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Farmers as entrepreneurs

LEISA

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Farmer Umar Sakho, doing business in his maize field using a mobile phone, in Sangalkam, Senegal. Credit: Jacob Silberberg/PANOS Pictures

Correction: The cover photo from the March 2009 issue should have been credited as Madeleine Stein/Sustainable Harvest International.

The editors have taken every care to ensure that the contents of this magazine are as accurate as possible. The authors have ultimate responsibility, however, for the content of individual articles.

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9 Supportive policies secure a future for family farming

Sofia Naranjo

Processing food in order to store it, and then selling it for a higher price, is a good way of increasing farmers' incomes. But this approach needs a secure market. The Brazilian national government runs a programme which buys products directly from farmers, and even pays a surplus if farmers follow agroecological farming methods. By participating in it, farmers in the north-eastern municipality of Mirandiba have seen their monthly incomes rise sharply. This has given them hope and enthusiasm to continue farming.

20 Adding value to local livelihoods

Kheuvanh Pommathat and Stuart Ling

The amount that farmers receive for their products is many times smaller than the price paid by the consumer. This is especially true in northern Laos, where large agro-businesses are more and more common. Setting up smaller farmer-based agro-enterprises can help give farmers a larger role within a value chain. This means developing a business plan, collecting savings, and working together. The results are positive, as farmers are better able to decide for themselves what, where and how to sell their products.



LEISA Magazine informs fieldworkers, researchers, farmers and policy makers about the latest developments in small-scale, sustainable agriculture. It offers readers around the globe an opportunity to share knowledge, information and opinions. LEISA Magazine aims to contribute to improving the sustainability of small-scale farmers' livelihoods. LEISA Magazine appears four times a year, in 154 countries.

LEISA stands for Low External Input and Sustainable Agriculture. It is about inspiring farmers to use local resources, natural processes and their knowledge, culture and values to improve productivity and income in an ecologically sound way. LEISA is an umbrella approach, and a political message, seeking to influence policy formulation to support small-scale farmers.

ILEIA is the Centre for Information on Low External Input and Sustainable Agriculture. It seeks to promote sustainable agriculture, through LEISA Magazine and other forms of information exchange. ILEIA is part of the worldwide LEISA Network, which publishes magazines on sustainable agriculture in India (in English), Brazil (in Portuguese), West Africa (in French), Latin America (in Spanish), Indonesia (in Bahasa Indonesia) and in China (in Chinese).



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28 Plenty of fruit, but also plenty of hurdles

Anders P. Pedersen

Farming in the Morogoro region, Tanzania, Ramadhani Fufumbe increases his income by selling dried fruit. This brings certain challenges, such as finding good quality bags for packaging his products, in addition to those which all farmers in this region face. But the biggest hurdle Mr Ramadhani faces is the many bureaucratic procedures he has to go through. Getting the documents needed for his business costs him time and money he can ill-afford. This constraint to rural entrepreneurship in particular, is often overlooked.

36 Helping credit do its job

Salibo Some

How can the difficulties associated with small-scale financial services be overcome? Considering that loans can have an enormous impact, many organisations provide them. Positive results are seen when credits and loans are available as part of a series of activities, including training and improved infrastructure. Following this approach, ASUDEC, a non-profit organisation in Burkina Faso, is now aiming at ensuring success with the creation of a farmer's savings and credit mutual.



5 Editorial – Entrepreneurship, the sustainable way

6 Theme overview – Enhancing farmers' entrepreneurship: Creating conditions for growth

Arno Maatman and Ted Schrader

9 Supportive policies secure a future for family farming

Sofia Naranjo

12 For these women, money does grow on (neem) trees

P.A. Chaya

16 It works to work together

Abraham Lemlem

17 Call for articles

20 Adding value to local livelihoods

Kheuavanh Pommathat and Stuart Ling

22 Bees, trade - and success

Verina Ingram

25 Market Access Centres make the difference

Benoît Thierry and Emeline Schneider

26 Enabling entrepreneurship: Conditions and constraints

28 Plenty of fruit, but also plenty of hurdles

Anders P. Pedersen

30 Two views - Do value chains help farmers out of poverty?

32 Tasting the results of a joint effort

Stephen Taranto and Stefano Padulosi

36 Helping credit do its job

Salibo Some

38 Field Note - Sipili is ready for business

Josphat Wachira

39 New books

40 Sources

42 Networking

44 Sustainable agriculture in the news

JUBILEE PAGES

4 The future of family farming

Meet small-scale farmers Mr Sabbaiah and Ms Hampamma from India.

14 Celebrating our jubilee

Why is family farming important? We want you to tell us. In our jubilee section "How I stay informed", a reader working in pest management talks about where he gets his information from. And in "After publication" an author explains how publishing in LEISA Magazine has helped the weaver ant gain global recognition.

18 Inspired by

Project co-ordinator Awudu Ngutte read in LEISA Magazine about how community seed banks are



25 YEARS
LEISA MAGAZINE

organised in one area of India. He decided to set one up in Cameroon. In his article, "An old seed gives birth to a new one", he explains how he went about it.

34 Update from the field

We go back to a very old issue of what was then called the

ILEIA newsletter. In an article published almost twenty years ago, Michael Loevinsohn described how Rwandan farmers were adapting Indonesian techniques to grow rice in areas where they weren't able to before. LEISA Magazine asked him how they are doing now.



AGRICULTURE THE WORLD OVER

The Future of Family Farming

Mr Sabbaiah and Ms Hampamma are small-scale farmers, pictured here in their sunflower field in the village of Maratha, in the Raichur district of Karnataka, India. In this area, sunflower is the major cash crop. AME Foundation, an NGO based in Bangalore, has acquainted farmers in Maratha with various techniques to improve sunflower yields, through Farmer Field Schools. As a result, yields have improved. In turn, incomes have also improved, as most farmers growing sunflower sell them on the local market. Buyers process the sunflower seeds into oil. Farmers here also rear sheep, and can therefore use an integrated farming approach which brings even greater ecological and financial benefits to the farm and the family. Sheep can be fed on crop by-products for example, while manure is useful for preparing compost and improving soils. This keeps costs down and at the same time makes best use of natural resources. The sheep are also sold locally, increasing farmers' incomes. With such opportunities, the future for these farmers looks as bright as the yellow petals on a sunflower in bloom.

Entrepreneurship, the sustainable way

It probably has not escaped your attention: during the last few years the terms rural entrepreneurship, value chains and market participation have become buzz words in agricultural development. “It is as if a major transition is suddenly taking place”, write Arno Maatman and Ted Schrader in their comprehensive overview article on this theme (see p.6).

Producing for local markets is a rational and entrepreneurial choice that needs to be re-valued

Small-scale farmers and their support institutions are becoming more convinced that there is little future for them unless they become more entrepreneurial in their approach to farming. Which means that they produce increasingly for markets – local, regional as well as global, and with a profit motive. Maatman and Schrader observe that, as such, there is nothing new about rural entrepreneurship. But the challenges faced by family farms in the South right now are unique in scope and scale.

What is there in it for small-scale farmers?

What options are there for small-scale farmers to become more entrepreneurial, we asked ourselves while preparing this issue. We have included several examples of how entrepreneurship –either a more entrepreneurial approach to farming itself, or in the form of income generating activities to complement farming– has brought greater prosperity to farmers. However, there are complexities and risks. Some of these tend to be overlooked, as Anders Pedersen points out in his article on the many hurdles small-scale farmers have to overcome, even when they are willing to expose themselves to greater risk (see p. 28). Small-scale farmers live in an environment that is by definition risky. Focusing entirely on producing one or two products for the international market can have disastrous results if, for instance, climatic conditions change or the world market prices go down. Producing for local markets and for home consumption, rather than engaging in the production of risky export crops, is therefore the rational and entrepreneurial choice of many family farmers. It deserves to be positively re-valued by agriculture development agencies, some of which seem to have all but forgotten about the benefits of small-scale family farming – for the farmers themselves, as well as for the environment and for society at large.

We have the pleasure to inform you that ALIN has joined the global LEISA Network. ALIN works with rural communities in Kenya, Tanzania, Uganda and Ethiopia. Its mission is to enhance livelihoods of communities through information exchange. With ALIN on board we are confident that East African readers will be served with more region-specific information. ALIN will shortly launch a new East African edition of LEISA Magazine. If you are interested in this new edition please write to ALIN (info@alin.or.ke) or visit www.leisa.info for more information.

Sustainable, fair and diverse

There is reason to be alert when it comes to rural entrepreneurship and sustainable land use. With farmers under pressure to produce for a low price, environmental costs tend to be overlooked. When producing for the market, farmers often feel forced to grow just one or very few varieties of crops and thus to sacrifice biodiversity. There are also many examples of unsustainable commercial production systems pushing small-scale farmers out of business, like the export floriculture farmers who overexploit the groundwater resources at the expense of their neighbours’ food security.

The idea that entrepreneurship should be governed by ethics and rules is increasingly accepted. This can be seen as a success of the fair trade movement. Sustainability should become an intrinsic part of such business ethics. Consumers have a role to play here: a massive demand for regional products, for diverse and sustainably produced food, is certainly going to have an impact.



Photo: Jorge Chavez-Tafur

In Cuba, as everywhere else, small-scale farmers develop entrepreneurial solutions, increasing yields and ensuring incomes. Farming some 50 km east of La Habana, Argelio grows more than sixty different species and sells most of them at the farm gate. He also sun-dries several plants and sells them as herbs and spices at a higher price.

Think innovative

To keep up with the pace at which the challenges for rural communities unfold, farmers’ support agencies have to be entrepreneurial themselves. Some organisations have found a truly innovative approach. The Arid Lands Information Network (ALIN) is one of them. They run a volunteer programme wherein young IT graduates work for a year with rural communities. They develop, for instance, software that helps the communities get easy and regular access to market information through SMS messages. And they train the communities in using such information technology. This programme fosters rural entrepreneurship development and gives IT graduates unique experience. ALIN shows that it is good to not only focus on the constraints, but also look at what is possible!

THEME OVERVIEW

Enhancing farmers' entrepreneurship:

If an entrepreneur is a creative person, or someone who takes risks and innovates, then small-scale farmers are definitely entrepreneurs. Their role as such, however, faces many challenges, of which accessing markets is only one of them. Facilitating rural entrepreneurship demands special efforts – especially if we consider the many changes which agriculture is currently going through worldwide.

Arno Maatman and Ted Schrader

"I did something that challenged the banking world. Conventional banks look for the rich; we look for the absolutely poor. All people are entrepreneurs, but many don't have the opportunity to find that out."
(Muhammad Yunus)

It is rather strange to be writing about entrepreneurship in relation to small-scale farming, as these days you find this theme everywhere. As if a major transition is suddenly taking place: the small-scale farmer-cultivator giving way to the farmer-entrepreneur; the subsistence-orientated farm entering the capitalist or market economy. This, of course, is not exactly true. Small-scale farmers have a long history of having one foot in a subsistence economy and the other in a market-orientated one. What seems to be evident from many discussions, is that "entrepreneurship", "enterprises" and "markets" are closely linked concepts. In other words, there is no entrepreneur without a market, and there are no markets without entrepreneurs. And the small-scale farmer is part of this equation.

What does rural entrepreneurship mean?

An entrepreneur is someone who builds an enterprise or venture, and who produces for or serves the market. The typical entrepreneur is depicted as a determined and creative leader, constantly looking for opportunities to improve and expand his or her business; somebody who takes more or less calculated risks, and who assumes responsibility for both profits and losses. Accordingly, entrepreneurship and innovativeness go hand in hand, in particular when entrepreneurs face strong competition or operate in highly dynamic environments.

So what about small-scale family farmers? Not surprisingly, small-scale farming has undergone enormous changes in recent decades. Many of these changes have not just been driven by external factors. They have also been inspired by farmers who continuously look for better ways to organise their farm, for new crops and cultivars, better animals, and alternative technologies to diversify production, increase productivity or reduce risks. Farmers have used a variety of ways to develop alternative income earning opportunities. Such incomes may have some link to agriculture (such as the marketing or processing of agricultural products), but are also found outside the direct realm of agriculture. Common examples of this second group include the production of handicrafts, or seasonal migration. In this sense, farmers are and have been "entrepreneurial" for quite some time.

However, there is no doubt that small-scale farms face challenges that are unique, even if not totally new. In many countries, farmers face the huge challenge of producing enough



Photo: Kodjio Konob/IFDC

Access to markets has become increasingly important, but finding ways of selling your product is not always easy.

food, feed and fibre (and possibly even fuel) in a context of rapidly rising urban and rural non-farming populations; and at as low as possible prices, as most of the domestic demand originates from very poor people. At the same time, they are expected to "pull" the country forward as entrepreneurs. Years of privatisation and liberalisation policies, however, have few positive results to show.

As always, the explanations for these poor results differ between scholars and across the globe. Some refer to the hugely challenging conditions which prevail, in spite of favourable macroeconomic policies. In 2002, the World Bank's "World Development Report: Institutions for markets", pointed to failing property rights and weak market institutions in general; other documents (such as those prepared by Thomas S. Jayne *et al.* from Michigan State University, and Mylène Kherallah *et al.* from the International Food Policy Research Institute) point at the half-hearted or otherwise inadequate implementation of adjustment policies as the major cause. An interesting perspective is the one that looks at transaction risks, and in particular at those that stem from co-ordination problems between all those involved (e.g. Dorward *et al.*, 1998). The central idea here is that market transactions need co-ordination, whether this is formal or informal, while confidence is a major factor in any business and investment decision. The structural adjustment programmes which were widely implemented failed to support the private sector to develop new co-ordination procedures. As a result, market transactions still typically take place through hierarchical socio-familial networks, and are limited to restricted areas – i.e., close to the urban centres, and only for those commodities for which profit margins are sufficiently high. Trade thus remains restricted to a happy few, and only a small proportion of farmers are integrated in such

Creating conditions for growth

networks. A large majority remains locked in a system of *ad hoc* sales of relatively low volumes of produce on marginal (spot) markets.

Markets and uncertainty

As shown by the sudden rise in food prices recently, commercialisation and trade take place within a very uncertain environment, and many factors are involved (such as import regulations, subsidies and trade restrictions). But increased market participation does offer many opportunities. Farmers may receive extra income through higher volumes of sales, and may, as a consequence, be better able to improve and diversify their diets, to invest in education for themselves and their children, and to re-invest in their farm and make it a more productive enterprise. However, when prices decline or returns to investments fall short, the consequences may be catastrophic.

In general, farmers face highly imperfect, dynamic and diverse markets, and run enormous risks to reach them. The relationships they establish with sellers or service providers and buyers are multiple and rapidly evolving; increased interaction with new and more distant actors adds considerable risk. What can be done, for instance, when suppliers or buyers do not live up to their promises? How can they negotiate when they have little access to information and unequal power relationships? Suppliers and buyers often operate through business cartels, and may disappear when opportunities seem more profitable elsewhere. In addition, some risks may also stem from the interaction within the producer community itself, for example through lack of accountability and/or excessive rivalry between producers or between different producer groups.

It is important to mention that access to credit remains highly problematic, as financing institutions still find it difficult to serve the agricultural sector. Information provided through extension and support services (including NGOs) mainly focuses on technologies, and not on prices, contacts or possibilities. Though market information systems are emerging in many developing countries, many of these systems are difficult to access and do not generate all the relevant information in time, or at affordable cost. In addition, the impact of local networks and of decision-making procedures –including mechanisms of reciprocity and redistribution of income and assets– also plays a role. Not surprisingly, small-scale farmers maintain part of their farm for subsistence purposes, even when they perceive a real prospect of increasing production for the market. This often makes perfect sense –

even more so if we consider wider aspects such as transport and transaction costs.

Rural entrepreneurship and sustainable land use

But in spite of the risks and difficulties, small-scale farmers are increasingly linked to local, national and international markets. Roughly, three pathways of change may be distinguished: (1) farmers whose income is (still) mainly based on agricultural production, and who are increasingly linked to the production and commercialisation of one or more products (in what is known as “commodity supply chains”) for domestic markets, (2) farmers who are increasingly part of an export-oriented process (often controlled by large multi-national companies), and (3) farmers who diversify away from agriculture. In the first two cases, farmers may be driven to take up new activities as well, like processing, marketing, etc., while the third path refers to those who migrate, or who provide other services.

These three pathways are not necessarily distinct. Farm families may be involved in different processes (or “value chains”), simultaneously serving the local and urban markets, in both conventional and “fair” trade. However, to some extent, entrepreneurship implies specialisation. It is simply too difficult to travel three relatively divergent pathways, and to maintain competitiveness. There is a tendency in international co-operation to prioritise the integration of farmers into export value chains, connecting them to the international markets. As Pommathat and Ling (p. 20) and Ingram (p. 22) show, the benefits of these processes can be many. It is important, however, to consider that farmers will need careful support in order to be “competitive”, and that this support needs to be based on “real” competitive advantages. It is also worth remembering that there is a lot of truth in the simple adage that you should be a national champion first before becoming an international one.

