas, with local poultry breeds mainly being reared. But projects are under way in areas such as in the Senegal River Valley to improve the performance of these family poultry farms through the introduction of sire roosters, which are crossed with local poultry breeds. This system is combined with habitat improvement, sanitary prophylaxis and feed manufacturing using local products. Significant genetic improvement can be achieved if epizootic diseases, such as the deadly Newcastle disease in Africa, are controlled. Success also depends on an animal's nutrition conditions and possibilities for marketing livestock products.

## Preserving local genetic resources

In ACP countries, as elsewhere, livestock genetic resources are broad ranging and tailored to local ▶

## KEY FIGURES

**7,616** livestock breeds have been identified worldwide

**62** breeds have disappeared over the last 6 years, i.e. almost one a month

**40%** is the proportion of livestock production in global agricultural production

**3.9 kg** of poultry meat is consumed per capita in Africa yearly (compared to 26.9 kg in OECD countries)

conditions as they have adapted and become resistant to a number of disease and climatic constraints through mutation and natural selection.

The Regional Project on Sustainable Management of Endemic Ruminant Livestock in West Africa (PROGEBE) is one of the few major genetic improvement programmes for local livestock breeds. It aims to preserve local livestock - N'Dama cattle, Djallonké sheep and trypano-tolerant West African Dwarf goats - inhabiting subhumid and humid areas of Gambia, Guinea, Mali and Senegal, where tsetse flies (vectors of animal trypanosomosis diseases) are rampant.

"Preserving doesn't simply mean leaving as it is. Instead, it involves enhancing the value and competitiveness of livestock while facilitating market access," says Mamadou Diop, national coordinator of PROGEBE-Senegal. This consists of preserving the animal's environment and improving its productivity through better access to animal health services, pasture, water and improved sires. In late 2009, in partnership with ISRA, the Senegalese agricultural research institute, and in collaboration with CRZ-K, the animal research institute at Kolda, an N'Dama cattle breeding programme was launched with livestock farmers actively participating in the breeding process. Currently 14 improved stock have been disseminated to livestock farms, and this should be increased to 20 in 2014.

The low production level is generally attributed to the poor productivity of local breeds. However, as is the case for exotic breeds or crossbreeds, the productivity of

## Swine production sector re-launched in Cameroon

Cameroon is counting on imports of improved pigs to re-launch its swine production sector. "This is a technological option. Like the poultry or dairy production sectors, we cannot overlook technological advances," states Dr Bourdanne, livestock sector specialist for the Agricultural Competitiveness Project in Cameroon. In November 2013, 66 landrace sows and seven Large White males arrived by plane from the Choice Genetics company, France. Highly productive sows can be obtained by crossing imported pigs with local breeds. According to Bourdanne, the average daily growth gain of local pigs barely exceeds 400 g/day (generally between 150 and 350 g), whereas it ranges from 500 to 800 g/day, or even more for these improved animals. Besides, local breeds have to be reared for 10–12 months to produce 100 kg pigs, but imported breeds can grow to this live weight within 6 months.

"The swine production sector needs new blood," says Bourdanne. The local pig population, currently consisting mainly of local and exotic breeds, is undergoing genetic degeneration due to substantial inbreeding. These sows will be disseminated to producers who promote breeding-certified livestock production farms at Kounden, with the swine production unit in Noun currently being rehabilitated. High quality feed essential for these pigs will be produced at this station, which will also help avoid health problems. "They are more susceptible in our conditions, which is why the Kounden station was chosen, as this area is free from major swine diseases," says Bourdanne, while adding that the prophylaxis programme and general biosecurity measures have to be respected.

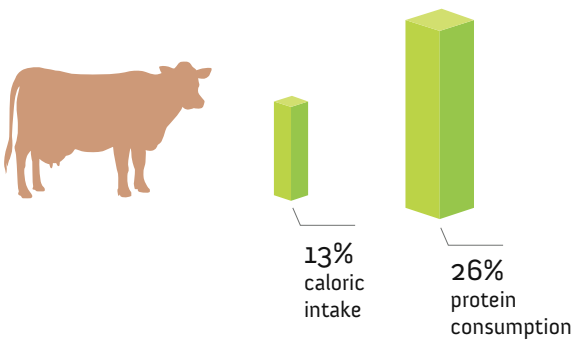
**By Anne Matho**

## The importance of breeding

Source: FAO, 2012

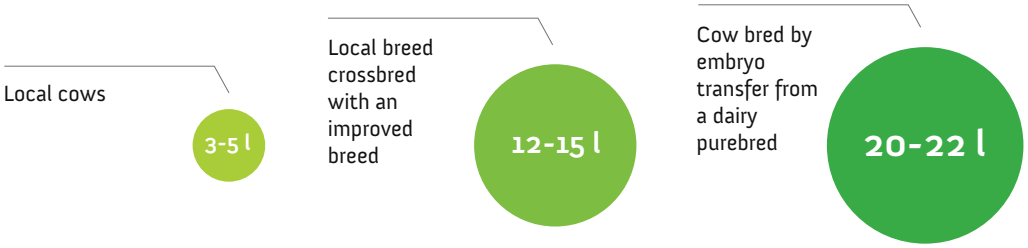
### Global agricultural GDP


### Livestock contribution to global diets




## Genetic livestock improvement

Optimal milk production per day per breed category in the Sahel



local breeds could be boosted by improving the rearing farming conditions.

## A genomic revolution

"According to the 2007 FAO *Livestock Report*, little is known about roughly 40% of domestic livestock breeds, 30% of which are considered to be endangered. It is thus essential to effectively inventory, preserve and characterise local breeds to ensure their improvement. We now have the tools required to more thoroughly characterise these populations by examining their genomes in order to pinpoint what determines their adaptation and production traits," says Michel Naves, animal genetics engineering specialist at the Animal Research Unit of the INRA French West Indies and Guyana Research Centre. Such genotyping initiatives are carried out to address the major challenge of breeding hardier and more productive animals. Detecting adaptation traits in local breeds is crucial in the development of production systems. This especially concerns adaptation to changing climatic conditions through, for instance, the identification of heat tolerant genes, particularly in pigs. "Local breeds, especially tropical ones, which are subjected to very substantial seasonal variations, are often able to mobilise their reserves when resources are scarce and to replenish them when fodder is more abundant, while also making use of a diverse range of food resources.