Whatever the path to follow, a question that remains (and which is not easy to answer) is whether these pathways will lead to more or to less sustainable land use. It might be argued, for instance, that diversification away from agriculture follows a vision of farming as a complementary activity, or even as a survival strategy, and not as an activity to invest in. Better links with the national or international markets, combined with an urgent need to increase incomes in the short run, may also encourage farmers to expand the area under the targeted crop, without taking appropriate measures to maintain sustainability. On the other hand, increased incomes could prove to be the

Fairer trade

Though we think that the major challenge for small-scale farmers and farmer co-operatives in developing countries lies in the expansion of trade within their own country and region, the fair trade movement needs mentioning here. Fair trade is serving a “niche” of consumers in urban centres and higher-income countries who are prepared to pay a premium price. Fair trade is based upon the idea that conventional trading relationships between small-scale farmers in the South, and traders and processors in the North, are unfair. This unfairness keeps farmers poor, while a lack of assets also leads to unsustainable land use. The fair trade movement is diverse, its volumes are not insignificant but still rather small compared to conventional trade in agricultural products, and is linked to only a few small-scale farmers in the world. The role of fair trade, however, goes beyond these direct estimates of impact. It has helped many farmers develop entrepreneurial skills. It has been, and still is, an inspirational example for many more farmers to engage in markets and to call for “fairer” shares. In addition, fair trade is challenging conventional traders and companies, which in turn has led to a rapid increase of initiatives labelled as sustainable trade, or ethical trade. There is tension, of course, between the concept of a “fair” price, and the way markets and businesses normally work, but the idea that entrepreneurship should be governed by norms (ethics) and rules is increasingly accepted. Fair trade is playing an important role in this process.

best guarantee for sustainable land use, allowing farmers to re-invest in soil fertility, conserving natural resources, or the appropriate use of technologies; and to diversify production for local or domestic markets. It is compelling to argue that an entrepreneurial attitude is a necessary condition for sustainability, because it implies a highly efficient use of scarce natural and human resources.

Farmer empowerment

Another issue to consider is that farmers within the same community or village will always have unequal opportunities to participate in markets. There will always be differences in terms of education or land size, interest or vulnerability. More vulnerable farmers, for instance, are probably less able to deal with the additional risks associated with (increased)



Photo: Fatoumata Keite/IFDC

Improved co-ordination between producers helps trade in Soumbala, Mali.

market participation. Some farmers will be willing to invest in reaching markets, and accept the outcomes, while others will not. While there is a relationship between vulnerability and willingness to invest in risky challenges, it is not as straightforward as one might think. Very poor farmers may, for instance, be more disposed to accept additional risks, when they feel that they have almost nothing to lose. In this context, farmer empowerment refers to the strategies that increase the opportunities for small-scale farmers –including the more vulnerable ones– to participate effectively in markets. There are essentially two strategies to empower farmers through market participation. The first one follows a “vertical integration” approach. In this situation farmers take up new economic activities, which cut across other parts of the production and commercialisation process. Examples are producers or organisations that purchase and distribute agricultural inputs, or collect, store and market agricultural products (such as the case presented by Chaya, p. 6). The second strategy refers to the establishment of better relationships with the other organisations involved (or “horizontal integration”), aiming at contacts, links and opportunities. These strategies are often seen and presented as opposites (as if having to choose between farmers and traders), but this is not really so: what seems essential is to explore the competitive strengths of farmer groups and co-operatives for certain tasks, and of traders and other private

entrepreneurs for others, and to focus on improved co-ordination mechanisms. Established traders may, for instance, have far better opportunities to serve consumers, to develop strategies for increasing market share and to interpret consumer trends.

In addition to these more straightforward strategies to improve co-ordination and empower small-scale farmers, another important issue is that of the “institutional environment”. This refers to the norms and rules that govern transactions, and to the rural investment climate that offers security and protection to farmers and producers (and other rural entrepreneurs investing in market intelligence, technologies, products and services, and organisational reforms). Both producer and business associations, as much as the state, have a crucial role to play here, leading to what is frequently referred to as “good governance”.

Facilitating rural entrepreneurship

Rural entrepreneurship depends on individuals understanding cost-benefit ratios, and being able to evaluate market opportunities and associated risks. Facilitating rural entrepreneurship will also require careful nurturing of grassroots (“bottom-up”) initiatives, and may involve establishing or supporting networking and brokering services. However, as we have argued in this article, facilitating rural entrepreneurship needs to go well beyond this, and should include support to lobbying and advocacy for enabling institutional environments. In fact, the whole debate around rural entrepreneurship would be much more helpful if it focused less on the definition of and the capacities for entrepreneurship, and more on the conditions that enable rural (and urban) entrepreneurs to develop their business.

Though many organisations will be involved in facilitating rural entrepreneurship, a special and crucial role has to be played by the producer organisations. These organisations are expected to: (1) stimulate entrepreneurship through provision of information and other advisory and capacity building services; (2) strengthen market (bargaining) power through collective commercialisation and by improving co-ordination between producers; (3) profit from economies of scale through collective storage and processing; and (4) represent farmers’ interests in policy negotiations, and dialogue with other agribusiness stakeholders. Producer organisations are of tremendous importance to stimulate rural entrepreneurship, and to guide farmers through the transformational changes that market participation both requires and is bound to produce. The outcomes of such changes are uncertain, and will probably produce both winners and losers. In any case, they require dialogue, both within the rural communities and between their representatives and other stakeholders involved (policy makers, consumers, business associations, other producers). It is through dialogue, and effective co-ordination, that small-scale farmers will show that they are effectively part of the equation, for good. ■

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Photo: Sofia Naranjo

Outside the Conviver office, farmers arrive with sacks full of produce to be delivered to schools and hospitals through the Food Acquisition Programme.

Supportive policies secure a future for family farmers

Mirandiba, in north-eastern Brazil, provides few opportunities for family farmers to make a living. With long dry seasons, few local jobs and poor access to markets, it is difficult to meet a family's needs. Men often migrate in search of work. However most return after finding they are still unable to escape poverty.

This situation repeated itself for many generations. Now, an innovative government policy is breaking the cycle by giving family farmers the opportunity to earn a decent livelihood from their independent work in agriculture.

Sofia Naranjo

Located in Pernambuco, Mirandiba is a typical rural municipality that shares many characteristics with other poor rural areas around the developing world. Half of Mirandiba's population of 13 000 people live in the rural area. From the working population, 57 percent are engaged in agricultural activities. In 2000, it was found that 76 percent of the population earned less than the monthly minimum wage. Poor family farmers generally do not own any land and live as

sharecroppers or tenant farmers, whilst also working as casual wage labourers.

In this semi-arid region there are prolonged dry periods of around six months each year, and recurring droughts. Farmers grow their staple food, cowpeas (*Vigna unguiculata*), in a diversified system with maize and other crops like pumpkins and melons. During the short rainy season farmers try to produce the maximum quantity of cowpeas and maize. However they are rarely able to meet their families' yearly food needs. At times they are forced to sell some of their produce in order to buy clothing and medicines. Access to markets, however, is limited, and they must rely on middlemen who pay them low prices. When the farmers' cowpeas reserves start to run out they are forced to buy more, but at higher prices. Consequently, family farmers are not able to be food self-sufficient despite their best efforts, and cannot make a living from selling their products.

Before the new government policy started, the main and often only way farmers in Mirandiba were able to earn an income was working as casual wage labourers for meagre daily rates. Local casual work was irregular and limited to the short growing season, forcing farmers to neglect their own family farm. During the dry season it was commonplace for men to migrate in search of jobs, usually to large irrigated horticultural

plantations. Sometimes entire families would migrate to these plantations for several years and the whole family, including children from the age of ten years, would work. For decades, these families lived in great deprivation. They felt they had no future in agriculture, but no alternative to it either, particularly as the majority of adults are illiterate.

Local initiatives

It is against this backdrop that the grassroots non-governmental organisation *Conviver no Sertão* (Living Together in the Outback) started its work. This NGO originated from another Brazilian NGO, AS-PTA (*Assessoria e Serviços a Projetos em Agricultura Alternativa*, Consultancy and Services to Projects in Alternative Agriculture). AS-PTA worked in Mirandiba in 1998 for two years. When they left, the local staff formed *Conviver no Sertão*. Successfully securing national and international funding, *Conviver* worked on water resources and home gardens, expanding into new areas. In 2003 *Conviver* set up a small fruit pulp factory and managed to convince farmers from four local communities to collect and process a native plum *umbu* (*Spondias tuberosa*) into pulp.

The aim of the pulp factory was to add value to local products and provide farmers with an alternative income. Unfortunately they did not have a market for the pulp, so it simply accumulated in the freezers. Unwilling to give up, in 2004 *Conviver* secured funding to buy equipment for a larger processing factory. That year they were also able to make a deal with the local town council. The council agreed to buy 300 kg of pulp a month to distribute at local schools to make juice for school dinners. The factory however, was producing far more pulp than was being sold. The town council also started to falter in their agreement by delaying payments or requesting decreasing quantities of pulp each time. By 2005 more family farmers had got involved in the pulp factory, less was being sold to the town council and the stock had built-up to over 12 000 kg with no market to go to.

Fruit pulp production by family farmers had been successful but its commercialisation had not. A tiny town in the remote semi-arid region does not offer a substantial market demand, nor provide easy access to other markets. The answer to their commercialisation problem appeared in 2005 when *Conviver* learned about the Brazilian government's innovative policy, the Food Acquisition Programme (*Programa de Aquisição de Alimentos*) or PAA.

The Food Acquisition Programme

The PAA was created in 2003 to address hunger and poverty by buying products directly from family farmers at prices that would benefit them and using these products to feed people in schools, nurseries, care homes, hospitals and other social service institutions. Funds come from two Brazilian ministries: the Ministry for Social Development and Fighting Hunger (*Ministério do Desenvolvimento Social e Combate à Fome - MDS*) and the Ministry for Agrarian Development (*Ministério do Desenvolvimento Agrário - MDA*). The agencies in charge of purchasing the products are the MDS in some cases and the Brazilian National Agricultural Supply Company (*Companhia Nacional de Abastecimento - CONAB*) in others. There are five different arrangements through which these agencies can buy from family farmers. *CONAB* manages one of the arrangements which was created in 2003 and re-named in 2006 as "Purchase from Family Agriculture with Simultaneous Donation" (*Compra da Agricultura Familiar com Doação Simultânea - CPR-doação*).

The way the CPR-doação works is simple. Associations or cooperatives of family farmers must first establish a contract



Photo: Sofia Naranjo

Vitória, Eliana and Edeneide (from left to right) - the whole family gets involved in the home gardens and fruit orchards.

with *CONAB*. This specifies which farmers will participate, which products they will produce and in what form (raw or processed). They also note which social institutions will benefit from the donations. The prices for all products are negotiated and agreed in advance, a total value for the contract is settled and resources earmarked for it. The farmers have a year to produce and deliver the products until they reach the total value of the contract. Once the goods are delivered to the social institutions the funds are released and the family farmers receive their payment on a monthly basis. This way the farmers have a previously established contract, a guaranteed purchase at defined prices, and a major incentive to produce. The PAA promotes agroecology through a price increase of 30 percent to farmer associations that prove they employ agroecological farming methods. Since August 2006 the maximum amount a family farmer is allowed to earn through the PAA is 3500 reais (R\$) a year (approximately US\$ 2065), equal to the Brazilian minimum wage at the time (previously the limit was R\$ 2500 a year).

Encouraging participation through success

Conviver found out about the PAA in 2004 and immediately went to meet with *CONAB* of the state of Pernambuco. They set up a contract worth R\$ 250 000 (close to US\$ 150 000) as they aimed to include 100 farmers. However it was difficult to convince enough farmers to join. They were reluctant to produce and deliver products in advance, based on the trust that the government would eventually pay them. As a result only 82 family farmers from eight farming communities

in Mirandiba joined. Since Conviver had the pulp factory running for over a year they were able to include fruit pulp in the contract, and being a value-added product, it received a high price. Pulp production extended to other fruits aside from *umbu*, for example papaya, mango, acerola (*Malpighia glabra*), caju (*Anacardium occidentale*) and caxi (*Lagenaria siceraria*). Conviver knew some farmers produced a few of these fruits and distributed tree seedlings to those who did not. The PAA offered the opportunity to market other products as well. Therefore Conviver included in the contract vegetables that the farmers had been growing in their home gardens (green pepper, aubergine, lettuce, coriander and beetroot) as well as products that farmers produced traditionally (pumpkin, cassava, sweet potato and goat meat). The products were taken to the Conviver office by the farmers and delivered in local schools, nurseries and homes for the elderly. Product deliveries began in February 2005 but by the time the contract period was over, they had not managed to reach the total value of the contract. Fortunately CONAB allowed them an extra six months and the farmers were able to achieve the contract value by the end of June 2006.

As commercialisation proved to be successful and others saw the participating farmers were being paid regularly and receiving good prices, interest in joining the PAA grew enormously: a total of 240 families got involved in the second contract. Although it took six months for CONAB to officially approve the contract, the farmers were enthusiastic about this new entrepreneurial opportunity and a large number continued producing and delivering products despite having no guarantee of payment. In December 2006 the contract was approved for a value of R\$ 760 000 (around US\$ 450 000) which amounted to 371 tonnes of food products delivered from July 2006 to November 2007. For the third contract, which commenced in December 2007, 393 farmers from 18 farming communities in Mirandiba signed up.

Increased food self-sufficiency and better livelihoods

Research in two participating communities found that for the majority of farmers, their situation started to improve around 2004. This was due to various social policies implemented by the Lula government, such as the *Bolsa Familia* (Family Bursary) and the retirement pension. The Bolsa Familia provides funds for bringing up children. The maximum a family can get is R\$ 122 (US\$ 72) a month but on average they tend to receive around R\$ 95 a month. The pension provides a minimum wage (R\$ 380 a month) to the elderly. These policies raised the income of farming families. However, they were solely assistencialist; they did not require or give an incentive for families to work and simply provided money. The PAA, on the other hand, required farmers to produce in order for them to increase their income and improve their living conditions. Furthermore, it was an incentive for hundreds of farmers to get involved in local commercialisation. The 240 farmers who participated in the second contract earned on average R\$ 106 a month, an amount comparable and often higher than the amount provided by the Bolsa Familia. These farmers had never had access to a market that allowed them to make a decent livelihood from selling their own produce. Even the few farmers who engaged in a small agroecological fair in the town of Mirandiba found that the income and benefits they got from the PAA were far more significant than those from the fair. In general, the farmers perceived the PAA as a guaranteed unlimited market that would buy any amount they produced; therefore they felt encouraged to increase their output as much as possible in order to maximise their earnings.

The PAA also enabled farming families in Mirandiba to be more food self-sufficient. The families claimed that their higher

income permitted them to reduce substantially, or eliminate completely, their need to work as casual wage labourers or to migrate in search for jobs. This meant that farmers had more time to dedicate to their family farm, increasing their production for consumption and for commercialisation through the PAA. As they ate more food from their own production, they spent less of their limited cash on purchasing food, freeing up money for other important uses. Even during the dry season farmers who had access to water preferred to stay in their communities and continue producing vegetables for the PAA instead of migrating.

A crucial impact of the PAA is that it gave farmers renewed hope and enthusiasm to make a living from independent family farming whilst at the same time increasing their self-esteem and happiness. The setting up and running of PAA contracts was led by a few hardworking, ambitious farmers who encouraged others in their communities to participate. The PAA provided the opportunity for several farmers to acquire or improve a range of business and managerial skills and to take on new responsibilities and jobs. Although not all participating farmers fully embraced the PAA and a small number actually abandoned the contract, in general the PAA has enabled hundreds of farmers to flourish – especially those who were willing to put in the effort. It has renewed their enthusiasm for family farming and awakened an entrepreneurial spirit, encouraging farmers to dedicate more time and make investments in their farms and home gardens. Many farmers expressed their joy of being independent family farmers and claimed they wanted to continue farming for the rest of their lives as now they felt they have a future in it.

Sustaining the benefits for the future

Despite the substantial improvements these farmers have experienced, they are not blinded by success and are fully aware that the PAA might change or end at any point. This is why the farmers' associations from the 18 communities involved in the third contract formed a large co-operative. This co-operative has two aims: to facilitate the management of future PAA contracts, and more importantly, to search for alternative markets to the PAA so they are able to continue living off their independent agricultural production even if the PAA is discontinued.