These traits could be of interest in the context of climate change, where spells of severe drought are followed by heavy rainfall periods, leading to marked quantitative and qualitative variability in food supplies," says Naves. New genotyping tools and, even more importantly, high throughput sequencing will enable major genetic resource selection progress to be achieved over the next 5-10 years. "This will concern genetic characterisation of populations (mapping their genomes), screening for 'selection signatures' (traces left in the genome by natural selection processes), searches for genetic markers associated with biological adaptation, or production processes and genetic improvement via the breeding of more productive animals, crossing tests and inbreeding management," confirms Naves. Developing countries do not yet have access to advanced technology, but this situation is rapidly changing. "Five to 10 years ago, it took several months to map a cow's complete genomic sequence at a price of tens of thousands of Euros. Nowadays, the results take 15-30 days and costs €3,000," says Naves.

With genomics progress, genetic improvement choices should not just be limited to selecting a local breed (safer but much slower) or introducing an exotic breed (faster, but more risky and fragile). Certain traits of local breeds can now be 'borrowed' and inserted in a more productive breed so that it will be better adapted to local constraints, otherwise traits could be sought in local breeds and subsequently exploited to boost the productivity of these animals without upsetting their adaptation features. Tapping the potential of local breeds also helps preserve genetic diversity, which is currently threatened. ■

**By Anne Guillaume-Gentil**

## Viewpoint

**Dr C. Valentine Yapi-Gnaoré**, director of the Centre International de Recherche Développement sur l'Elevage en Zone Subhumide (CIRDES), a research centre on livestock and animal diseases in Burkina Faso, is an expert in quantitative genetics and domestic livestock improvement.

# Farmer involvement in livestock breeding

**How is genetic livestock improvement able to help fulfil the current and future protein needs of African people?**

In general, livestock productivity is lower in Africa than in Europe or elsewhere, whereas herd numbers are high. Genetic improvement can be geared towards increasing the amount of protein produced per livestock head, thus increasing the protein supply available to meet peoples' needs. Several projects on this issue have been carried out but unfortunately not followed up.

**Should livestock farmers be more involved?**

Yes, genetic improvement initiatives should come from livestock farmers themselves under guidance from experts. Most of the programmes are run by governments and donors but they end when funding dries up. If, however, farmers are proactive, if they are more aware and participate effectively, I think it could improve the productivity of their herd. But unfortunately, the feeling still prevails that the larger the herd the richer and more social status one has. This thinking must change. Genetic improvement implies that, for instance, livestock farmers should not have unproductive male or female animals in their herds, but this is a bitter pill to swallow. Farmers' herd management habits, whereby male and female animals are generally grouped together, further complicate the situation. Moreover, are there enough qualified people to manage genetic improvement in Africa?

**What CIRDES genetic improvement initiatives are under way?**

Our job is to first identify important local livestock breeds. Their potential is measured in terms of tolerance to certain diseases, walking ability and cultural value. We are developing a gene bank and collecting semen from males of these breeds, which is stored in controlled conditions. Two years ago we also set up a farm to preserve live animals of these breeds. This farm showcases native livestock breeds from West and Central Africa. CIRDES has a genotyping platform for molecular biology research, which enables us to characterise livestock breeds. The laboratory is certified under ISO/IEC 17025:2005, so CIRDES is a West African Economic and Monetary Union centre of excellence in animal biotechnology.

FIELD REPORT FROM SENEGAL

# The farmer's winning bet

Meeting with an animal genetics specialist changed Pape Seck's life. In 1997, he took up dairy breed selection in Senegal. Despite the difficulties he encountered, his small experimental farm is today home to a high-quality herd which continues to grow.

Pape Seck's passion for dairy breeds came from his meeting with Professor Pape Alassane Diop, a specialist in animal genetics and a pioneer in artificial insemination (AI) in Senegal. The professor found his calling in Touba, Mbella, Mbellakadiao and Kaolack, in the heart of the groundnut basin where his first tests took place.

Seck mainly owes his becoming a farmer to his father, who was passionate about agriculture and animal farming. When he was very young, living in Sine-Saloum (in the groundnut basin) where his father managed a trading house, he was introduced to small-scale agriculture. Seck worked at an office that specialised in accounting, but never forget his desire to be a farmer. He retired to Bargny, 30 km south of Dakar, to land he had inherited from his parents.

Left: Livestock market in Dakar
Right: A half-breed Holstein

© S Elina

There, he began to raise sheep and then started to raise cattle. He began with Maure zebu. However, due to lack of experience and training, his first attempts were not successful. But Seck was not discouraged. Over the years, with plenty of advice from farming services and from Professor Diop, he learned and soon saw results.

Today Seck is in his element, proud of his herd comprising Holstein mixes, a beautiful Brown Swiss and her many offspring, as well as recently arrived Ndama bulls. "We have a mix of breeds as the government chooses the ones that seem the best adapted to the climate in Senegal," he explains. AI products, imported by the government, have become more accessible since President Abdoulaye Wade launched the 'Great Agricultural Offensive for Food and Abundance' (GOANA - Grande offensive agricole pour la nourriture et l'abondance) in 2008. AI products are sold by the private sector for 50,000 CFA francs (€76) with a guarantee to repeat the insemination if it is unsuccessful.

Although he prefers the Holstein breed, Seck has a herd of around 40 heads of cattle of various breeds. Crossbreeding the local species, the Gobra zebu, with the Brown Swiss or Holstein works well. These mixed-breed cows produce, under optimal conditions, on average 12 litres of milk per day, whereas a local breed would produce a maximum of 5 litres, or more commonly only 1-3 litres.