The PAA is a telling example of how a government policy, that provides a guaranteed institutional market to poor family farmers, can significantly improve their lives and allow them to continue farming. The PAA has enabled hundreds of farming families in Mirandiba to leave the cycle of poverty behind, and allowed them to survive and progress as independent family farmers. Several governments throughout the world, as well as some development agencies, have school feeding programmes and similar projects to provide food to populations in need. If this food were purchased from local family farmers, then both farmers and consumers would benefit. In a world where industrial agriculture and globalised food markets offer little hope and opportunity for poor family farmers, such institutional markets could provide them with a feasible and effective alternative which enables them to stay on the land and have a future as independent and diversified family farmers. ■

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For these women, money does grow on (neem) trees

Once, the women of Muddana Guddi, a village in Raichur district, in the southern Indian state of Karnataka, suffered from drought and poverty. With no alternatives except cursing their own troubles, they used to migrate to neighbouring states for work. Now, they are earning their own livelihoods by running a business worth hundreds of thousands of rupees. The women collect readily available neem tree seeds, to produce and sell neem cake. They have been so successful that they received a UNDP national award.

P.A. Chaya

During summer, when there is little paid agricultural work available, women and children of Muddana Guddi, a village in Raichur district, Karnataka, collect neem seeds and sell them to a mediator who comes to their village. In a week, a woman can collect around 100 kg of seeds and earn 300 to 400 rupees (around US\$ 6 to US\$ 8). It is well known that many tonnes of neem seeds are exported from Karnataka to big industries in the north of India. They are processed into neem oil, which is sold at a high price. While seed collectors get minimal amounts, the mediators earn thousands of rupees. After extracting the oil, the leftover cake is also sold, although it does not have the qualities needed for use as a fertilizer or bio-pesticide.

Identifying promising local initiatives

Farmers use neem cake like any other compost. Although it is called cake, it is actually a powder (see Box), so it can be added to and mixed with soil at any time, including when ploughing. When the crop is suffering a nutrition deficiency, the farmer will add neem cake to the soil. Observing this, and knowing that local farmers were losing out to the mediators and big business, Neju George, a social worker, thought that if neem cake could be produced and sold locally, poor women may be able to earn some money. To achieve this aim, he and some like-minded friends started an organisation named *Jagruta Mahila Sanghatane* (JMS), which means "women's organisation with awareness". Under this JMS umbrella, many women's self help groups were formed. Each worked on a specific income generating idea, such as making terracotta jewellery or herbal medicines. JMS operates like a federation, providing trainings, publicity, workshops and



Photo: P. A. Chaya

Separating the waste, like all the other steps in the process, is a collective effort.

market facilities for the women. "First we tried to unite the women so that they could organise self help groups. Then we searched for income generating activities. Our main intention was to make the best use of locally available natural resources. At last we found neem," remembers Neju George.

In this way, the self help group *Jhansi Rani Mahila Sangha* was formed, of fourteen women from Muddana Guddi. They decided to produce neem cake. But no-one knew how. Neju contacted the Indian Institute of Science in Bangalore to ask whether a small machine was available to crush the neem seeds. The answer was: "Yes. But the machine costs 500 000 rupees". But how could the women, who earn only 10 or 20 rupees per day, afford the equivalent of nearly US\$ 10 000? Then they had the idea of crushing the neem seeds with the help of a tractor. This process started seven years ago and till today it is working.

Marketing the neem cake locally

All the fourteen members of the women's self help group are involved in gathering the neem. Seven teams of two members each go to the surrounding villages. A temple compound or a school will be chosen as a meeting place. Women and children of each village will come to the meeting place to sell their seeds, but this was not always straightforward: "When we went

Making and using neem cake

After collection, the neem seeds are poured on dry ground. After the seeds have dried, any filth and other waste is removed. A tractor will then drive over the clean seeds until they are crushed. The women then take this material and filter it. For this they use a locally made wire screen like the one shown in the photo above. Around 75 percent of the filtered material will be fine enough for use. The remaining seeds and product will be crushed again until it is all fine enough. The powder that results from this crushing and filtering is called neem cake. Since the women do not extract oil from seeds, the oil content will remain in the cake. This is important in terms of quality, as the active ingredients are found in the oil. If products containing neem oil are used in farming, they can act as an insecticide or a pest repellent, and also provide nutrients. When seeds are crushed in the industrial process, the neem oil is extracted first, but is still sold as neem cake. Farmers say this is no use, and that the industrial product is not of good quality.

to collect seeds, some mediators turned angry. Some of them assaulted us. They offered other villagers half a rupee extra per kilo of seeds. But the villagers are our friends and relatives; they didn't fall into the trap. Considering this situation, we increased the purchase price of seeds. The mediators totally disappeared from this trade", recalls Chinnamma, a group member. After gathering all the seeds together, they take them to Pothnal, a village where another group has provided storage space.

With many struggles along the way, the group members succeeded in producing seven tonnes of neem cake in 1999, the first year of production. But, where were the buyers? With the brand name of "Chiguru", Neju planned to advertise the neem cake in a simple style: a three-wheeler with a banner went around the villages. But there also was some aggression from chemical fertilizer companies, because the banner read "Don't use chemical fertilizers. They will devastate your land. To increase fertility, use Chiguru neem cake". Some days passed without any sales. They decided to look for ways of convincing farmers to use the neem cake. They gave about 50 kilos of cake to more than 100 farmers and asked them to pay for it after harvest. However, the farmers did not really understand this method of raising awareness. They just used the neem cake, and it was disappointing to see that none of them refunded the cost.

During this period, there was a lot of publicity about organic farming, and the then agriculture minister, H.K. Patil, met with some farmers, and realised the importance of these ideas. This led the Karnataka government to implement an organic farming policy to encourage farmers to adopt sustainable agriculture. This boosted the scope for marketing organic fertilizer and bio-pesticides. *Sahaja Samrudha*, Karnataka's leading organic farmers' group, was searching for huge quantities of bio-pesticides and vermicompost. Neju George contacted them and assured them that he could provide whatever quantity of neem cake was needed. So the cake was brought to Bangalore, and then it was distributed to farmers. "It was very useful for me. My crop was neither attacked by pest nor disease" says Shivanapur Ramesh, farmer of Devanahalli, Bangalore, who grows mulberry and grapes. From this time onwards, there were no more worries about the market. Now the cake is being exported to other places such as Hubli, Belgaum, Goa, and Maharashtra. Year by year the business is growing. Last year the *Jhansi* women's group had a turnover of 400 000 rupees. This year they reached 500 000 rupees by producing 100 tonnes of cake.

Impacts and sustainability

Though it started on a small scale, the impact of this project can be clearly seen. Women who once used to migrate, now remain in the village. From seed collection to export, they perform many tasks. Mariyamma, a group member with little formal education, maintains all documents of expenditures and income. After all the cake is sold, she distributes the profit to all the members. "We used to have to go to big cities in search of food. Now our problems have disappeared. We earn money here and are also saving some for the future," says Sushilamma, a group member, with pride.

In the initial stages, some of the villagers ridiculed the women's new profession. "My husband objected, asking why we are doing this work. But when the burden on him of providing money was decreased, then he admired me. Now he encourages me to go ahead," says Huligemma, another proud group member.

The United Nation's Development Programme (UNDP) has been encouraging rural women's entrepreneurship. Every year it recognises small entrepreneurs and gives a national award, known as "Partners in Change". In 2006, Chinnamma, the *Jhansi* team leader, was proposed for the award, and beat

690 other entrepreneurs to win it. She received the award, worth 200 000 rupees, from Mr Kamalnath, Commerce Minister of the government of India.

In this area it is quite natural that every farmer grows many neem trees around his field, especially on bunds. Therefore there is scope for the initiative to grow. Neem is a drought tolerant tree, which does not suffer from pests and diseases, so no inputs like water, pest control or fertilizer are needed. Any farmer with neem trees can earn an income even in years of drought. Previously, farmers did not know about the importance of neem seeds, so they did not earn anything from them. But the situation here has changed. Farmers sell their seeds to the women's groups rather than the industrial company or their mediators. The farmers wish to help the women of their village, while also earning an income!

Building on successes

Some factors can be identified which contributed to the women's success. They were keen to earn their own living, they were hard-working and innovative. They have also formed a strong and united group, and had support of local organisations and



Photo: P. A. Chaya

The keys to success are clear to see: women are enthusiastic, hard-working and innovative.

people. They did not let low education levels hold them back, but were keen to learn. The decision of the Karnataka government to support organic farming also came at the right time for them, when their product was ready but there was little demand.

The *Jhansi* group, still composed of the original fourteen women, now has plans to grow. Getting an adequate place to collect and store the seed, and producing the neem cake are their main priorities. To crush neem seeds they require a machine. "Setting up a unit for extracting and packing neem oil is part of our future plans," explains Neju.

Neem trees planted by villagers decades ago are now giving financial stability to women. A family's livelihood often depends on these women! Behind this achievement is the humble neem tree, a natural resource which has given life to several villages. ■

P. A. Chaya, Volunteer, *Sahaja Samrudha* Organic Farmers' Association of Karnataka. c/o Hanumantha Rao Dore, Behind Good Luck Hotel, Near Pappu Advocates, S B Temple Road, Gulbaarga - 585 103, Karnataka, India. E-mail: chayaapk@gmail.com



Graduates of the Institute of Agriculture and Animal Sciences in Chitwan, Nepal, reading various editions of LEISA Magazine.

A renewed LEISA Ma

It has always been the aim of LEISA Magazine to highlight alternative methods of agricultural production, that keep local needs and circumstances in mind, while taking sustainability into account. The growing awareness of the benefits of such alternative approaches – see the back page for a nice example of this growing awareness – has made us decide to make some changes to our magazine. We want to provide more people with more information. Our last issue of this year will therefore look rather different from what you are used to. We hope to show even more clearly that local experiences can have a large impact at a global level. We will link the types of local practices we usually present in the articles to the global debate on agriculture,

Your photos

In our previous issue we announced our photo contest, asking you to send in photos that reflect your thoughts on The Future of Family Farming. We have received some beautiful photos – thank you to all those that have contributed. The deadline for this contest (with which you can win a netbook, a camera or a radio) is October 1, so you can still send us your entries. For us to be able to publish the winning photos, they should be at least 1 MB.

We also received entries to our call for photos of readers reading LEISA Magazine. Thank you to all of you who sent in a photo! It is a great pleasure to actually see the magazine being read all over the world. We would like to receive more still! Send us a photo of you reading LEISA Magazine, preferably showing something of your surroundings.

On our website you can find more information on how to contribute to our jubilee activities. See <http://ileia.leisa.info>.



Josphat Wachira from Kenya, who is also the author of the Field Note of this issue (see p. 39).



HOW I STAY INFORMED

Name: Sakda Sinives
Position: Senior Subject Matter Specialist of Pest Management Division
Country: Bangkok, Thailand
Subscribed for: 14 years

What do you do?

"I have been working for 31 years in pest management for the Department of Agricultural Extension. I work with extensionists and farmers, on pest control measures. In the beginning, we were always promoting pesticides to farmers, even offering them for free. We stopped handing pesticides out to farmers about ten years ago, when we started looking more closely at pesticide residues. Now we promote the safe use of chemical pesticides as well as the use of biological pest control. We have been promoting the Farmer Field School approach for almost twenty years, which includes information on biological controls."

Where do you get your information?

"From various sources such as our department's own research, organisations like IRRI (International Rice Research Institute), FAO (United Nations' Food and Agriculture Organization) and many NGOs. We also exchange information with agricultural research and extension services in neighbouring countries like Vietnam, Indonesia and the Philippines. Furthermore, I appreciate the articles in LEISA Magazine, which I share and discuss with others, including farmers."

How do you exchange information in your work?

"We use a lot of different media for exchanging information. Every district in Thailand now has an information centre which includes access to the internet. We regularly disseminate different types of information to these centres, such as audio-visual programmes and an agriculture magazine called *Techno Chaoban* (or "Local Know-how Technology"). I am also a journalist and I write reports twice a month for *Techno Chaoban*. In addition, we have training sessions for extensionists, and training and visit (T&V) programmes for farmers. These days, we also depend a lot on mobile phones. I have farmers calling me up for advice,

gazine

providing more background information, news and debate. The experiences, needs and wants of small-scale farmers will be highlighted even more. We will also become a truly global magazine in the sense that each issue will provide local experiences from around the globe.

We would like your help!

To ensure that we will be providing you with the information you need, we hope you will tell us what changes you like to see in the magazine. What do you like and dislike about the magazine the way it is now? What kind of information would you like to see included? Send us your opinions, comments and suggestions! You can do so either by regular mail, e-mail (jubilee@ileia.nl) or through our website. We have opened a special page there where you can leave your contributions. See <http://ileia.leisa.info>.

The relevance of small-scale farming. What do you think?

LEISA Magazine believes in the benefits of small-scale, sustainable farming. But what do you think? What does small-scale farming mean for the people you work with, for your rural area, for your country's economy? What is its contribution to society, to food security? Send us your thoughts on the matter, either in the form of a short text (250 words maximum), or a video, a drawing, anything you think will answer this question. You can send your contribution to jubilee@ileia.nl. Please mention 'family farming' in the subject line. Letters are also welcome of course – for the address see the colophon. Contributions are welcome up to October 1. The best ones will be published in our first renewed edition, appearing in December of this year.

and we recommend they use our call centre to contact experts in the Department."

What kinds of challenges do you encounter in information exchanges?

"Well, we have budgetary problems that have an effect on the maintenance of computers, for example. Up to 30 percent of our districts have problems with the effectiveness of their internet. When this happens, people use the mobile phone much more."

What kind of information do you still miss?

"We are very interested in obtaining more information about local know-how from other countries so we can learn about alternative biological control methods. We also miss information on pesticide use. We have noticed that there are other places that have found simple methods or solutions to problems that we still struggle with. Those are the kinds of experiences we most like to learn about."

Contact details

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Global recognition for weaver ants

Paul Van Mele has co-authored various articles in LEISA Magazine. When we asked him for reflections on these articles, he immediately mentioned the first one he sent to us, about weaver ants in Vietnam. Published in April 2002, work on weaver ants has since spread to Africa. Now governments, international research institutes and individual growers have become much more aware of the benefits of using weaver ants as biological pest control in fruit orchards.

“The weaver ant article generated a lot of interest and response. I think this is because it is an unusual technology, but also because the weaver ant (*Oecophylla*) is commonly found in Africa and Asia. Many people recognised the ant, but did not know that it can be beneficial – most viewed it as a pest. The article helped to change that perception. Various people wrote to me, from individual growers in Papua New Guinea to organisations in India. I also sent it to many networks and colleagues. It is very accessible, which is LEISA Magazine's strength.

In West Africa, through field research with colleagues, we found that where there were more ants, there was fewer fruit fly damage. The work was published in the *Journal of Economic Entomology*, after which it was, rather quickly, picked up by the media. I spent more than two months dealing with journalists and answering enquiries about the work, from all over the world. This all helped in reaching a wider audience – not just scientists and academics.

In particular the line drawing in the article caught people's attention. This illustrates how farmers in Vietnam introduce weaver ants in trees. It was republished in the book "Ants as Friends". I was in Ghana last month, and met a Ph.D. researcher who had introduced colonies of weaver ants into cashew orchards. I asked him about how he had done this. It turned out he was using the method from the line drawing first published in the article in LEISA Magazine.

In terms of wider impact, the weaver ant story was picked up by various international organisations, including the FAO IPM group in Asia, CIRAD, IITA, ICIPE and the Eco-Innovation network. In Africa, it has been on the agenda at government level meetings in Kenya, Tanzania, Benin, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Senegal and Mali, with research on weaver ants being initiated in more than half of these countries. Recently, work has begun with the private sector in Ghana, where thousands of orange growers are producing organic orange juice for local and export markets.

It would be overambitious to state that all this was because of the article alone, but it definitely contributed to the establishment of a network of over 250 weaver ant enthusiasts and professionals from across the world. I also believe it has helped get weaver ants more widely recognised in Africa as a valuable natural resource.”

Paul Van Mele. Program Leader, Learning and Innovation Systems, Africa Rice Center (WARDA), 01 BP 2031, Cotonou, Benin. E-mail: p.vanmele@cgiar.org

The article referred to here was called "Observations and farmer experimentation with predatory ants", by Paul Van Mele and Vo The Truyen, published in LEISA Magazine, April 2002.

It works to work together

With more than 3.5 million animals, Ethiopia has the largest cattle population in Africa. Milk production, however, is very low, and its per capita consumption is lower than the African or the world's average. This means that the potential demand is large. But farmers need to tackle different challenges in order to increase production. One of the most important ones is to develop efficient marketing approaches. As seen in the northern province of Tigray, setting up co-operatives can be an important step forward in this direction.

Abraham Lemlem

Although Ethiopia has a relatively high number of animals, cattle breeders face many difficulties. This is particularly true in the northern province of Tigray, where more than 80 percent of the population is made up of subsistence farmers – and where food production covers only 40 percent of the population's needs. Free and uncontrolled grazing predominates, and grazing lands are common property. Poor management has led to a loss of most palatable species, and to an invasion of less palatable ones. Even worse, many areas have altogether lost their vegetative cover, resulting in sheet and gully erosion. This has gradually led to environmental degradation and to decreasing crop yields and livestock numbers.