In the herd, a brown calf with a small hump stands out. This one is the product of a Gujarat zebu. "I introduced this breed for the quality of its meat and its ability to grow faster than the others," says Seck, who wants to diversify his income. Today, Holstein or Gujarat mixed-breed bulls or cows sell for over 800,000 CFA francs (€1,220) at the Dakar livestock market, while a local breed will barely manage 250,000 CFA francs (€382).

## Ticks, dermatitis, fevers...

Success does not mean that Seck does not encounter any difficulties. One problem is the lower semen quality following the entry of new arrivals in the market, alongside the State, "When I started, the two Holstein-Gobra mixed-breed cows, obtained by crossbreeding, each produced over 14 litres of milk per day. Today, this 'Holstein', which is only a 25% mix, produces over 10 litres per day," says Seck.

Another problem is vulnerability to diseases. "This morning, my main Brown Swiss bull is in a bad way, with the beginnings of foot-and-mouth disease. For the herd to produce more calves, other than via artificial insemination, it needs this sire," says the concerned farmer. Moreover, his small, six-month-old calf has contracted lumpy-skin disease. It should recover if treated with antibiotics; however this is relatively expensive, estimated to cost around 19,000 CFA francs (€29) for treatment.

That said, along with the better known and better-equipped farms in the Niayes region of north-west Senegal, in the area around Wayembam and Niakoul Rab, Seck says he is happy to be one of those which can adapt. This new system of animal farming allows him, under optimal conditions, to produce over 40 litres of milk per day with only three or four lactating cows. This would be impossible with local breeds. ■

**By Mame Aly Konte**

© M.A.Konte

HONEY

# Sweet success?

Increasing demand for honey by urban consumers provides livelihood opportunities for women and landless people, particularly as beekeeping complements other economic activities in rural and urban settings. Whilst traditional honey value chains are often fragmented, success in improved production and marketing for domestic and export markets is demonstrating how supply can better meet the demand.


© ILRI/Z Sewunet

A display of honey at an exhibition in Ethiopia

As an alternative to poaching, timber-felling and charcoal burning by many of Kenya's poorest rural communities, Honey Care Africa has sought to improve the productivity and viability of honey production for domestic markets. Established in 2000 by three Kenyan entrepreneurs, the social enterprise company creates partnerships between local communities, development agencies and the private sector. Farmers, including women and young people, are supported with micro-loans to purchase Langstroth beehives and are then given intensive training in apiculture. Collecting the honey on-site, Honey Care Africa buys it at an agreed price, and the honey is then processed, packaged, marketed and sold to urban consumers through supermarket chains and other outlets.

To date, over 15,000 Kenyans have benefited, of which almost half are women. Their involvement is particularly beneficial, as women do not generally take part in traditional beekeeping, with indigenous hives located high up in the trees. Honey Care Africa - Tanzania, launched in 2005, is now the largest single honey producer and exporter in the country, and Honey Care Africa is also involved in projects in Malawi and South Sudan. Founder and director, Farouk Jiwa says, "If you want something sustainable and viable, you need to bring different actors in the value chain together and facilitate, not become a player yourself. This is a big problem with development strategies today. With Honey Care Africa, building this platform and taking our model to scale was very exciting."*

To improve productivity and quality in honey for domestic and export markets, Beza Mar Agro-Industry, an Ethiopian honey trader, has been working with local farmers since 2003. By 2008, the company was one of the first African companies to export honey to the European market; it is now developing mixed flavour and speciality products to provide greater income for farmers and traders involved in the honey value chain.

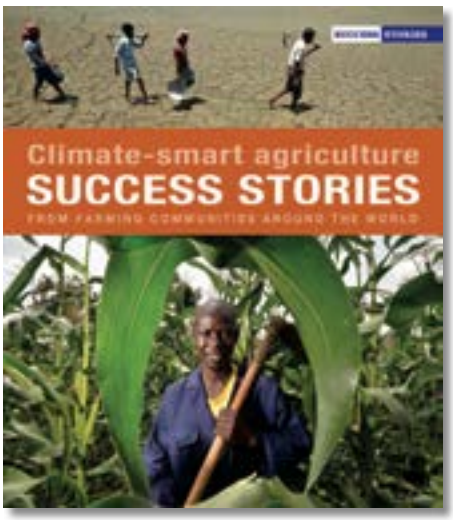
But farmers' adoption of modern technologies and practices has been slower than expected, says director Hailegiorgis Demissie, and the ability of local producers to sustainably supply increased volumes of export quality honey requires substantial investment in improved production and postharvest practices. "In local markets, we know each other and can trust the product, and each other as buyers and sellers," he says. "The international honey market is very competitive and the process is very different." However, with increased exports from 30 t in 2009 to over 150 t of honey and 40 t of beeswax by 2012, the greater earnings have enabled beekeepers to buy more livestock and send their children to school.

To protect the rights of producers of a rare honey that is exported from the protected Kilum Ijim mountain forest in North West Cameroon, Oku Honey was one of three African products in 2013 to be awarded Protected Geographic Indications (PGI) by the African Intellectual Property Organization. While most African honey is dark red, Oku Honey is valued for its delicate creamy texture and white colour. PGI certification protects consumers (and producers) from imitation products and encourages biodiversity, with Oku production linked to conservation and sustainable community forest management.

Whilst certification, including organic and fair-trade, enables beekeeper associations and cooperatives in Africa and across other ACP regions to produce high value niche products for export, demand in domestic urban markets continues to grow. However, as successes have shown, there is an increasing need for better structured value chains across ACP regions, benefiting from high quality equipment, professional services, quality control, technology and more robust consumer markets. ■

* Meet a Sustainable Entrepreneur: Farouk Jiwa, Honey Care Africa http://tinyurl.com/qju78h9.

# Meeting the challenge




**Climate-Smart Agriculture Success Stories from Farming Communities Around the World**
By P Neate
CCAFS/CGIAR/CTA, 2013; 42 pp.
ISSN 2212-6333
CTA no. **1752**
**2** credit points
Downloadable as PFD file from:
http://tinyurl.com/o36qlw4

The FAO has defined climate-smart agriculture as consisting of three main pillars: sustainably increasing agricultural productivity; building resilience to climate change; and reducing greenhouse gas emissions. Around the world, there are numerous projects that are testing or promoting such principles; few, however, have had widespread uptake.

This booklet presents 16 examples where climate-smart targets are being achieved at a significant scale. They include agricultural interventions, such as the regeneration of farmland in the Sahel and the system of rice intensification in Vietnam. Weather-based crop insurance and agricultural advice systems are included in a chapter on addressing climate related risks. And a final chapter on policies to promote climate change mitigation includes community based forest management in Tanzania, which is playing an important role in reducing deforestation.

As a valuable overview of progress with climate-smart interventions, the booklet is both accessible and visually appealing, with stunning photographs to accompany the clear text.

## ▼Capacity building

Cutting-edge research that is specifically relevant to local environments and that promotes economic growth for millions of farmers is one way to reduce poverty and food insecurity in Africa. This book details how the Regional University Forum for Capacity Building in Agriculture is working to strengthen the capacity of African universities to respond to the demands of smallholder farmers by training researchers and building strong ties between universities and business enterprises.

**Dirty Hands, Fine Minds: The Story of an Agricultural Research and Training Network in African Universities**
By MA Fitzgerald & M Lindow
RUFORUM, 2013; 53 pp.
ISBN 978-99-7086-610-6
Downloadable as PDF file from:
http://tinyurl.com/p2g2tfr

## ▼Agricultural potential

Smallholders will play a key role in meeting the future food demands of growing and increasingly rich urban populations. This report studies different smallholder livelihood strategies and concludes that while some have the potential to undertake profitable commercial agricultural activities, others should be supported in exiting agriculture, to seek non-farm employment opportunities. Recommendations to help potentially profitable smallholders cope with climate change, price shocks and limited finance are provided.

**From Subsistence to Profit: Transforming Smallholder Farms**
By S Fan, J Brezeska, M Keyzer & A Halsema
IFPRI, 2013; 30 pp.
ISBN 978-08-9629-558-2
Downloadable as PDF file from:
http://tinyurl.com/pblabqc

# Gender

**Women, Livestock Ownership and Markets**
Edited by J Njuki & P Sanginga
Routledge, 2013; 148 pp.
ISBN 978-04-1563-928-6
£60 • €70
Routledge
130 Milton Park
Abingdon
OX14 4SB, UK
www.routledge.com

Women are major actors in livestock production in Eastern and Southern Africa - and elsewhere - and are typically responsible for small ruminants, dairying and poultry production. Yet despite this, they are commonly excluded from household decision-making processes, especially regarding the disposal of animals and animal products, with negative implications for both family welfare and economic growth.

This book provides a comprehensive analysis of women's ownership of livestock, their participation in marketing, and their roles in decision-making within the household. It also explores how the ownership of livestock by women can impact on household food and nutrition security. The authors discuss strategies for increasing women's participation in livestock markets, such as through collective marketing and better access to livestock information and services. A final chapter sets out a series of recommendations on how gender can be mainstreamed within livestock research and development, to ensure that livestock truly are a pathway out of poverty, for women in particular.

## ▼Global hunger

This annual publication presents updated estimates of undernourishment and progress towards the Millennium Development Goal and World Food Summit hunger targets. The report reveals that 842 million people, or roughly one in eight, suffered chronic hunger in 2011–13, with the vast majority living in developing regions. While substantial progress has been made in East Asia, Southeast Asia and Latin America, progress has been modest in sub-Saharan Africa, where 25% are estimated to be hungry.

**State of Food Insecurity in the World 2013**
By FAO, IFAD & WFP
FAO, 2013; 56 pp.
ISBN 978-92-5107-916-4
Downloadable as PDF file from:
http://tinyurl.com/njzqzjp

# Valuable lessons

**Do all Roads Lead to Market? Learning from AGRA's Market Access Programme**
Edited by E Kambewa, M Konlambique, B Wennink & M Wongtschowski
Royal Tropical Institute, 2013; 160 pp.
ISBN 978-94-6022-271-9
€25
Royal Tropical Institute
Postbus 95001
1090 HA Amsterdam
The Netherlands
www.kit.nl

■ Smallholder farmers are frequently advised to bulk their crops to achieve a better bargaining position, and better prices. But is it always the right strategy? Crop production and postharvest handling to reach the standard required for group marketing may be more costly, and there are transport costs, plus potential delays in getting payment. Only if buyers are prepared to pay a significantly higher price for the bulked crop will the expense and effort incurred by the farmer prove worthwhile, and that depends on building strong, trusting relationships with buyers who value the difference in quality from crops bought through traditional marketing systems.

Such lessons make this review of AGRA's market access programme an essential read for those working to improve smallholder marketing. With case studies from across Eastern, West and Southern Africa, examining a wide range of issues, the authors continually ask 'What should we be doing differently?' - reflecting AGRA's creditable determination to learn and improve in its work on behalf of African farmers.

# Methodology


**Guides for Value Chain Development: A Comparative Review**
By J Donovan, M Cunha, S Franzel, A Gyau & D Mithöfer
CTA/World Agroforestry Centre, 2013; 80 pp.
ISBN 978-92-9081-527-3
CTA no. **1746**
**10** credit points
Downloadable as PFD file from:
http://tinyurl.com/nk7ct7z

Value chain development (VCD) is central to many efforts to tackle poverty. Careful analysis of the business context, the main actors and the relationships between those actors is essential in designing appropriate VCD interventions, and numerous guides on how to conduct such analysis have been published in recent years. But theory and practice in this field are evolving, in a context where no universally accepted definition of a value chain exists, and there is limited evidence about the impact of VCD to inform design of new interventions.