In efforts to increase milk yields, REST, the Relief Society of Tigray, introduced Begeit cattle to this region. Originally bred in Ethiopia's lowlands, Begeit cows are known for their many advantages – they are well-adapted to local conditions and give high milk yields. Many farmers were able to get up to eight litres of milk per day. But then they faced a problem they had not expected: how to sell their milk. Although their own consumption increased dramatically, how could they increase their incomes and get additional benefits?

Box 1. Abeba Yebiyo's story

Abeba Yebiyo is a 55 year old woman living in the Degua Tembien district (or *woreda*), in the centre of the Tigray region. She is the head of a family of eight, trying to earn a living and sustain her family under very difficult conditions. In June 2004 she received a cow from REST, which later gave birth to four calves (one male and three female). Ms Yebiyo sold the male calf to a neighbour, earning 600 birr (approximately US\$ 55). She now has two heifers (one of which is pregnant), one lactating cow and one female calf. This has added a completely new dimension to her household. While before they were basically limited to growing barley, and surviving on a limited diet, the whole family now cares for their animals and enjoys the benefits. The cow yields an average of eight litres of milk per day, for ten months of the year. This is more than the whole family can consume.

Ms Abeba is now a member of the local milk co-operative. So she supplies them with milk, earning 5 birr per litre – adding up to a potential total of 12 000 birr per year (around US\$ 1000). Taking into account what she spends on feed and the animals' health, she and her family make a net gain of almost 700 dollars. They also spend less money on fuel, using some of the cows' dung for this purpose. And they even sell some of this dung, earning some extra cash.

Forming marketing groups

As seen in Box 1, many of the farmers who worked together with REST experienced a number of benefits, especially in terms of milk and dairy products. But meetings with farmers, extension workers and local authorities made it clear that extra efforts were needed to market these products, to ensure that farmers could earn a steady monetary income, and expand the benefits of milk production to the population at large. A shared idea was that of forming marketing groups, considering these had to operate as "milk units". Small-scale farmers were to organise themselves in order to collect and sell the milk, and at the same time to process it and sell different value added products. All groups were to become independent entities within a community, and would be recognised as co-operatives once they were legally certified.

There were different objectives for forming these co-operatives. One was to help farmers commercialise their products, so that they could earn more income. But it was also expected that by making more milk available, the nutritional status of the population would be improved. For their part, farmers hoped to increase the efficiency of their milk processing procedures, lessening the amount of milk lost during the processing of dairy products. This was all conceived as a "dairy development scheme", where success depended largely on the development of marketing facilities, and also on the availability of small-scale processing techniques. Farmers were interested in producing high quality dairy products, and also in being able to store them. By working together, they aimed at solving their problems collectively, in ways that individuals cannot. This meant co-ordinating knowledge, wealth and capital. It was clear that operating as a large group could improve the living standards of individual members, by reducing production costs and obtaining better prices.

The first measure taken was to assign specific roles and responsibilities to all those involved. Committed farmers were invited to join together, and to dedicate the necessary time and energy to milk production. REST agreed to provide dairy cows to the groups on a credit basis. They also agreed to provide forage seeds and animal feed (such as molasses), as well as cans and milking equipment. As part of its regular programmes, REST also agreed to continue providing extension and technical support.

Most importantly, one of REST's roles was to help in organising the co-operatives. This required following strict procedures, such as filling in an application form for the local authorities, registering all members, opening a bank account, and describing in detail all planned activities and expected results. Most co-operatives were set up by farmers from one village or from a single area; in most cases forming groups of at least ten members. These were all set up as voluntary organisations open to anyone interested, with equal voting rights for all members. Following Ethiopian law, dividends were to be divided in accordance to the number of shares each member has, and also in relation to their contribution.

Setting the scene

But while all co-operatives have to follow Ethiopian law, one of the main requisites for them being officially recognised is the elaboration of their own by-laws. These are internal norms which regulate all procedures, and which determine the roles and responsibilities of all members. The preparation of these by-laws was thus an essential part of the process, resulting in a specific

Box 2. A successful co-operative

The Daero milk processing and marketing co-operative, in the Wukro district, was established in May 2006. Originally formed of 15 members, it is now twice as big. Together with the government's co-operatives department, REST helped its members get organised, and provided a number of Begeit cows. An important step in its formation was the development of its own by-laws, and the identification of duties and responsibilities. Those participating in the co-operative's management bodies received training, and were also invited to visit other co-operatives. By doing this they could get a clear picture of operating procedures, problems faced, and how to solve such problems. But the support provided by REST is now limited to the visits of extension agents, and the co-operative is the one in charge of supporting its members. Every month, for example, wheat bran is sold at a reduced price to all members with milking cows. Several members have also received loans.

Its most important service, however, is the commercialisation of milk. At the moment, each member has at least one crossbred and one Begeit cow, so they are all producing milk. Approximately 220 litres of milk are collected every day at the selling post, from which different products reach the market. Every day, consumers buy 120 litres of whole milk, 20 litres of boiled milk, 60 litres of yoghurt, 250 gr of butter and 18 litres of skimmed milk. This provides a total daily income of more than 1000 birr.

Product	Amount	Price/unit (birr)	Daily income (in birr)
Whole milk	120 lt.	4.00	480.00
Boiled milk	20 lt.	5.00	100.00
Yoghurt	60 lt.	7.50	450.00
Skimmed milk	18 lt.	2.00	36.00
Butter	0.25 kg.	80.00	20.00
Total			1086.00

Subtracting all operational costs (like rent or the salary of a sales person), the co-operative gets a net monthly income of 7578 birr – the equivalent of more than US\$ 8000 per year.

and detailed document. As part of this process, it was necessary to determine the co-operative's objectives, the way agreements are reached or decisions are taken. It was also necessary to decide what is needed to be accepted as member, including the expected duties – especially for the internal management bodies. A special section of these regulations looks at the allocation of profits. All milk co-operatives deduct 30 percent of the net income gained in one year, using it to cover all management costs. The remaining profit is divided among all members.

Members of the different co-operatives set up in recent years like to point out the many services, and therefore, benefits they are getting. As seen in Box 2, the commercialisation of dairy products results in a considerable amount of money becoming available. Most co-operatives are therefore able to provide specific services. Some provide credit at affordable rates; others help farmers with animal feed. And in addition to these services, all co-operative members get paid for their milk, on a regular basis (in a way that "it is as if we are getting a salary"). Put together, this all provides a very favourable setting for farmers to develop their own ideas, increasing yields, processing their products, obtaining higher incomes and improving their living standards. Within this framework, it is clear that farmers' entrepreneurship will help solve the problems they still face. ■

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Call for articles

Scaling up and sustaining the gains December 2009, Vol. 25.4

The next issue of LEISA Magazine will have a new look, with new sections. At the end of our jubilee year, it is a good occasion to look at how sustainable agriculture practices have developed and spread over time. We want to look at initiatives that have been taken to scale up successful methods and approaches. Equally, we will look at the factors that have hindered the spreading of sustainable agricultural practices. And we want to learn about what it is that has helped some sustainable practices to continue while others have not.

We would like to pay attention to the different dimensions of upscaling. What characteristics does a good practice need for it to be disseminated and picked up by others? What institutional arrangements are important (for example collaboration between farmers' organisations, government extension departments, private sector and/or NGOs)? And what are the policies that encourage or inhibit scaling up processes? How do they come about? How does relevant information reach those in charge of drafting them? Have successful advocacy campaigns influenced local policies?

We invite you to contribute to this challenging theme. Please do **not** send us a full article, but a *500-word summary* of your experience, pointing at the factors that have contributed to, or hindered, the wider dissemination of sustainable benefits. What makes your experience special, and why do you think it is relevant to others?

Please send your ideas to Jorge Chavez-Tafur, editor, at j.chavez-tafur@ileia.nl. We look forward to hearing from you before August 15th, 2009.



... that certain Australian acacia species have tasty and nutritious seeds that can be stored for many years, thus serving as famine reserve food? You can read all about it on our **blog**, LEISA's Farm. There you can also find many other interesting items related to sustainable agriculture, and sign up to receive new posts in your inbox: www.familyfarming.typepad.com.

Awudu Ngutte works as a project co-ordinator for INAPA, a small organisation based in Buea, Cameroon. He has been receiving LEISA Magazine since 2004, sharing it with his colleagues and other organisations. He was particularly interested in issue 23.2, “Securing seed supply”, and in the story describing the organisation of community seed banks. He felt that this was an idea that could be replicated in his region. Working together with farmers, extension agents and authorities, he showed that this is possible.



An old seed gives birth to a new one

Awudu Ngutte

Since 2004, when I subscribed to LEISA Magazine, we have been receiving it at the office. We receive it regularly (even though it generally arrives several weeks after publication), and share it among all staff members. Although I have enjoyed all issues, I was particularly struck by volume 23.2. The cover page, showing the head of a family surrounded with a large variety of seeds, caught my attention, as it reminded me of the days when I used to assist my parents, travelling long distances to find seeds. This issue’s title, “Securing seed supply”, seemed especially relevant to the problems we were facing then –and still face– in Cameroon. Reading the different articles, I was happy to come across the one written by Vanaja Ramprasad, entitled “Community seed banks for maintaining genetic diversity”. I immediately felt we could put forward a project to develop seed banks in our region.

The South West region has a farming population of 35 000 persons, yet low production levels and low yields result in food insecurity. Many national and international organisations are busy with projects and programmes aimed at combatting food insecurity. Not many, however, tackle what I saw in this article, and the fact that food sufficiency begins with what is sown. Quoting a popular saying, “whatever is sown will surely be reflected in the harvest”.

Widespread interest

Without much encouragement, this article was read by all of INAPA’s staff

members within one week. Between September 2006 and February 2007 we organised a series of discussion sessions with representatives of the different farmer groups. These included the Unity Farmers group in Bonduma, the Nkongleh Women group in Soppo, the Self Help Union in Dibanda, the ABUET Rural Women group in Great Soppo, and more than 30 individual farmers from within the region. These sessions were used to analyse the major constraints farmers face in relation to seeds, such as: acquiring quality seeds, seed storage, and their preference for traditional indigenous seeds. In all, the discussions gave us a clear picture of the situation. They mentioned that seeds are expensive and hard to obtain, especially in remote

areas such as Mamfe, Munyenge, Lobe, Manyemen, or Bangem. We also looked at related issues, such as labour: farmers rarely work in groups, and they are reluctant to work with extension staff. We regarded the experience described by Ms Ramprasad as an example to follow, and spent some time looking at the opportunities for setting up a community seed bank in our region, following the same approach. We thought it would be useful to involve other organisations, so I contacted Mr Thaddeus Ayuk Etengeneng, the local representative of the National Agricultural Extension Research Programme (NAERP), Mrs Pamela Tarkang, Executive Director of Dynamic Action Group, Bomaka (an NGO working with the underprivileged in



The article which inspired the author; LEISA Magazine, Vol. 23.2, June 2007, “Securing seed supply”.



Photo: INAPA/Therry Photo Studio

The author with Michael Ndah, Peter Ashu and other participants at one of their planning sessions in the building of the Ministry of Agriculture and Rural Development, Buea.

the rural areas), Mrs Angelina Forcha of ABUET Rural Women, Mr Michael Ndah of AGROPAC-CIG Dibanda, and several extension agents working for NAERP. The outcomes of all these meetings and discussions resulted in a working document called “Seeds for all families”. I drew up an action plan, sketched a project proposal, and presented it to all those involved in the discussions. Since then this document has been my philosophical walking stick.

We then formed a committee involving the different persons and organisations we had been in touch with. This committee immediately started working on identifying the places where the seed banks could be built. Between March and September 2007, this committee was busy supporting individual producers and their farming groups, and selecting high quality seeds and cuttings (which were then to be treated and stored in their respective communities). The committee has also monitored progress, measuring increases in cultivated land and increases in yields and outputs. We have been interested in documenting where seeds come from, and also in comparing the results (such as pest incidence). We have also reported the main difficulties which farmers face. These have included the lack of materials and inputs, the high costs involved in building storage facilities, the presence of rats and rodents in local barns, or the need for training courses and additional extension support. Through this committee, we have also encouraged a farmer-to-farmer exchange of information.

More than a seedbank

In general, results have been positive. The Maize Seeds Producers Union, with 78 members, produced over 100 tonnes

of maize seeds, all of which were sold to the Ministry of Agriculture and Rural Development and then distributed to the farmers of the region. The Esimbi Groundnuts Seeds Producers, with 17 members produced more than 20 tonnes of groundnut seeds, most of which were sold through local markets. Other groups were able to produce plantain plantlets, okra and other vegetables. Most groups, however, had difficulties in terms of storage, relying on locally constructed barns. Five groups used rooms in some of their members’ houses. Another issue was the use of sun drying methodologies, for example using bamboo mats. These are issues that require further action, for which the help of the Regional Delegate of Agriculture and Rural Development is currently being sought.

The seed bank project was welcomed by farmers and communities alike. Being a member of the Social Edge Network, a worldwide network focusing on sustainable development, I also wanted to share our work with others, especially thinking of opportunities for new partnerships and new activities. So, I responded to the call made by the Global Social Benefit Incubator (GSBI) programme, organised by the Santa Clara University in California, U.S.A. On the basis of our work and results, I submitted a proposal for the further development of community seed banks in the South West Region of Cameroon. I completed all the necessary forms and qualified as a semi-finalist. I was later glad to hear that I had been selected as a finalist, and was therefore interviewed through the telephone. Although I did not win one of the “action learning” scholarships, I was very happy to have participated, learning a lot in the process.

Now I look forward to the GSBI 2010 competition, while at the same time, together with my colleagues in INAPA, I am busy trying to ensure the sustainability of this approach. Farmer groups will store the best seeds grown in their areas. They should quantify their annual reserves and alert the other communities. Each bank is to have a management committee of 5 persons (bank attendant, statistician, treasurer, adviser and technical staff). Their needs for other seeds shall be presented to the

A community seed bank

As a result of the many advantages of community seed banks, and because of their relative simplicity, they are becoming more popular in the rural areas of many parts of the world. According to Vanaja Ramprasad, “a community seed bank functions very much like a commercial bank. The transfers are, however, not in money but in seeds”. They are generally open to all farmers of a given community, all of whom become members by paying a nominal annual fee. Seeds are then provided free of charge to all those interested in a particular variety or species. The bank’s members then sow these seeds and, after harvesting the crop, return double the amount of seeds initially given. These are then stored and given to other members.

Seed banks do not need special buildings, but they do need to have good storage facilities. An example of a typical seed bank would be an elevated bamboo shed constructed for preserving yam sets. Other types of seeds can be stored on shelves in tin cans, glass jars, aluminium basins or plastic containers, all properly sealed and labelled. All participants also need to assume specific responsibilities, such as treating the seed before storage. For example, only healthy and pest-free seeds should be selected for storage, and members are responsible for treating them with any insecticides or other treatments. They should also ensure that seeds are thoroughly dried before storage, and are correctly labelled, so that their origin can be traced, for research or documentation purposes.

other banks, and we will try to facilitate the exchange of seeds (limiting monetary transactions to a minimum). One of our future plans is to seek funds for the establishment of Central Seed Bank which, co-ordinated by INAPA, could help all local banks serve their clients. ■

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INAPA, the Institute for Agro Pastoral Activities, works with the farmers of the rural and urban areas of the South West Region of Cameroon. Based in Buea, its main aims are to formulate strategies that will help improve crop and animal yields, involve individual farmers and farming groups in capacity building programmes, and formulate and implement agro pastoral development projects.



Photo: Chanthasitiphanha

The Pakngao Farmers Enterprise attracted investments from farmers and business people that allowed it to buy a tractor and maize sheller.

Adding value to local livelihoods

In Laos, farmers get better prices for their products and more control over value chains when they join together to form and invest in their own agro-enterprises. Since 2007, 18 agro-enterprises have been formed.

Kheuavanh Pommathat and Stuart Ling

Northern Laos is changing fast. The rugged mountains, which were once the preserve of isolated tribes living a subsistence lifestyle, are now being carved up by roads, hydropower developments and rubber plantations. Foreign

companies, from China, Vietnam and Thailand, are scrambling for land to invest in large agro-enterprises, producing rubber, cassava and maize. They receive the backing of government authorities, who give them land and tax concessions in their drive for foreign investment.

For illiterate and cash-poor small farmers, the options to access these markets are few. They can sign a contract agreement giving the company the right to buy their fresh, unprocessed product for an extremely low price. Or they can give up farming altogether and choose to work as a labourer on company land. However, a new agro-enterprise approach is being piloted by VECO, a non-governmental organisation, with small-scale farmers in the province of Bokeo. The idea is that local farmers form businesses, and take control of the value chain.