This publication reviews the strengths and weaknesses of 11 guides to VCD, and finds that most lack sufficient discussion on the conditions necessary for VCD to advance development objectives. Many also do not adequately recognise the importance of a specific context in determining intervention design. It recommends that more critical reflection and debate is needed on ways to address the needs of the poor in value chains, on tools to analyse the context in which chains operate, and on systems for mutual learning in designing VCD interventions.

# Conference call


**Making the Connection: Value Chains for Transforming Smallholder Agriculture**
By C Pye-Smith
CTA, 2013; 40 pp.
ISSN 2212-6333
CTA no. **1755**
**2** credit points
Downloadable as PFD file from:
http://tinyurl.com/oehcele

The 'Making the Connection' conference, held in Addis Ababa in November 2012, raised a number of key points on how to build inclusive value chains for the benefit of smallholder farmers. This report provides a summary, collating points raised by presenters and other delegates in main and parallel sessions during the 4-day event. It opens, by setting out a number of areas deserving of policy attention, including the need for governments to support higher education in delivering training on agribusiness and value chain topics, and a call to liberalise the telecommunications sector in countries where this has not been done, to facilitate greater use of ICTs.

In a chapter on how to create the right environment for growth, governments are called on to reduce corruption and bureaucracy, and boost rural infrastructure and health care. Other areas of focus include the power of information technologies, the growing prominence of domestic and regional trade, and the need for farmers' organisations to be more business-oriented and provide their members with better training.

## ▼ Producing more with less

A greater focus on the role of microbiology in agriculture, combined with new technologies, will help mitigate potential food shortages, this report claims. All plants rely on microbes to secure nutrients, deter pathogens and resist environmental stresses. The authors reveal that improved understanding of plant–microbe interactions has the potential to increase crop productivity by 20% and reduce fertiliser and pesticide requirements by 20% within 20 years.

**How Microbes can Help Feed the World**
By A Reid & SE Greene
American Society for Microbiology, 2013; 36 pp.
Downloadable as PDF file from:
http://tinyurl.com/psmczcv

## ▼ Corporate responsibility

Since 2000, at least 4 million ha – linked to 100 large-scale land deals – have been turned over to sugar cultivation at the expense of small-scale producers. All but one of the world's 10 leading food and drink companies were found to be 'poor' or 'very poor' in ensuring protection of land rights for local communities within their supply chains. In Brazil and Cambodia, local people have been evicted by sugar plantations that ultimately supply Coca-Cola and Tate & Lyle, while Associated British Foods has been linked with conflicts in Malawi, Mali and Zambia.

**Sugar Rush: Land Rights and the Supply Chains of the Biggest Food and Beverage Companies**
By J Thorpe
Oxfam, 2013; 24 pp.
ISBN 978-17-8077-462-6
Downloadable as PDF file from:
http://tinyurl.com/ng4urq

## ▼ Attention deficit

Despite getting little attention from researchers, crop breeders and policymakers, neglected and underutilised plant species (NUS) already play a vital role in household nutrition for millions of families, and could do much more. This short, attractively presented guide outlines their value to food security, farm resilience, nutrition, livelihoods and cultural identity, drawing on success stories from around the world. It also sets out the key challenges facing NUS, and what needs to be done to address them.

**Fighting Poverty, Hunger and Malnutrition with Neglected and Underutilized Species**
By S Padulosi, J Thompson & P Rudebjer
Bioversity International, 2013; 60 pp.
ISBN 978-92-9043-941-7
Downloadable as PDF file from:
http://tinyurl.com/qdnrvee

# Organisational capacity

**Empowering Smallholder Farmers in Markets: Experiences with Farmer-led Research for Advocacy**
By G Ton & F Proctor et al.
Agrinatura/CTA/Wageningen UR, 2013; 140 pp.
ISBN 978-94-6173-891-2
CTA no. **1767**
**10** credit points
Downloadable as PFD file from:
http://tinyurl.com/qdvzhte

Research partnerships between farmers' organisations and research teams are rarely straightforward, and the lessons learned in trying to make them work are a significant output of the process, regardless of whether they achieve their intended aims. This honest reflection on efforts by the Empowering Smallholder Farmers in Markets programme to boost the advocacy capacity of national farmer organisations through farmer-led research, will therefore give plenty of food for thought for those working in the same field.

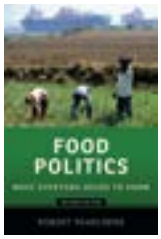
The book largely consists of a series of country studies, detailing collaborative research activities and their outcomes. Examples include grassroots consultations to revise the national agricultural advisory services in Uganda, developing in-house research capacity to monitor government policies in Kenya, and strengthening the role of women in Costa Rica's national advocacy platform. They emphasise what can be achieved by national farmers' organisations in terms of advocacy, and in developing the innovation required to help smallholders effectively access markets.

## ▼ Uncertain future

This report draws on four different climate models to assess the likely impacts of climate change in Southern Africa until 2050. Those models, however, make fairly divergent predictions about, for instance, changes in rainfall quantity across the region during that period. Faced with such uncertainty, the authors recommend the need for flexibility in adaptation plans, while also calling on governments to allocate significant budgets to adaptation, including smallholder irrigation and heat tolerant crop varieties.

**Southern African Agriculture and Climate Change**
By S Hachigonta, GC Nelson, TS Thomas & LM Sibanda
IFPRI, 2013; 370 pp.
ISBN 978-08-9629-208-6
Downloadable as PDF file from:
http://tinyurl.com/qedgbgr

# Updated analysis




**Food Politics: What Everyone Needs to Know**
By R Paarlberg
Oxford University Press, 2013; 272 pp.
ISBN 978-01-9932-238-1
£10.99 • €9
Oxford University Press
Great Clarendon Street
Oxford
OX2 6DP, UK
www.oup.com

■ Food and politics have been entwined ever since hunter-gatherers became cultivators, new settlements required governance, and agricultural products offered the basis for taxation to pay for the emerging administrators and military. Little has changed in some 10,000 years except for the increasing complexity, as international organisations join governments to optimise production and distribution of food. The author addresses pivotal topics, including food aid and agricultural development assistance, the green revolution controversy, the politics of obesity, and who governs the world food system.