Box 1. Pakngao Farmers Group Enterprise

Until 2007, 47 farmers in Pakngao village sold their maize harvest to a Thai trader, receiving a low price because it was unprocessed. The trader captured the benefits of collection, transport and processing.

A local agro-enterprise for maize was set up later that year within a cluster of four villages of the Lao, Khmu and Hmong ethnic groups. The farmers decided to add value to their product to get a better price. Another 24 farmers were recruited to join in the business plan, which proposed the purchase of a tractor and sheller. Each farmer investor was willing to pay the local equivalent of US\$ 735 each for a share in the enterprise, some borrowing money from within the village to finance their shareholding.

The group received a grant of US\$ 4882 from the project. In their contract, these funds were to be reinvested within the group over a 15-year period (that is, it was not allowed to be paid out as profit to shareholders).

By the end of 2008, 120 farmers in four producer groups (one per village) had a contract to produce maize for the enterprise. The increased area, a higher yield as a result of ploughing, and higher prices through shelling resulted in a four-fold increase in their total income compared to 2007. With the resulting profits and even more local investors, the enterprise invested in a truck in early 2009.

The value chain approach

Put simply, the value chain covers every step from the farmer to the final consumer. Each step adds value. This might be a bulk buyer who dries the crop, or a company who repacks a product into attractive bags for the consumer. A simple value chain might be:

Producer group → *Middleman (buyer)* → *Processor* → *Consumer*

In the case of maize for example, a farmer sells a green cob for about 700 Lao kip/kilogram (or US\$ 0.08), but the consumer ends up paying 7000 Lao kip/kg by the time it has been processed and packaged into high quality pig food. To understand why farmers are receiving a low price, we first need to look at all the steps along the chain. It is also necessary to understand the institutional environment, such as the impact of government policies (such as taxes) on the chain.

In our maize example, a chain analysis showed that there were many reasons why farmers would receive a low price. Among these, we saw that:

- producers would mix different qualities (e.g. wet with dry), and so receive a low quality rating and price;
- producers had no storage facilities, and so would be forced to sell the green cobs straight after harvest at a low price;
- farmers were in debt to traders, and had to sell their maize immediately to pay back their loans; and
- different types of seeds, planting times and growing techniques would cause the maize to ripen at different times, increasing costs for traders and reducing quality.

Agro-enterprises for village clusters

For the pilot, 4-12 villages were strategically clustered. Participating farmer groups identified products with best potential. A small agro-enterprise was set up and a committee selected of more business-oriented farmers. These farmers are highly trusted members of the community who are prepared to invest money in the agro-enterprise. The new value chain therefore looks like this:

Producer group → *Small agro-enterprise* → *Processor* → *Consumer group*

The committee needs to encourage farmers to invest in the agro-enterprise (in the form of shares – or community savings) in the hope of seeing a return (profit). They also need to develop a business plan that is passed by all the investors in the group. The enterprises should aim to do more than just buying from farmers – they should also provide services (such as providing seeds, training and crop monitoring) and invest in value-adding (such as post-harvest processing and storage).

Findings of the pilot project

Although only one annual cycle has passed since establishing the agro-enterprises, there have been significant improvements in both product quantity and quality in the areas where they operate. The cases in Boxes 1 and 2 illustrate the success of the development process.

The Pakngao Farmers Group Enterprise, described in Box 1, collected savings at the village level to establish an agro-enterprise, in a way that could not be borne by individuals alone. In a place where banks are difficult to access, people were willing to invest their savings into an enterprise. It is unusual that farmers are in the position to invest so much money. However, these farmers, located along the Mekong river, are relatively more prosperous than those of the ethnic groups in more remote areas. Share prices in other village clusters in the programme varied, with some as low as US\$ 147.

There also seems to be a positive effect when farmers see local businesses investing in their area, building infrastructure or buying processing equipment. Farmers have greater confidence that the agro-enterprise is serious about buying their crops on a long-term basis, so production naturally increased.

Apart from the success of adding value to peanut production, the Nam Phuk Farmers Group Enterprise mentioned in Box 2 shows the different solutions that come from considering an enterprise approach. Previously, efforts had been made to train and encourage farmers to produce their own biofertilizer using local materials, with only limited success. Now the enterprise approach had managed to promote sustainable agriculture among the local farmers with only a passing mention of soil fertility. A key factor was that the pelleted biofertilizer is much longer lasting and easier to spread than the unpelleted biofertilizer. As the necessary processing equipment costs about US\$ 2000, it could only be purchased by the collective investment of the enterprise.

Box 2. Nam Phuk Farmers Group Enterprise

In 2007, Nam Phuk Farmers Group Enterprise was formed, with the aim of increasing income for local peanut producers. By 2008, their profits increased. Instead of selling fresh unshelled peanuts at a low price, they sold high value snacks to local restaurants. Supply was unable to keep up with demand.

By early 2009, the enterprise decided to produce pelleted bio-fertilizer, for their own farms and also to sell to neighbouring farmers. In their business plan, the justification given was that importing chemical fertilizers added a large cost. Besides needing to raise these funds, farmers found this high cost added too much risk in the event of crop failure. By mid 2009, the factory was established and producing bio-fertilizer using a mix of local ingredients.

Local agro-enterprises and sustainability

Several lessons have already been learned on how to make local agro-enterprises work in a sustainable way:

1. Local enterprises work best if they form themselves, have power over decision making and develop their own rules. In every village, there are farmers who have business potential, and it is more rewarding to identify those who are outside traditional power structures. Once they have the opportunity, they are motivated to sacrifice a lot of time and energy into making their business successful.
2. Regularly bring different stakeholders together that are either within or influence the value chain. Businesses should not be seen as only exploiting farmers but can be part of the solution.
3. Corruption, unfair taxation or bureaucracy can destroy small businesses. An association of several enterprises can lobby the government more effectively to create a favourable small business environment.
4. Where contract law is absent or difficult to enforce, agreements should be made between producers and enterprises signed by a third party (e.g. local government) to arbitrate in the case of disputes. To ensure the agro-enterprise stays locally owned, outside companies should be restricted from buying shares or having voting rights. Donor co-funding during the business planning stage is also an effective way to enable small agro-enterprises to invest and maintain their independence.
5. There needs to be a mechanism to provide organisational support to the new enterprises for several years. Important aspects are managing finances, understanding contracts, and recording minutes of meetings. The government could play a role by for example, giving tax free start-up periods on condition that profits are reinvested in the enterprise.

Future plans

The existing enterprises still need to be supported for several years, particularly with research, training, and advisory services. As well as facilitating the establishment of new agro-enterprises, VECO will encourage the formation of an association of enterprises which gives members a chance to learn, exchange and lobby for improvements in the local business environment.

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Bees, trade – and success

Honey production is frequently promoted as a pro-poor income generation activity as it is accessible to many members of a rural community, has low start-up costs and requires little land or labour. But while apiculture (bee-keeping) presents an opportunity for many African farmers, the potential to create a significant livelihood from selling honey often remains out of reach. Without access to a market and with limited transformation, the expected benefits do not materialise. These were the major issues considered by a small organisation in Cameroon, leading to results that were recognised by the SEED Awards.

Verina Ingram

As in many other countries, the honey sector in Cameroon has long been a traditional and small-scale activity. However, the last decade has seen a dynamic change in this sector. This is largely thanks to a series of projects aimed at conserving this country's natural resources and developing income generation activities. Thanks to the trainings provided to local organisations and communities, there are now hundreds of bee-keepers, in particular in the Western Cameroon Highlands, producing more than 3000 tonnes of honey and 50 000 kg of wax (with a value of at least 3 million euros). Recent years have seen increasing volumes of wax exports to Europe, the organic certification of honey, the establishment of a certificate of origin system, and the approval of national legislation for securing honey quality standards. A growing number of apiculture groups have been recorded and sale prices are increasing. Notwithstanding, all those involved feel that apiculture could play a far larger role, both in terms of income and poverty alleviation, and in terms of the country's natural resources.

Box 1. The SEED Awards

The SEED Award is not a monetary prize, but a 12-month package of support services tailored to recipients' needs, to strengthen and scale up activities. The SEED Initiative is a global network for action on sustainable development partnerships, founded by IUCN, UNEP and UNDP, to deliver concrete progress towards the internationally-agreed goals in the United Nation's Millennium Declaration and the World Summit on Sustainable Development 2002. SEED focuses on locally-driven, entrepreneurial partnerships in developing countries. Its goal is to inspire, promote and build capacity to support the innovative ways in which groups work together to improve incomes and strengthen livelihoods; tackle poverty and marginalisation; and manage and conserve natural resources and ecosystems. For more information, see Networking, p.42.

Tackling the major bottlenecks

A few years ago, the Western Highlands Conservation Network, a group of 22 NGOs concerned with conservation, farming, agroforestry and sustainable livelihoods, decided to work together with private and public bodies in order to tackle what was seen as the major difficulty: honey marketing. A thorough market study was carried out with the help of the Netherlands



Photo: Verina Ingram

Higher quality gives producers a reason to argue for a higher prices. Here different products are displayed in a market stall in Yaounde.

Development Organisation, SNV, showing both the productive potential of the Cameroonian apicultural sector, and also the poverty within which the producer communities live. Since then, one of the major catalysts in the development of market links has been the organisation called "Guide d'Espoir", or "Guiding Hope", which groups together most of those involved in this study. Although only legally established in May 2007, its members have more than 15 years of experience with the promotion of apiculture, the production of organic honey and bee products, and their commercialisation in West African and European markets.

Guiding Hope was created to strengthen the link between the disadvantaged producers of high value apiculture products and the market; guiding them with information and opportunities; facilitating processes and providing support; and sharing the risks and burdens of selling to a non-local market. Their business strategy is to use socially responsible, sustainable and profitable production, and transformation and trading in apicultural products, as a catalyst for improving the quality of life of the producer communities. It aims to become the missing link in the commercial chain, bringing hope to producers by engaging transparently with them. It also aims to provide the rigour and quality control required to get access to the international markets and return profits to the community. A small organisation, Guiding Hope has 6 members who manage the business (and form the Directive Council), and 22 employees. There are also occasional consultants and service providers. In 2008 it had 10 bondholders, three of whom are also members, who have invested money into the business. All working capital has come from these bondholders and reinvested profits.

In September 2008, Guiding Hope won one of five global SEED Awards for Entrepreneurship in Sustainable Development for its work to scale up social, environmental and economic impacts (see Box 1). SEED is supporting Guiding Hope to grow, providing capacity building and technical advice. Whilst it is too early to provide an evaluation, this award has helped Guiding Hope to rewrite the business plan, provided an incentive to formalise and audit accounts, and consolidate agreements with partners and suppliers. It has also helped establish links with potential buyers, produce public relations materials, gain media attention, and prepare three proposals for financing. Such support is necessary to provide credibility to a small, young, unknown organisation. It also allows us to increase our contacts in the international market and obtain access to affordable capital.

Chains and partners

The importance of marketing convinced Guiding Hope to follow a value chain approach, as one that can ensure sustainable trade (providing sustainable profits to shareholders, attractive rates for employees and fair prices for suppliers). This approach is also expected to avoid any environmental impact, and to have a “social multiplier effect” by allowing the involvement of men, women and youths from all socio-economic, ethnic and religious backgrounds. The group’s business model is based on the establishment of collaboration relationships with three main groups. One of these is a development organisation known as PAELLA (or *Programme d’Appui aux Initiatives Locales à L’Auto-Emploi*). They provide the technical assistance needed to meet standards and legislation set in Europe, and train and support all producer communities. Another important partner is a small honey and wax importer and trader in the U.K., Tropical Forest Products, with whom a long term trading partnership is being negotiated.

The third, and by far the largest, group is formed by the 755 bee-keeping households who supply raw honey, comb and propolis, with whom Guiding Hope has signed agreements. These are poor, rural farmers and beekeepers, with an average annual income of approximately 400,000 CFA francs (or US\$ 800). Bee-keeping represents almost half of their total income. Guiding Hope assists them to group together, and provides training in both the technical aspects of production and the organisational aspects (such as quality control, administration and accounting).

This support is based on their specific needs – from creating clean water sources to building community halls that double as collection centres. This type of empowerment means they can develop their own apiculture based activities, work together in community development projects, and have the negotiating power to sell their products at fair prices. Trainings and demonstrations on product processing also allow communities to add value by increasing the quality of honey, and especially increasing the value of honey by-products. Guiding Hope has introduced new (for the region) wax production techniques, European buyers, and is stimulating production of goods such as soap, creams, and candles. The organisations can sell these locally. If they are of sufficient quality, Guiding Hope proposes to incorporate them into its honey trading network in major cities in Cameroon and potentially, for export.

While Guiding Hope is equally interested in working with farmers in the North West region, a zone of mountainous forests with a tradition of producing high quality honey, most of its work is now carried out in six villages around Ngaoundal, Djerem Division in the province of Adamaoua. This is a transition zone between the tropical south and the Sahel, and is the largest honey production area in Cameroon. Adamaoua is home to at least 14 different ethnic groups. Bee-keeping was traditionally an activity carried out by the Gbaya, one of the most numerous groups, but is being taken up more and more by other groups as they see its many advantages. Most families practice a mix of activities, combining beekeeping with farming, cattle trading, fishing and hunting. Bee-keeping also involves young and old, men and women, with honey sales providing seasonal cash income. Bees are also vital for agriculture, being one of the major pollinators of the local staple crops and also of important fruits such as mangoes and avocados. Bees are also critical in pollinating forest trees.

Enabling entrepreneurship

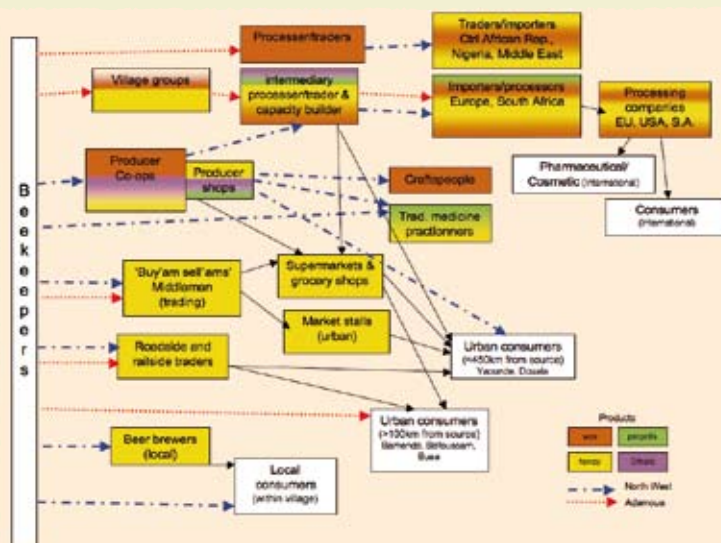
To date, Guiding Hope has developed a range of products for the national market (marketing soap, candles and two types of honey: “Savannah Miel Royal” and “White Mountain”), and has exported more than 100 tonnes of beeswax to Europe. They are now preparing to export honey to Europe. In 2009, they plan to send at least 50 tonnes, once the Honey Monitoring Residue Scheme, submitted in February 2009 to

Box 2. Value chains

The term “value chain” has been used for more than twenty years. It refers to the full range of activities needed to bring a product or service from conception, through production and delivery to final consumers (and ultimately disposal after use). A value chain can be the way in which a firm develops a competitive advantage and creates shareholder value. It can also demonstrate the interrelation and dynamics between individual businesses. A narrow economic-based definition of value chains involves identifying the series of value-generating activities performed by an organisation. A broader, systems approach looks at the complex range of activities implemented by various actors, from primary producers, harvesters, processors, traders, service providers and upstream suppliers to downstream customers. This is also known as a value system.

Value chain analysis encompasses issues such as organisation, co-ordination, power relationships between actors, linkages and governance aspects. These issues can be analysed by individual organisations, as well as between actors within a chain. Drivers of value chain activities include economies of scale, learning, capacity utilisation, linkages among activities, the degree of vertical integration, timing of market entry, geographic location and institutional factors such as regulations, union activity, or taxes.

The value chain approach has been a very useful analytical tool for taking a more objective look at an organisation’s position in a market. It allows for examining the consequences of empowering one group (the producers) and identifying how to link them to importers and consumers. It enables analysis



Cameroon apiculture value chains.

of the implications of who does what, at which stage in the chain, and what this means for risks, capital needed and margins. It can also help to identify with whom to form partnerships in the chain.