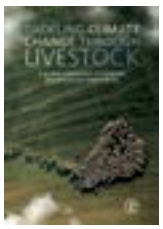
This second edition of *Food Politics* has been revised and expanded, with a new chapter examining the politics of meat production and consumption, and updated information on farming, water and climate change. The evolution of 'precision systems' to reduce environmental damage are also examined. This is a book that offers answers to many questions often clouded or confused by partisan actors. A book worth reading as a follow-up to the 2010 first edition.

## ▼ Risk zones

As temperatures warm, many of the world's poorest and most vulnerable people will be at increasing risk from drought, flooding and heat waves. The impoverishing impact of such disasters is huge, potentially wiping out gains made in poverty reduction. By identifying the places where numbers of poor people and disaster risks are most concentrated – including eight countries in sub-Saharan Africa – the authors aim to show how disaster risk management must be at the heart of poverty reduction efforts.

**The Geography of Poverty, Disasters and Climate Extremes in 2030**
By A Shepherd, T Mitchell, K Lewis *et al.*
ODI, 2013; 88 pp.
Downloadable as PDF file from:
http://tinyurl.com/pmxvke4

# Reducing emissions




**Tackling Climate Change Through Livestock**
By PJ Gerber, H Steinfeld, B Henderson *et al.*
FAO, 2013; 139 pp.
ISBN 978-92-5107-920-1
FAO Publications
Vialle delle Terme di Caracalla
00153 Rome, Italy
www.fao.org/publications
Downloadable as PDF file from:
http://tinyurl.com/nl5x72u

■ The significant contribution of the global livestock sector to greenhouse gas emissions is well known, representing close to 15% of human induced emissions. Nearly half (45%) of this comes from production and processing of feed, with production of methane by ruminants contributing around 39% of the total. Yet, as this report from FAO makes clear, most interventions to reduce emissions focus on technologies and practices that actually improve production efficiency.

Such measures include the use of better quality feed, and achieving a better balance of feed, in order to reduce gas and manure emissions. Improved breeding and animal health can reduce the number of unproductive animals in a herd, and their related emissions. Manure management practices that ensure the recovery and recycling of nutrients and energy are another valuable strategy. Importantly, significant mitigation can be achieved by adopting improved practices within existing systems, and the greatest potential lies in the world's low productivity ruminant systems, such as in Africa and the Caribbean.

## ▼ Issues and challenges

This report aims to provide an up-to-date assessment of the emerging issues and challenges facing smallholder farming in sub-Saharan Africa. Written in two major sections, the first focuses on 13 key areas in African agriculture. These include: challenges and promising solutions for the improvement of soil health; development of effective seed systems; and creation of an enabling policy environment. The second section collates statistics and key agricultural data for 16 countries. The intention is to expand this coverage in future reports.

**Africa Agriculture Status Report**
Edited by J von Braun, M Bwalya, R Cadwell *et al.*
AGRA, 2013; 204 pp.
Downloadable as PDF file from:
http://tinyurl.com/nubojsd

# Land grabbing

**Governing Global Land Deals: The Role of the State in the Rush for Land**
Edited by W Wolford, SM Borras, R Hall, I Scoones & B White
Wiley, 2013; 288 pp.
ISBN 978-11-1868-826-7
£19.99 • €16
Wiley, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, UK
www.wiley.com

■ Between March 2008 and April 2009, an estimated 40 million ha of land in the global South changed hands, for the purpose of producing commodity resources. This scale of land dealing was 20 times higher than the average for the previous 40 years, with land acquired for a wide range of purposes, including logging, food, fuel and biofuel, ranching, plantation forestry, access to water and hydropower, and protection of biodiversity.

The acceleration in land acquisition, in particular by foreign entities, has prompted widespread concern that such deals are working to the advantage of external markets while allowing the neglect of local communities. In many cases, they have been accused of lacking transparency or community dialogue, and have resulted in displacement in people from their ancestral land. Focussing on the role of government in how such deals are negotiated, this timely collection of studies is dominated by cases from Latin America, but also includes examples from Madagascar, Mozambique and Senegal, as well as south India.

## ▼ Challenging convention

Agroecological farming systems are based on a very different paradigm than conventional agriculture. They emphasise integration rather than segregation, and aim to close the farming system and rely on local inputs. For such practices and principles – explained in this useful guide – to become mainstream, however, would require concerted action in several spheres, including agricultural, economic and cross-sectoral policies, and new priorities for knowledge management and research.

**Mainstreaming Agroecology: Implications for Global Food and Farming Systems**
By M Wibbelmann, U Schmutz, J Wright *et al.*
The Centre for Agroecology and Food Security, 2013; 32 pp.
ISBN 978-18-4600-045-4
Downloadable as PDF file from:
http://tinyurl.com/mrtvtxa

# University reform

**Changing Agricultural Education from Within**
Edited by W Ochola, W Heemskerk & M Wongtschowski
Royal Tropical Institute, 2013; 120 pp.
ISBN 978-94-6022-271-9
€25
For Royal Tropical Institute's address, see page 22

■ The process of innovation is increasingly recognised as one that must involve many stakeholders, including farmers and the private sector. Most African universities, however, have failed to recognise this. Agriculture students are taught the skills to design, manage and report on research projects, but not how to facilitate an innovation process. Teaching methods continue to be very lecturer-focussed, denying students the chance to develop as effective agents who can deal with the 'real life' challenges related to empowering smallholders.