Photo: Verina Ingram

Aminatou Hamoua, Guiding Hope's internal control officer, uses a refractometer to measure moisture content in honey, ensuring its quality.

the European Union, is approved. Guiding Hope, as instigator of the Cameroonian Union of Apiculture Exporters, has been the leading organisation working with the government in setting up this scheme. The group also invested in setting up an organic production system which could be certified as such. In November 2008 they received the organic certification for honey, wax and propolis from the U.K.'s Soil Association. The organic label increases the selling price by almost 50 percent, resulting in higher incomes. Through "preferred supplier contracts", Guiding Hope is also aiming at the fair trade market, establishing long term agreements.

Similar attention is being given to the need to upscale this approach, and benefit more villages. Guiding Hope plans to continue working with the villages in Adamaoua, broadening out to other villages once the full production capacity of the first villages is reached. This assures quality control and traceability, and makes better use of the limited resources available for an integrated sustainable development and business approach. This model will then be expanded to the co-operatives in the North West, three of which have already shown interest. While they have different needs for organisational and business support, and they face various environmental threats, their production potential is high. The approval of the Honey Monitoring Residue Scheme provides even more possibilities, as it sets a basic framework and opens up the market for other organisations to export to Europe. This will be expanded upon with the development of national honey and apiculture standards, helping promote a high quality product among consumers in Cameroon and abroad. This is a joint initiative started with the National Beekeepers Federation, with which the national government is getting even more involved. Only a few years ago, it was unclear which government agency was to be contacted, or which one should be involved. Thanks to a series of meetings and discussions, the roles and responsibilities within the Ministry of Livestock and Fisheries are now clear.

And while the benefits in terms of income are obvious, Guiding Hope also believes that bee-keeping can lead to positive environmental and agricultural services (such as pollination, forest regeneration and conservation), all of which contribute to sustainable trade. Consultations with villagers showed that they are equally interested in working with these interactions. In joint

efforts with PAELLA and various government agencies (such as the Ministries of Livestock and Commerce and Small Enterprises), environmental education has been made a priority. This includes setting up community nurseries and reforestation activities, and agreeing on community regeneration and beekeeping zones. The support of the SEED Award will help Guiding Hope create more conditions which are favourable for beekeepers and for the environmental situation in general in the area. This will have positive knock-on effects for agriculture such as increased pollination and the possibility of making compost from honey and wax wastes. Farmers are looking to diversify and secure cash incomes through bee-product processing. This has led to changes in apicultural practices, with innovations such as new hive designs that facilitate harvesting and resist animal attacks, and energy efficient stoves. Communities are also designating unproductive and degraded land for agroforestry, growing species which can provide hive materials, fuelwood and protect water catchments.

Time will tell the true tale, but it appears that small-scale rural entrepreneurship in the apiculture sector is already resulting in far-reaching institutional and sectoral changes. We believe that it has the potential to result in incomes and community development on a sustainable basis.

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Market Access Centres make the difference

The Analanjirifo region in eastern Madagascar offers a unique and extremely wide range of agricultural products. Local production of cloves, lychees, vegetables, rice and honey represents a source of wealth. Despite this potential, the area's poor farmers have to cope with many problems, most important of which are marketing their produce and finding permanent partnerships. Market Access Centres are being set up to address these problems for farmers, including bee-keepers.

Benoît Thierry and Emeline Schneider

High agricultural potential and harsh living conditions for farmers: this is the paradoxical situation of the Analanjirifo region. The cause is the rural area's lack of infrastructure and technical skills, limiting investment and hampering the professionalisation of the various value chains. Most growers have difficulty accessing commercial inputs as they are too expensive, and not available locally. In addition, productivity varies with the climate, giving farmers an uncertain income. The situation is made worse with the absence of regional-level storage facilities and post-harvest processing infrastructure. Products cannot be conserved, preventing farmers and producers from responding adequately to demand.

Since 2004, the Rural Income Promotion Programme has been running in the eastern province of Toamasina. Financed by the International Fund for Agricultural Development (IFAD), the Organization of Petroleum Exporting Countries' (OPEC) Fund for International Development and the Government of Madagascar, its objective is to improve the income of poor farmers in two regions. The programme's activities consist mainly of supporting farmers' groups, through the development of "partnership poles" for value chain management. These poles bring together local government authorities, producers' groups, exporters and microfinance institutions. Seven poles are at present in service in the Analanjirifo region, and three others are in preparation for the Atsinanana region. Within a pole, producers' organisations are grouped into agricultural co-operatives, which have the task of managing a "Market Access Centre" (MAC).

The aim of the MACs is to organise collection systems, improve small farmers' negotiating strength, and the quality of their

produce, and develop sustainable partnerships with traders. Each centre manages the marketing of the commodity that passes through it, and negotiates on behalf of producers in exchanges with traders. The manager in charge of the MAC is responsible for receiving the farmers' produce and selling it, and also for seeking out the best market opportunities.

An advisor made available by the programme manages marketing within each MAC. The advisor also provides training to those in charge of the centre on topics ranging from simple management to product traceability. The Market Access Centres differ from one pole to another, developing their own strategies depending on the potential and constraints of the zone. Their main challenge is to function effectively enough to gain the confidence of producers and traders.

Improving honey production

Malagasy honey used to be highly prized in Europe, but lost its market share because of the lack of a sanitary surveillance system, so that exports to the European Union stopped. Many initiatives have been launched by the support programme to improve the quality of honey and thus relaunch the honey sector on the external market. As part of this effort, bee-keepers in the Analanjirifo region have been included in the MACs since 2004.

The first improvement in the honey value chain has been to upgrade the method of bee-keeping. In the region, the traditional manner has been for households to own between one and five hives. The quantities produced (5 kg per hive per year) do not bring in enough income. Mr Nosy, a bee-keeper for more than ten years, explains the problems relating to the traditional system: "I have always worked with traditional hives set up in hollow tree trunks. You rub the inside with citronella leaves and then put in wax to attract swarms. Upkeep and gathering are difficult, and after extraction the honey has many impurities."

The programme decided to provide 500 Langstroth-type hives with movable frames to farmers, training them in the use of the modern hives. One modern hive can produce 10 kg per collection, three times a year. The main criteria for eligibility were the motivation and organisation of producers' groups. Besides improving the bee-keeping methods, the post-collection treatment received attention: the honey is extracted by centrifugation (using a machine with a rapidly rotating container to separate liquids from solids), it is then filtered and stored in plastic buckets suitable for containing food.

MACs help farmers with marketing

A Market Access Centre facilitates the marketing of the honey intended for national and international markets. The MAC collects honey (and other products) from members of the co-operative at a price slightly higher than the market price. It then finds the most profitable purchasers. If profits accrue from the sale, these are distributed among the members and help to develop the Centre. The member farmers have adopted this partnership system and new groups continue to be created. At the time of publication, nine Market Access Centres are successfully marketing different products of 4000 farmer members. ■

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Photo: Marcellin Léon, PPRP/IFAD

Bee-keeper Indiamalaza Gaston from the village of Rantolava shows his modern hive, producing honey to sell through a Market Access Centre in the Analanjirifo region.

Conditions and constraints

A wide variety of articles about entrepreneurship arrived in our inbox. They all showed that certain conditions have to be met before it is possible to engage successfully in any entrepreneurial activity. We decided to take a glimpse at some of these conditions, by summarising some articles that we just did not have space to publish. They all add some specific details and case studies, to expand on and illustrate the theme of this issue. For example, the selection highlights the importance of recognising specific local opportunities (like elephant dung or shrimp), finding a reliable market and what effects infrastructure such as electricity can have on improving your business. Please feel free to contact the authors for more information!



Namibia

Photo: Dave Cole



India

Photo: Annemarije Kooijman-van Dijk

More rights for the landless

The San people of Namibia have been harvesting Devil's Claw (*Harpago phytium*) for international markets for many years. Demand for this tuber's medicinal applications has been high. However, the harvesters are among the most marginalised and powerless people in Namibia. With increased ecological awareness among Northern consumers, and reports about the dismal socio-economic situation of the harvesters, the Sustainably Harvested Devil's Claw (SHDC) project was established. It aimed to secure better benefits for the harvesters, while linking producers more closely to consumers.

Before, harvesters had no land rights, and often worked on farms. Many were unemployed. SHDC registered the existing harvesters and helped them organise themselves into groups. Through training, and with support from various institutions, groups have established purchase contracts with a buyer. Devil's Claw has also been certified as an organic product. In 2007, the harvesting and sale of Devil's Claw generated around US\$ 50 000.

Establishing ecological and economic sustainability is critical, so plans to manage the harvest of Devil's Claw have been drawn up, to ensure continued benefits. This way, people with few rights and entrepreneurial opportunities in Namibia can benefit directly from local botanical resources. However, given the extent of poverty in this rural area, the challenge now is to identify additional products that can also contribute to a higher level of income. (KH)

Want to read the full article?
Contact **Dave Cole**, community and natural resource development consultant, CRIAA SA-DC, Namibia, at dave.cole@criaasadc.org.

Energy and entrepreneurs

The context in which rural enterprises operate can form barriers to their growth. In developing countries, some 1.6 billion people do not have access to electricity. This can be one such barrier. But does increased access to electricity increase opportunities for rural enterprises? Annemarije Kooijman-van Dijk researched the use and impact of electricity (and electrical appliances) in 264 typical rural enterprises in the Indian Himalayas, such as tailors and flourmills.

Many enterprises that use electricity, do so mostly to increase comfort of work and flexibility, often alternating its use with traditional forms of production – most tailors still use manual sewing machines, even though they also have electric machines. Overall, the impact of access to electricity on increasing incomes is small, especially for rural entrepreneurs. These are poor, target the local market and lack access to distant markets. Indeed, access to markets determines to a large extent the economic impact of the availability of electricity. Economic impacts are found in sectors with large demand for electricity, such as flour milling. They are also found among the few enterprises that target distant markets, where electric appliances are essential for communication and improving product quality. Having access to loans did not change the willingness to invest, following doubt that any increase in profits would compensate for interest paid.

Therefore, without support for entrepreneurs to access markets, electricity is not a major factor in leading a rural society out of poverty. It can, however, lead to improvements in wellbeing. (KH)

Want to read the full article?
Contact **Annemarije Kooijman-van Dijk**, University of Twente, the Netherlands, via m.zuithof@utwente.nl



Costa Rica

Photo: Ricardo Radulovich



Nigeria

Photo: Muideen Salawu



Nepal

Photo: flickr.com (Theta-Sigma)

Identifying your market: shrimp

Coastal communities in the Gulf of Nicoya, on the Pacific side of Costa Rica, are experiencing an ongoing decrease in fisheries. "Fishing these days only pays for gasoline, and sometimes not even that," is how people have been describing the current situation. Mariculture (the deliberate growing of seaweeds, shellfish, shrimp and other lifeforms from the sea), is growing worldwide. It is another kind of agriculture, with the advantage that seawater is plentiful.

The Sea Gardens Project has been researching the production of white shrimp (*Litopenaeus vannamei*) in cages, together with several coastal communities. Shrimp was chosen for a variety of reasons: it is well-known and widely consumed; demand is therefore assured. It has a relatively high value and grows fast. Another advantage is that small-scale shrimp production in cages requires little input, and the inputs that are needed are easily available. Cultivating fish or shellfish in the same cage, with seaweeds around it, is also possible.

After several production cycles managed by the fishing communities, net returns on investment are well over one hundred per cent in four months. Income can be increased by selling shrimp as live bait. Costs can be reduced by using local materials for cages and using fish meat instead of commercial feed. Depending on the start-up costs involved, the scale of the operation, and the way labour costs are considered, the activity is easily profitable, given the good local market. (KH)

Want to read the full article?

Contact **Ricardo Radulovich**, director of the Sea Gardens Project of the University of Costa Rica/ Development Marketplace Program, World Bank, at ricardo.radulovich@maricultura.net

Support needed for success

For more than two hundred years, the women of Ogotun, Nigeria, have been making mats woven from the stalk of the miraculous berry (*Thaumatococcus danielli*). The unique, colourful weaving patterns were so distinctive that the market value of the mats was good. By 2006, however, rising costs of living meant that income from the farm was not enough, and with competition from synthetic mat products, women's income dropped sharply.

With farmers cultivating the raw material, and women having a strong attachment to weaving as their traditional occupation, SMEDAN (Small and Medium Enterprises Development Agency of Nigeria), and SIFE-OAU, an NGO, worked together to help the women bring this activity back to life. Among a number of support activities, two weavers were selected for a two-week modern weaving training in India in 2008. These women are now mentoring thirty other weavers in the community. It has led to a new range of woven products, including sandals, table mats and jewellery boxes.

Now the challenge is to create sustainable marketing opportunities for these products. SMEDAN organised exhibitions, while SIFE-OAU has taken the products to Singapore and London. In the last twelve months, weaving is again contributing to the economy of Ogotun. The women weavers have now organised themselves into a co-operative. We hope that in two years time, the table mats in most offices in Europe will be from Ogotun! (KH)

Want to read the full article?

Contact **Muideen Salawu**, Strategic Projects Director (2006 to 2008), SIFE-OAU, Obafemi Awolowo University, Nigeria, at muideens@gmail.com

Using the natural environment

Ecological Farmers' Forum (EFF) is a farmer's organisation near Chitwan National Park, Nepal. Set up three years ago, their primary motive is to promote ecological farming to help improve living conditions. The National Park is famous for its 150 elephants, which produce an average of 19 tonnes of dung per day. The Forum learned how to prepare vermicompost from elephant waste in 2007. As vermicompost is a valuable input for organic agricultural systems, the farmers felt this was a good way to replace chemical fertilizers and also save money.

With the support of the United Nations Development Programme (UNDP) and a local NGO, EFF began selling prepared vermicompost at 25 per cent less than the normal market price. More than 100 farmers are now involved. With vermicompost production, more local farmers have initiated organic farming, and their products are in high demand locally. Paddy and rapeseed yields have increased by more than 20 per cent. Farmers' living standards have improved. There is also less unemployment now.

Consumers, including tourists, are interested in organic products. EFF believes there is enormous demand all over the country for vermicompost and hopes to expand production. Building on local natural resources, and with good market demand, vermicomposting has proved to be a good enterprise among local farmers, and has had positive ecological, social and economic effects. (KH)

Want to read the full article?

Contact **Subarna Sharma**, programme producer and presenter, Radio Chitwan 94.6 MHz Community Radio, Chitwan, Nepal, at subarna_sas@hotmail.com

Plenty of fruit, but also plenty of hurdles

Many types of fruit grow in the Uluguru mountains in Tanzania. And the sunshine needed to dry them is plentiful and free. The combination of these facts could mean a good business for farmers. But it is not so simple. Even the most entrepreneurial and dedicated of people will still have plenty of hurdles to overcome. To sell a bag of dried mangoes, you need not only preservatives and packaging, but also quite a few official permits and certificates.



Anders P. Pedersen

Farmers form networks and unions for better marketing options. Many seek to improve their situation through meetings, projects and training, and also access to loans. However, results are limited. Many organisations seem to care more about the benefits for their employees than for their members. But some farmers are innovative and make additional efforts to pursue new ways of making their daily income.

One such farmer is Mr Ramadhani Fufumbe from Kinole District in the Morogoro region. He has been an individual member of MVIWATA, a farmers' network, for more than five years. Ramadhani is 55 years old, of Uluguru tribe origin, and speaks Uluguru and Swahili. He is married to Rehema and Sinavyo. They have six children, three of whom help on the farm. Rehema works mainly in the field while Sinavyo looks after the children and prepares food for the family.

The Uluguru mountains

Mr Ramadhani lives in Mfumbwe, a village in the Uluguru mountains. It is a remote place with scattered huts, and is difficult to get to. Although chiefdoms were formally abolished upon Independence in 1961, most people in Tanzania still respect tribal chiefs. The Uluguru chief resides in Kinole town, which gives the town a special flavour among Tanzanians.

Soils are reddish or black, each of which has different properties and crop suitability. A good rainfall of 2000 mm per year at a modest altitude of 400-500 metres in hilly terrain provides a varying microclimate. Farmers grow a wide variety of crops: highland rice, lowland rice, chilli, pepper, coconut, maize, jackfruit, oranges, beans, groundnuts, bananas and tomatoes. Most families do not depend much on cash; food is bartered and work is shared in various ways. Most farmers grow a variety of crops, so for most of the year, households have food. However, farmers are poor and rely on what they can grow for themselves. There is neither electricity nor piped water. In a nearby village there is a solar panel where people can come and recharge batteries for 100 Tanzanian shillings (TSh), about US\$ 0.06.

Mr Ramadhani with his second sun drier. There are airing holes in the top of the plastic sheeting, and a device on each leg of the drier to prevent ants climbing up.

Producing dried fruit for the market

In the mid-1990s, an effort to set up a juice factory in nearby Mkuyuni failed because the local farmers did not manage to raise their share of capital. Equipment that was left behind (such as a sundrier design and trays) was given to those few local farmers who were interested to continue working with local fruit processing, one of whom was Mr Ramadhani. Dried fruit production started in 1997. You would think that it was easy to set up a fruit-drying business here. Not really. Despite a relatively short distance to town (45 km), the road conditions are tough. During heavy rains, the area is cut off due to bridges and roads becoming impassable. Fruits for the town market may arrive too late or not at all. They may rot, or may never find any market due to transport hurdles and costs, or there may be excess supply from other villages. Mr Ramadhani does not despair and has tried a new way to overcome the difficulties.