The Graduate Opportunities for Innovation and Transformation programme has sought to address this, working with three universities in Kenya, Malawi and Uganda. Each university hosted a number of mid-career professionals, whose studies involved work within their employing organisations to introduce innovation. University departments were also challenged to adopt institutional changes to promote student-centred learning. Their experiences documented here provide valuable lessons for academics, policymakers and students in how African agricultural higher education can take its proper place in tackling poverty.

## ▼ Innovation

Agricultural biotechnologies, say the authors, have considerable potential to empower smallholders to raise productivity and engage in markets. Using 19 case studies, they describe the practical realities and experiences of applying biotechnology research to smallholder production, from artificial insemination to DNA-based methodologies, but not genetic modification. The book concludes by calling for greater efforts to bring agricultural biotechnologies to smallholders and increased sharing of genetic resources and knowledge across borders.

**Biotechnologies at Work for Smallholders**
Edited by J Ruane, JD Dargie, C Mba *et al.*
FAO, 2013; 209 pp.
ISBN 978-92-5107-877-8
Downloadable as PDF file from:
http://tinyurl.com/lmsnp3a

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# Why CTA believes in a youth strategy

For many years, whether in EU or ACP countries, young people have not considered agriculture to be 'sexy' enough for a career. But CTA is convinced that youth are able to make a difference in agriculture and turn it into a profitable business. CTA decided to support young people to make it work.

When we started to work on our youth in agriculture strategy, the question that came to mind was "Do the youth want to be involved in agriculture?" So we turned to social media and asked 208 users aged between 27 and 45 from Africa, Asia, Europe and the Middle East working in various fields, ranging from ICTs to foreign affairs, "What would it take for you to work in agriculture?" The responses from African and European users were of particular interest; while Europeans commonly responded that it would take a "good job opportunity" or a "good salary", Africans almost always answered either "nothing" or "access to land".

These answers reflect the disparity in the knowledge of what opportunities are available in agriculture. The limited statistics on youth in ACP regions show that 51% of the population in Africa is aged between 18 and 24 years old. In the Caribbean, however, the proportion of youth has declined from 59% in 1975 to around 42% in 2011. These demonstrate that, beyond demographic implications, the youth are a population group with increasing needs for basic necessities, jobs and participation in decision-making.

Other statistics related to agriculture show that due to a rapidly growing population the demand for food will triple. Agriculture is also more risky than it was 25 years ago - due in part to the threat of climate change and resources such as land and water getting scarcer. These pressing issues call for new agricultural technologies and innovative resources and tools.

At CTA, we believe that agriculture is able to provide opportunities for the youth to meet their career needs and that youth can bring a source of labour, energy, dynamism and innovation that agriculture needs. This was the interpretation that CTA chose to adopt when deciding to develop its youth strategy 2013-2018. Hence, the strategy identifies four main priority objectives for CTA: 1) to promote evidence-based multi-sectoral policies on youth in agriculture and rural development; 2) to encourage youth engagement in policy dialogues; 3) to facilitate youth engagement in value chains and; 4) to promote increased use of ICTs and continue supporting young professionals in agricultural sciences and innovation. A common factor underlying these four priority areas is the recognition of the capacity building needs of young people who must be capable of exploiting all the opportunities that agriculture offers.

The youth strategy will allow CTA to clearly define priority areas of concern, and focus its activities accordingly. Our work will also send a strong message to partners in ACP and EU countries, as well as to the international community, on the need for coordinated action in enhanced efforts to support young people.

# Two colleagues are starting a new life


José (Ze to his colleagues) Filipe Fonseca was primarily in charge of CTA partnerships. His approach was to put the partners and CTA on an equal footing and in this way create a trusting relationship. "A partnership is a state of mind, a receptiveness," he says. Achieving great success, this vision allowed the creation of several networks, such as the Caribbean Farmers Network and the Pacific Agricultural and Forestry Policy Network. Ze also encouraged the sharing of experience between the Pacific and Caribbean regions. For example, in the Pacific, agritourism is not well developed. This is not the case in the Caribbean. As such, he acted as an intermediary between the institutions in these two regions.


Ze will now return to his homeland, Guinea-Bissau, where he will devote himself to agricultural extension and history. "I have learned a great deal at CTA and I will now take my knowledge back to the country where I was born," he says. He will work with a non-governmental organisation to spread agriculture extension services via new communication tools. A passionate devotee of history, he will also dedicate a portion of his time to a slavery and human trafficking memorial. "If everyone does their part, we will heal," he says.

At CTA, Ze worked for a long time in tandem with Hildreth Ann John-Charles, who dedicated almost 23 years of her life to the organisation. She was involved in innovative experiments at the Centre, such as the programme for acquiring databases on CD-ROM for various institutions, launched in 1987. Her work at CTA taught her "to increase and improve her skills." She has also decided to return to her homeland, Dominica. "I love agriculture and hope to continue being involved by becoming a small-scale farmer. In my country, we have a saying: 'produce what you eat, eat what you produce'." She plans to sell any surplus from her harvests to the local market. A mother and grandmother, she will also devote herself to her family.

Two wonderful projects, for which we wish them every success.

## Erratum

Yusuf Hassan-Maiwa, assistant director at the Ministry of Agriculture and Natural Resources, Kebbi State (Nigeria), responded to an article on fonio published in *Spore* 166 (page 7): "Interesting as the piece of information is, no cereal yields 800 t/ha to date." The article incorrectly refers to production in t per ha, the correct data is 800 kg per ha.

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# 4 QUESTIONS FOR ISOLINA BOTO

## Manager of CTA's Brussels office

**Isolina** has over 25 years of experience in development. Her position as manager of the CTA Brussels office since 2004 involves policy work with the ACP-EU and other Brussels-based actors on key areas related to agricultural and trade policies (http://brusselsbriefings.net). The Brussels office also provides a very popular ACP-EU news service (http://brus-sels.cta.int/).

### 1 *Why did CTA decide to create regional briefings in parallel with the Brussels Briefings?*

Initiated in 2007, the Brussels Briefings are held every 2 months to facilitate ACP-EU policy-dialogue on key agricultural issues. In 2010, at the request of the ACP Committee of Ambassadors and African regional farmers' organisations, regional briefings on key issues relevant to respective regional priorities were launched. Twelve regional briefings have been organised so far, aimed at informing and influencing policy processes. They address topical issues related to ACP rural development and provide the latest results and updates from policy practice and research on various topics such as food security and trade and development.

### 2 *What impact have the regional briefings had, and at what level?*

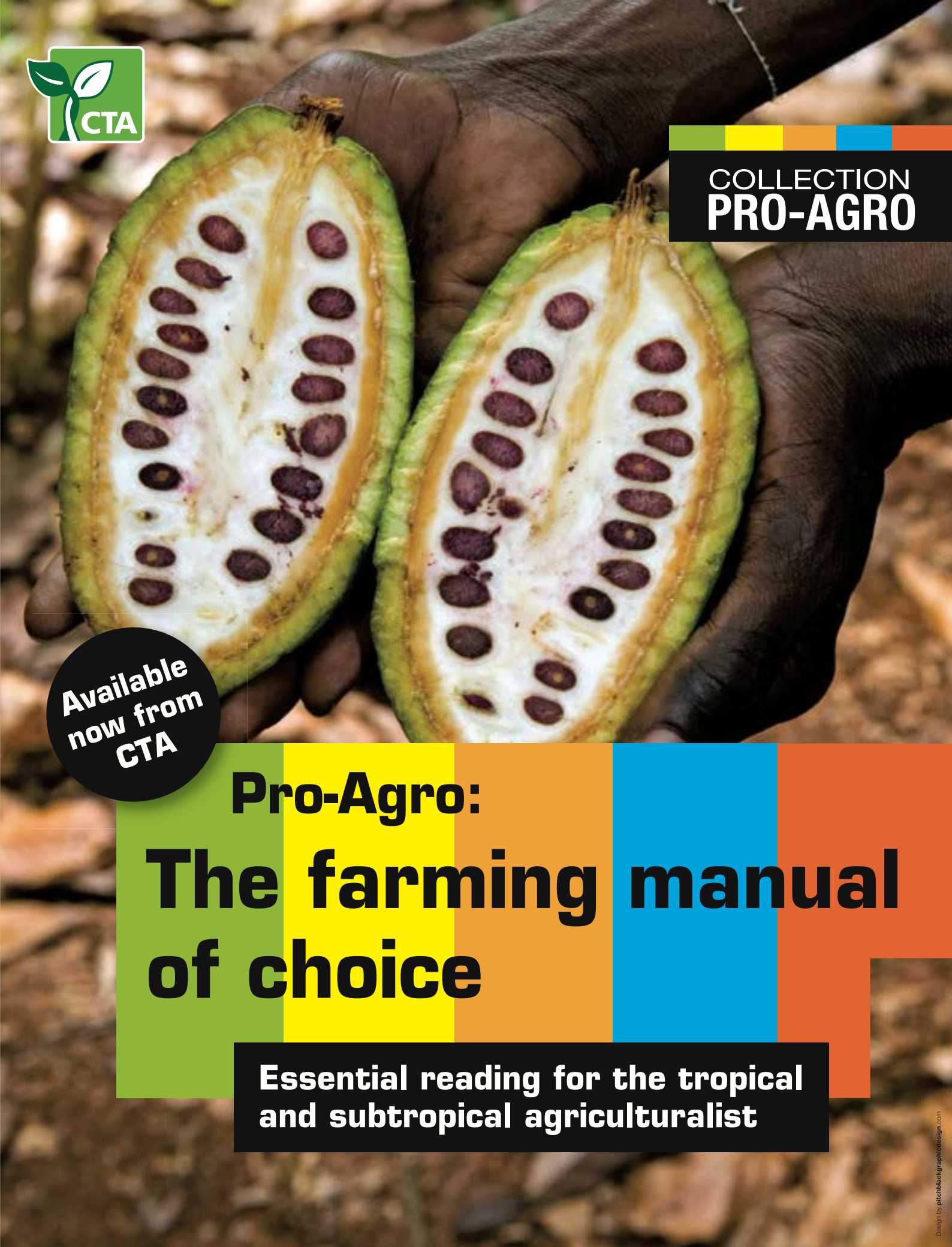
The decentralisation process of the Brussels Briefings has been very successful. In 2012 a yearly Continental Briefing to discuss key policy issues of common interest to all farmers'organisations was launched in Africa. National briefings in Haiti were launched in March 2013. Organised by the development organisation, PROMODEV, the Ministry of Agriculture and other partners, with support from CTA, four have been held in 2013. These national briefings address some of the topics discussed in Brussels Briefings, making use of existing material, but the topics are related to the local context. The positive impact is shown by the fact that the briefings are owned at regional and national level and driven by the partners. Feedback received has been very positive.

### 3 *Are the briefings followed by concrete actions? Can you provide some examples?*

Some topics get a high profile in the policy agenda. For example, following the Brussels Briefing on agricultural resilience, the International Food Policy Research Institute included this topic as part of its strategic programme for the next 5 years. Following the Brussels Briefing on food price volatility in 2011, CTA facilitated the input of farmers' organisations to the G20 meeting held in Mexico the following year and its main recommendations were accepted by G20 Ministers of Agriculture. The regional briefing on 'Agricultural Resilience in West Africa' held in the Gambia led to a multi-million Euro proposal by the farmers' organisation, ROPPA, to the 11th European Development Fund, with regional organisations such as the Economic Community of West African States and Members of the West African Economic and Monetary Union.

### 4 *What themes would you like to address at future regional briefings? How do you decide?*

The topics are proposed by the organisers and farmers' organisations. We select them based on the priority for the region, new knowledge generated on a topic and interest for policymakers at that particular time. Some topics for future briefings include agricultural value chain finance, family farming, economic opportunities for women entrepreneurs, agritourism, building synergies between trade and agricultural policies.



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