Mr Ramadhani dries, packs and sells jackfruits, pineapples, bananas, mango, mizaituni-fruits (a fruit said to come from Central America, but grown here for ages), tomatoes and lemon grass. Since these fruits have different ripening seasons, it means he can spread his efforts throughout the year. Mr Ramadhani has two sun driers, 30 trays, a cupboard, a mobile phone, and an "office" of a few square metres. No electricity, no generator, no vehicle, no fuel, no piped water, no scales, no thermometer, and no local supplies (except for the fruits): these are the conditions a small-scale farmer typically faces.

The mobile phone is a striking innovation and three or four people in the village have one. The batteries can normally be charged at the local shop. SMSs are used to minimise the costs of communication. Without the mobile phone, Mr Ramadhani would not have been able to be in constant contact with customers and suppliers. He would have wasted time looking for people to buy his produce.

If all goes well

Fruits are cut and spread out on trays while fresh. They will be ready for packing in two to three days – if all goes well. The weather may be overcast, there may be excessive rains, or ants may claim their share of the harvest. At times trays of fruit become “burnt”. It might be that temperatures are too high, but the reason for this is not fully known and the problem is frequent and unpredictable. At times up to half of the trays need to be discarded. Fruit like mango need a chemical (potassium metabisulphite) to maintain the colour. This chemical is applied at a rate of 2 g per kg fruit. It is imported and expensive, but if it is not used, the mangoes turn black and cannot be sold. A friend at university has assisted Mr Ramadhani with this so far. However, in the future he may not be able to get hold of the chemical so easily, so he might not be able to continue preparing dried mango unless he finds an alternative method of maintaining colour.

Producing a bag of 100 grams of fruit requires up to 2 kg of raw fruit. The 100 gram bags are sold at a wholesale price of 400 Tsh. A small outlet for farmers with several similar products (food, spices, juices, etc.) is found in Morogoro at Boma Road. Here, the price reaches 500 Tsh. Other *ad hoc* sales opportunities are used as they arise; when Mr Ramadhani travels he always carries a display and small stock of his products.

Finding good bags for packaging is a headache. Even poor quality bags have to be imported from Nairobi. A better quality can be bought from the town of Moshi, 600 km away. Bags and labels often cost more than the value of dried fruit. Fruits are collected, packed in plastic bags, labels are filled out (with a production and expiry date), and sealed with the flame of a candle.

Box 1. Mr Ramadhani's turnover for year 2006

Income, all sales	750 400 Tsh
Costs (excl. labour and time)	563 640 Tsh
Gross profit	186 760 Tsh

It appears that Mr Ramadhani is making a profit. However, if all costs were included, his net profit would be zero.

Risk of imprisonment

Mr Ramadhani insists he can improve the situation by following the proper legal channels – which is quite a task. In order to have his business approved and legalised he has to be (and is) a registered producer. For registration he needs a health certificate for his products. This is a must for domestic and export sales and is quite an obstacle for a producer in a remote area. Firstly he needs to visit many offices. Then, samples of the fruit need to be analysed, at a cost of 100 000 TSh per sample (around US\$ 75). This soon adds up to quite a total for six kinds of fruits/vegetables, and prevents most farmers becoming registered and legalised. But Mr Ramadhani pursues this issue relentlessly and has invested everything. Eventually, he succeeded in getting his Registration and Sales permit. This was very important as, without registration, he faces imprisonment if his products are sold outside the Morogoro region.

As he is currently forced to travel out of the village to gather information and to purchase labels, bags, chemicals and other crucial materials, Mr Ramadhani is losing time and money. This may make his fragile business unfeasible. The profit may never be substantial unless the quantity increases and workload is shared, for example through the involvement of other local

Box 2. To become an entrepreneurial farmer, you need to overcome quite a few hurdles...

1. Produce excess of a product with local market value
2. Find customers for this product
3. Get registered as a food business with the Chamber of Commerce
4. Product Laboratory tests:
 - a. Identify a laboratory
 - b. Make an agreement
 - c. Pay for repetitive tests for each kind of fruit
5. Apply for Quality Control Certificate with the Tanzania Food and Drug Authority
6. Pay for the Quality Control Certificate
7. Collect certificate, make copies
8. Get permission for establishing a shop from local authorities
9. Establish a shop or stall, or link up with a business man / woman
10. Registration, accounts, payments to the Income Tax Department

farmers. Mr Ramadhani could specialise in a single product instead of six. This would give bigger volumes, ease marketing, and provide more profit – but at a higher risk, which Morogoro farmers do not like.

Support is distant and insufficient

Despite various strategies and policies aimed at alleviating poverty among small-scale farmers, the existing regulations pose serious challenges, even for the most innovative farmers. Box 2 shows that the number, costs and pace of the official requirements make it all but impossible to comply with the necessary legal conditions. Such requirements include business registration, laboratory tests of current products, quality control, quality certificates, local levies, and government tax, each requiring plenty of documentation. A poor smallholder, living in a remote mountainous region, in a house with clay walls and no furniture, simply does not have the means to fulfil the conditions required.

Most often, community and civil society organisations do not deal with the bureaucratic issues that innovative farmers with growth potential need. The local agricultural extension service seems to play an insignificant or invisible role. In most cases the only potential partners are from commercial business, from the research sector or if a development project should appear on the scene. The commercial sector often loses interest if the products come in low volumes, or if weather and logistics prevents accessibility. Many research projects are too small and do not take farmers' interests and sustainability into account. Farmer organisations have a tendency to get involved in local politics and move away from the interest of their members. Their key role –alleviating farmers' technical and operational needs– gets snowed under a whole lot of other tasks. Thus, as a paradox, the small-scale farmer, who actually was targeted for support in becoming an entrepreneur, becomes the loser, and often gets left behind by all those who originally wanted to help him or her.

Farmers in remote areas need improved technical and administrative support to enable them to continue improving production, yield, their storage capacity, and market access. In addition, networks and organisations need to be more co-productive and sensitive to their needs, for minimising costs and providing other support. Taking these issues into account will make farmers like Ramadhani Fufumbe even more successful. ■

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Do value chains help farmers

Many current global policies propose that farmers can get out of poverty by being (better) linked to markets. Government and NGO programmes thus often promote cheap agricultural input supplies, and support farmers to sell their products through “value chains”. Value chains refer to all the steps that a product takes, from its point of origin (in this case, farm products) to the consumer. Many professionals think that improving conditions along the whole chain stimulates farmers to become more entrepreneurial and gain a better income.

Does an emphasis on value chain development indeed lead to farmers becoming more entrepreneurial? And is it the key to poverty reduction in rural areas? Here are two views on these questions, both referring to Ghana, West Africa.



Photo: Frank van Schoorbroeck



“Developing value chains reduces poverty”

Victor Attuquaye Clottey, co-ordinator of the Network to Support Agricultural Intensification in sub-Saharan Africa.

“Agricultural value chain development is about linking farmers to people who can process, package, market and eventually buy the food they produce. In Ghana, the agriculture sector employs at least 55 percent of the working population, and most of them are small-scale farmers. This rises to above 75 percent in the rural areas. More than 35 percent of the country’s gross domestic product (GDP) comes from agriculture. This pattern is not different from other economies in sub-Saharan Africa. Despite the enormous contribution of agriculture to national economies, the rural folk whose main livelihood activity is agriculture happen to be the most poverty-stricken in the developing world.

“Rural farmers have always taken opportunities to trade their products, to improve their ability to create wealth. However, how can farmers’ inherent entrepreneurial capacities be enhanced even further? This is where value chain development as part of the overall development agenda has an answer.

“Markets have to be created by the farmers and agro-business people themselves and not by outsiders for them. Only then will they feel the pain and the gain from their transactions. This does not mean that the government should not provide the favourable environment for enterprises to thrive. After all, the state also gains and loses depending on the direction of the country’s economic growth.

“Small-scale farmers, however, need coaching to play gainful roles in the agro-food industry. Coaching on chain development techniques is a sure way of empowering small-scale farmers to engage with suppliers and buyers of their produce, to develop a common strategy from which farmers and buyers both benefit. For example, pepper-growing communities in northern Ghana wanted to make the most of the market for peppers. They were already producing fresh peppers to bring in much-needed revenue at the start of the cropping season. However, they also needed extra income to get them through the long dry season. Farmers were thus supported to break into the high-value domestic and export market of dried pepper. The Savanna Agricultural Research Institute and its partners introduced farmers to appropriate varieties, drying technologies and linkages to markets. Today, pepper drying has

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out of poverty?

become a specialised enterprise in the communities, linking primary producers to assemblers who sort, grade and sell the dried pepper on both the domestic urban and export markets.

“But farmer empowerment through value chain development does not only come through promoting innovations in production and processing technologies. Improving the way a business is organised, managed and regulated is also necessary. Rural farmers can then shift from largely subsistence vocations to more business-like ones, integrating themselves into sustainable markets for their products.

“In rural northern Ghana, by setting up commodity-based value chains, farmers have steadily increased average income from pepper from US\$ 199 in 2005 to US\$ 482 per farm household in 2008. Income of soybean farmers increased from US\$ 113 to US\$ 434 while small ruminant farmers made a 15 percent increment to US\$ 330 in 2007-2008. Households could change their roofs from thatch grass to aluminium sheets; acquire TV sets running on car batteries and family heads now own mobile phones. Similar outcomes can be found in Benin, Burkina Faso, Mali, Niger, Nigeria and Togo.”

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“The poorest farmers do not automatically benefit”



Gertjan Becx, director of Resilience, a consultancy firm based in Wageningen, the Netherlands.

“Value chain development is an important concept for poverty reduction, as it implies a broad approach, embracing the complete agricultural system from planning to production to market. Programmes with an integrated value chain approach have a bigger chance of success than interventions based on production or marketing alone. However, increasing the efficiency of a value chain does not automatically result in benefits for poorer farmers. Smallholder farmers need support to become more entrepreneurial and enter agro-value chains to improve their abysmal economic conditions.

“We performed an analysis of rural livelihoods in distinct regions of Ghana, including some value chain analyses of main

Our digital newsletter, E-LEISA, contains a summary of the previous discussion on livestock and climate change. To subscribe to this newsletter, go to E-LEISA on the homepage of LEISA Magazine.

food crops. More than 1200 smallholder farmers were interviewed to understand the constraints they face when wanting to become more entrepreneurial. We define entrepreneurship as ‘planned production for a defined market with a profit objective’.

“In our Ghanaian investigation we discovered four clusters of interconnected constraints that restrict entrepreneurial development of smallholder farmers. The first cluster includes constraints related to production and processing. Lack of capital, little access to (micro-) credit, poor soil or seed quality, lack of water, uncertainty about land entitlement, shortage of adequate labour, lack of traction, and lack of knowledge and technology, all hamper productivity increases. Moreover, because of chronic hunger, people are mentally and physically weak, so they cannot work to their full capacity.

“The second cluster contains the risks and uncertainties farmers face, like the erratic climate, lack of information, fluctuating markets, corruption, crime, and hostile institutions. Farmers feel highly vulnerable and see little chance of organising themselves, to be able to withstand the risks and achieve sufficient production for a value chain.

“The third cluster relates to the lack of incentives to invest. Often, rural agriculture is not profitable enough for farmers to invest in improvements. Farmers who do not own land have little incentive to invest in it. Moreover, farmers perceive that if they can make a profit, their extended family, patrons and the government (through tax) will claim most, if not all, of the fruits of their activities. Inadequate investment in rural infrastructure is also a serious constraint.

“The fourth cluster deals with the mindset of subsistence farmers. Culture and religion often restrict them from exploring new opportunities. Farmers are inclined to consume rather than to save and invest. Most importantly, subsistence farmers deeply mistrust their local, regional and national governments.

“We found that poor farmers have difficulties with long-term planning, markets and profit as many of them have developed ‘coping strategies’ in response to difficult circumstances. In a stable environment there is nothing wrong with coping strategies. However, in sub-Saharan Africa the environment is not stable: developments like population growth, soil depletion and climate change require farmers to keep adapting and investing in their farms.

“We concluded that agricultural entrepreneurship is necessary for small-scale farmers to escape the cycle of continuing poverty. But this will only be possible if they organise themselves into farmer-based organisations. Value chain development must take the constraints described above into consideration if they are to work for poorer farmers. Value chains can only overcome the cycle of poverty if they are deliberately designed to improve farmer livelihoods, so to be ‘pro poor’.”

Gertjan Becx (gertjan.becx@gmail.com) wrote this contribution together with Hans Eenhoorn (j.w.eenhoorn@inter.nl.net), associate professor of Wageningen University. The research report “Constrain constraints!” discusses the factors limiting smallholders to become more entrepreneurial. For more details, see Sources, on page 40.

Tasting the results of a joint effort

Bioversity International is running several projects aimed at creating marketing options for the crops grown in the Central Andes. These activities focus on strengthening the linkages between producers and the local and international markets, and also between farming communities and the tourism sector. The overall objective is to support the development of new tools for income generation for rural and urban areas of countries like Bolivia.

Stephen Taranto and Stefano Padulosi

Community-based tourism refers to small-scale tourism ventures developed and managed by a local community. These are set up to ensure that a greater part of the economic benefits of tourism remain in the local communities, instead of in the hands of outside travel agencies. Agro-tourism refers to tourism experiences that focus on agricultural production and the consumption of locally-produced agricultural products. Examples range from visiting wineries in Italy to spending time in a traditional farming community in the Andes, and learning about what crops are grown and how they are used.

These approaches represent a growing sector of the Bolivian economy: a quick survey reveals that more than 30 initiatives are trying them out today, providing an interesting service to visitors and benefiting local communities. In some cases, these activities are being pursued in the belief that they can play an important role in showcasing Andean agricultural production systems and their remarkable agro-biodiversity. Consisting of many species of crops and animals, this diversity is mostly maintained by small-scale farmers. Through participatory diversification strategies and linkages to the domestic and international food and tourism markets, these activities aim at exploiting native crops for income generation.

Agro-tourism around Lake Titicaca

The partnership established between Bioversity International, La Paz on Foot and other organisations (see Box) was formed to assess and describe local agro-biodiversity, its current conservation status, and to look for ways to enhance local families' income through community-based agro-tourism in a community on Lake Titicaca. Our work started in Santiago de Okola, a community on the south-eastern shore of the lake, at almost 4000 m above sea level. Santiago de Okola is a traditional lakeside village of about 60 families, with a high tourism potential. It is located just 1.5 hours by boat from the Island of the Sun, Lake Titicaca's most important tourist destination, and only 2.5 hours drive from the city of La Paz. The community maintains many traditional farming practices;

farmers grow potatoes and other Andean crops such as oca (*Oxalis tuberosa*) and quinoa (*Chenopodium quinoa*). For these reasons, as well as for its impressive landscapes, the views of Lake Titicaca and its beautiful beaches, this predominantly Aymara-speaking community has long been recognised as a tourist destination for Bolivian nationals.

In June 2006, a group of community members with an entrepreneurial vision formed the "Tourism Association of Santiago de Okola". They approached La Paz on Foot, which had already been bringing tourists to the community. They wanted to exchange ideas and discuss ways by which they could improve the services their community was already providing, and increase their incomes. At roughly the same time, La Paz on Foot was approached by Fundación PROINPA and asked to participate in the IFAD-funded Neglected and Under-utilized Species programme. PROINPA asked La Paz on Foot to help identify an appropriate site for implementing a pilot project.

Santiago de Okola was selected, due to the attractiveness of the landscape, its proximity to existing tourist destinations and –most important– the interest and commitment shown by the local population. The research hypothesis behind the work was that it is possible to generate additional benefits (increased income, conservation of germplasm, cultural survival) from local agro-biodiversity via agro-tourism, especially when infrastructure and human capacities are improved. Since then, the project has carried out a series of activities. Among these, they have facilitated exchange visits with existing community-based tourism enterprises in Bolivia and Ecuador. These visits were very useful, as they helped the farmers learn about the "reality" of running a tourism initiative as opposed to the "dream" of such an undertaking. All participants were able to see how other communities have developed and are managing their tourism initiatives. They could also see the impact which tourism can have in terms of income, day-to-day activities and internal community relations.

Twelve families are participating actively in the project and have set up bedrooms with up to four beds. Approximately

Partnerships for development and agro-biodiversity conservation

Several organisations are involved in this initiative, all of them with different interests and experience. One of them is Fundación PROINPA, a research and agro-biodiversity conservation institution based in La Paz. As a result of more than 15 years' work, they have vast knowledge of the intricate social and technological dynamics that characterise the Andean region. Another is UCODEP (Unity and Cooperation for the Development of People), an NGO based in Rome that has worked on a number of sustainable development projects, including initiatives aimed at helping tourism benefit the local communities. A third partner is La Paz on Foot, a small agro-tourism and environmental education project that organises courses and tourist packages that focus on the natural and cultural history of the Central Andes. The name illustrates the "slow-paced" experiences the company provides: visiting communities "on foot" and engaging in genuine interactions with local populations.

Additional input comes from "Alexander Coffee", an important restaurant chain in Bolivia's capital city. This chain has a long history of working with farming communities and has supported the development of two successful organic coffee-producing co-operatives. Bioversity International contributes by providing an overall framework within a multidisciplinary and multi-stakeholder view. One of Bioversity's main interests is supporting pilot projects that alleviate poverty and generate income for rural communities while conserving agro-biodiversity and the associated cultural practices necessary to maintain *in situ* genetic diversity.



Photo: Stephen Taranto

Tourists' stay in the community includes visiting farms, where they get a first taste of the local biodiversity.

90 tourists from Europe and the United States visited the community in 2008, with many more expected in 2009. They stayed with the families in a "home-stay" style arrangement, passing time and sharing meals with their host families. The regular tourist participates in a 3-hour tour of the community. This includes visits to home gardens, farm parcels, the community school and eating a traditional lunch using locally produced foods. PROINPA has directed the development of garden plots that showcase the rich agro-biodiversity present in the Lake Titicaca region.

Some challenges remain within the community...

While the community of Santiago de Okola is excited about its project, there are many challenges involved in its success. The learning curve for the participating families is steep. Their many obligations to farming and other household activities make it difficult to devote time to "growing" their new business. The still unpredictable and infrequent arrival of tourists makes it difficult to invest time and resources in improving the conditions of lodging and other services. In addition, the lure of urban areas means that periodic or permanent migration continues to be an option to many.

Nevertheless, the interest shown by the participating families is strong, and project technicians are working closely with all community members to make the project sustainable. For example, they are inviting more families to participate. Families are also investing personal resources in small improvements, such as cleaning up garbage around the village, painting bedrooms and purchasing china and cutlery for tourists' use.

We have many plans for the coming months. We will be setting up a community agricultural museum, and organising workshops that will look at the preparation of novel and more attractive meals made with local crops. We will be drafting the community company's internal statutes and regulations, and developing a website (www.santiagodeokola.com will soon be available). With support from UCODEP, representatives from the Runa Tupari agro-tourism initiative from Cotacachi,

Ecuador, will visit Santiago de Okola. At the same time, efforts are being made to re-introduce several native crop varieties on to farms, such as *cañawa* (*Chenopodium pallidicaule*) and new varieties of potato and quinoa. The hope is that this will diversify diets and help farmers to conserve regional agricultural traditions.

... and also beyond it

An important additional partner in conserving the agricultural heritage of communities like Santiago de Okola is the Alexander Coffee restaurant chain. Their coffee shops are very popular with tourists and middle to upper class Bolivians. In 2008, with support from UCODEP, PROINPA and La Paz on Foot, Alexander Coffee led a series of campaigns to increase awareness of the nutritional, cultural and economic value of three Andean grains (quinoa, *cañawa* and amaranth). These grains have a very high nutritional value, but their production can hardly compete with that of wheat, maize or other associated products. Too often, people do not choose to eat them due to the fact that they are stigmatised as foods of the poor, a stereotype which is difficult to eliminate. Various activities took place during the three-month-long campaign. Four novel dishes using these grains were prepared (amaranth muffins and a quinoa salad, for example), and leaflets were placed on restaurant tables and counters with information about the history, culture and nutritional values of each crop.

Results among Bolivian consumers have been encouraging, showing a potentially permanent increase in the consumption of these grains. International tourists who visited Alexander Coffee might find it difficult to consume a diversity of Andean grains in their home countries, due to lack of availability. The idea, however, was to at least make them more aware of the agricultural richness of the Andean region, an aspect usually neglected by tourism companies operating in the region.

The experience showed that through NGO-private collaborations it is possible to reach a large audience with information which is important for increasing awareness about, and consumption of, native crops. It has also confirmed that the promotion of local agro-biodiversity can be successful providing that we use innovative, practical, culturally sensitive and attractive approaches. We find it important to aim at younger generations, for whom local crops and local food should be seen as an opportunity to re-discover their own roots and traditions in a pleasurable way.

The partnerships developed during this project ultimately depend on the willingness of local farmers and communities to continue using neglected and under-utilised species and varieties of native crops. In Santiago de Okola, the innovative approaches that focus on diversifying farmer economies seem to be working, albeit on a very small scale. Project co-ordinators are actively seeking additional support to be able to continue and, hopefully, replicate the positive results seen so far. The interest and commitment of farmers is critical to this process. But as they experience success, we are sure that this interest and commitment will continue to grow as well as their gardens do. ■

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One of the first volumes of what was then known as the ILEIA Newsletter described how farmers in Rwanda were working with new ideas and approaches to rice production, including some used by Asian farmers. Michael Loevinsohn showed how farmers, through their experimentation, had managed to cultivate rice at altitudes well above normal levels. Much has happened since that article was published, including the terrible events which began in April 1994 and which shocked the world. But the seasons of life continue. Some now speak of Rwanda's "renaissance" and the development of highland rice is part of that story.



Photo: Michael Loevinsohn

Harvesting the results of their efforts, back in 1989.

Rwanda's highland rice renaissance

In a short article included in vol. 6 of the ILEIA Newsletter, almost 20 years ago, Michael Loevinsohn described his work with Rwandan farmers in the country's Central Plateau. This was (and still is) a highly populated area, in Africa's most densely populated country. Michael, currently an independent consultant and researcher focusing on the links between livelihoods, food and health, was working as a visiting scientist at the *Institut des Sciences Agronomiques du Rwanda*, ISAR, and later in the Faculty of Medicine at the National University. His work with the farmers in the Butare prefecture was supported by the *Projet Rizicole de Butare*, under the Ministry of Agriculture. This project was supposed to produce rice for the urban market (and hopefully for export),

but centrally-managed production at lower altitudes was encountering serious problems. It was therefore willing to support Michael's proposal to find ways of sustainably increasing rice and other food crop production in higher altitude valleys. As he put it, he was interested in "exploring a participatory approach to farming systems improvement adapted to a situation where, on the one hand, ecological conditions and farmers' concerns vary greatly, even over short distances, and, on the other, formal research faces important human and financial constraints". He and his colleagues sought to stimulate innovation by introducing ideas that had yet to be tried and explored by researchers.

A participatory analysis of the problems farmers were facing found lack

of land to be the overriding concern. They were growing various crops in the valleys on raised beds, yet the land between was unused. "Why?", Michael asked. "Too wet, nothing will grow there", farmers answered. "Well, what about rice? Farmers in Java, Indonesia, combine rice with other crops in a similar way in a system known as 'sorjan'" (see Box). Michael had heard about it earlier while doing research in Indonesia. While riding his motorcycle through the Rwandan valleys, he had been struck by the similarity between the two situations when he first arrived.

Many of the farmers were willing to try. Some had seen rice grown in valleys 200 m lower in paddies and thought that a better idea. None had ever grown the crop before. They were also willing to try out new ideas on fertilization, including green manures. Again, an example from elsewhere, Indian and Indonesian farmers' practice of planting fast-growing leguminous shrubs before rice, especially *Sesbania*, was helpful to ground the discussion. Two local species (*Sesbania sesban* and *S. macrantha*) were known and frequently used for fodder, but the idea of using green manures was totally new.

Many farmers were eager to experiment, trying out these and other ideas and adapting them to their realities. Rice yields in the first season were not spectacular (approximately 2 tonnes per hectare), but farmers rapidly improved on that. They overcame problems of cold sterility, devised water management systems and persevered to find ways of integrating *Sesbania*. They also found innovative ways



Photo: Michael Loevinsohn

As rice production increases, this is an image which has become increasingly common in Butare, as in other parts of Rwanda.

Rice practices from Java to Rwanda

Sorjan is practised in the non-irrigated lowlands of Java, in particular on those farms found in hilly terrain (although not necessarily limited to steep slopes). It is a traditional way of combining the production of rice and vegetables or annual crops, especially when farms have a limited amount of water available. Farmers dig up the soil on one part of a field, lowering the surface, and use this soil to raise the surface on the adjoining area, forming terraces. The lower part, called *tabukan*, is used to grow rice in the rainy season. The higher part, called *guludan*, is used to grow vegetables or crops such as cassava.

The size of the *sorjan* fields depends on the labour available and on the availability of water. If water is available, the width of the *tabukan* can range between 5 and 15 m, while the *guludan* ranges between one and 6 m. If water is limited, farmers frequently plan for one part of *tabukan* for every two parts of *guludan*. Equally important is to consider the properties of the soil: farmers prefer not to make a *sorjan* field if the soil will dry up easily, as rice production is then more difficult. Preferably, the *sorjan* fields are made at 90 degrees to the collector canal.

of maintaining crop diversity to ensure food security and exploit market niches. What emerged reflected local constraints and opportunities, different in each valley and each group. The 1990 article showed the importance of group work: "By acting together, farmers realised several economies of scale... But the process of experimentation itself was strengthened in a group context."

Going through difficult times

Many difficult things happened since this article was published. In one of the world's most horrendous events, the country lost more than 15 percent of its population, thousands were detained, and at least 3 million became refugees. Infrastructure was destroyed, and production declined sharply. The consequences of these terrible events are still felt today.

Michael returned two years later, in 1996, and found the groups had survived – as had their rice-based systems. Other groups had emerged in the valleys and were also growing rice. By 2008, rice was being cultivated on kilometre after kilometre in these highland valleys, building on the pioneering efforts of those farmer groups.

Many Rwandans have experienced positive changes since the genocide and its aftermath. For several years, the country has seen sustained economic growth (with statistics showing annual

growth rates of up to 10 percent), supported by a considerable increase in exports and a growing number of tourists visiting the country. Governmental policies have helped increase the number of children going to school, and at the same time increased the number of citizens covered by health insurance. More and more Rwandans have access to drinking water, helping reduce the infant mortality figures. Rwanda also boasts of having the highest number of female members of parliament in the world.

Responding to the government's interest in increasing agricultural production, many policies have favoured the cultivation of rice, and special programmes have been set up in this direction. Farmers and politicians agree on its many advantages: a relatively short growth span (especially when compared to, for example, cassava), the fact that it is easier to store, or that it provides useful by-products (animal feed, or even a source of energy). As a result, production is currently estimated at 50 000 tonnes, grown by more than 60 000 farmers on approximately 10 thousand hectares. These volumes mean that Rwanda produces 70 percent of the rice it consumes: a very important figure if we consider that rice has become a staple crop, eaten almost every day.

Rwanda's "Strategic Plan for the Transformation of Agriculture", implemented by the Ministry of Agriculture, envisions an important role for rice. Since 2006, there have been two trials of what is known as SRI, the System of Rice Intensification. This involves a number of novel practices: the use of seedlings not older than 15 days, wider spacing and natural fertilization. Importantly, healthy root development and soil micro-organisms are promoted by not flooding the fields permanently. Yields of up to 8 tonnes per hectare have been achieved in Rwanda.

Continuous innovation processes

But while average yields are often higher with SRI, experience elsewhere shows they are not uniform: some fields yield 10 t/ha, while some farmers do little better than those growing rice in "conventional" ways. According to Michael, these differences mean that further research is needed. "SRI involves a number of elements having to do with crop and water management. Not all are easy to apply in all situations and it is not clear which are the most important in which contexts. Figuring that out would seem to be ideally suited to the farmer-led research approach I described in 1990." Michael remembers how, back in 1990,

one of the members of the Rujangari co-operative said he didn't believe that rice needed so much water. "Sorghum and maize don't, so why should rice?" He was interested in following that up, and for several months he took some of the steps towards what later came to be known as SRI. He experimented alone and ultimately did not succeed, but his

**Motivation drives innovation,
"and that is still in plentiful supply"**

effort showed, as in so many other cases, the important role that farmers can play as researchers. "At that time, making rice (and *Sesbania*) work required figuring out variety, planting date, cropping pattern and calendar, irrigation, fertility management, etc. The farmers brought to the problem their insights as farmers who knew the land and several other crops well. So the hypotheses they tested were well-founded and were refined through their discussions with each other, within and among the groups. Farmers maintained an impressive intensity of experimentation over several seasons." So why not repeat this approach? This is especially important when considering the differences in terms of topography, soil quality, or the economic orientation of farmers. "And when it comes to changing conditions, due to climatic or market variability, that local, engaged experimental drive is going to be vital to continuing adaptation."

Those visiting Rwanda are convinced that this approach is possible, and that it can be broadened so as to consider other important concerns as well (such as the apparent link between rice production and the incidence of malaria, a major health issue in this country). Farmer innovation remains, as the original article concluded, a neglected resource. The motivation that drove that innovation, Michael says, was stark necessity "and that is still in plentiful supply". (JCT)

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His article appeared in Vol. 6.1, March 1990. This is available on our website, both as a PDF and as an HTML file. A fuller description of the farmer-led research can be found in an article in vol. 46 of *Agricultural Systems* (1994). Additional information was provided by Olivier Briet (o.briet@gmail.com) and Widjoraras (rarastie@veco-indonesia.net), for which we are very grateful.



Photo: ASUDEC

From farmer to businesswoman: Ms Bohonté's small chicken enterprise brought the necessary income for, among other things, building her family's new house.

Helping credit do its job

Providing financial services is one of the key elements that can help farmers put their ideas into practice. Various organisations are involved in finance programmes, providing credit.

Many of them, however, find it difficult to operate in distant villages, and to provide these services to small-scale farmers.

Experience has shown that the provision of credit needs to be complemented with additional efforts – such as training on

how to efficiently use the money which is made available. But

the provision of credit can have very positive results, even if on a small scale. Some encouraging results have been seen in

Burkina Faso, that may work in other settings as well.

Salibo Some

Located in central West Africa, Burkina Faso has a population of 14 million people. It is ranked as one of the world's poorest countries, with almost three quarters of the population earning less than US\$ 2 per day. Approximately 85 percent of the population depend on agriculture and livestock production. Population growth has led to increased pressure on the land, in turn leading to soil infertility, environmental degradation and food insecurity. These issues have all had negative effects on poverty levels. Climate change is also expected to have a serious impact.

Together with various governmental agencies, many private organisations are working to improve this situation in Burkina Faso. As part of their efforts, such organisations are frequently

interested in providing financial services. These services are seen as a tool that can help farmers improve yields and outputs, while at the same time helping them put their ideas into practice – for example, in terms of crop diversification or access to new markets. Rural finance, however, faces many difficulties. Many institutions find it hard to reach distant villages. And those who do reach these villages soon find out that farmers are not always capable of using the money available in an efficient way. Because of soil constraints and unpredictable rainfall, agricultural activities cannot be easily planned, so farmers tend to use the funds available for food and health security, making repayment difficult. Without measures to ensure that loans are paid back, many compare credit to a donation, making it impossible to continue providing credit in the long run. In addition, evaluations carried out in Burkina Faso and other countries show that the selection procedures of credit beneficiaries is often questionable, or that the interest rates are simply too high.

Loans, higher incomes and empowerment

ASUDEC, the Africa Sustainable Development Council, is a local non-profit organisation founded in 1998. At the moment we work with almost 10 000 farmers, in more than one hundred villages in the South-west, Central and Central-southern regions of the country. Our aim is to assist the local population to find better ways of doing what they do, helping them improve their wellbeing while preserving the environment. One of our strategies is to provide financial services and thus help farmers help themselves. This goes together with what we call “instrumental interventions”, or the construction of basic infrastructure and the distribution of animals, equipment and materials, and also “transformative interventions”, focusing on awareness raising and technical training. As an outsider in the community, ASUDEC starts by learning about its values and traditions, the constraints it faces and the major threats. Additionally, we start on a very small scale,

growing with time in response to the needs and willingness of the beneficiaries. This has helped us build trust and reach a larger segment of the population.

Our financial services include saving accounts and the provision of credit. As most rural areas lack these services, farmers keep the little money they have at home, running the risk that it might be stolen or lost, and contributing very little to the local economy. Our intention is to provide a service that will not only secure their money and assure food and health security, but that can also help the poor to intensify and/or diversify their income generating activities. In turn, this will contribute to empowering them further and promoting the local economy. Aiming at a higher efficiency, our credit funds are targeted at women. This discrimination is justified by the fact that (a) women are more vulnerable than men; (b) they are also more trustworthy with respect to credit reimbursement; and (c) because with women, the income generated as a result of the loan is more likely to benefit all members of the family, particularly the children.

In order to get a loan, the women of a given village are encouraged to request it as a group (and to form such a group when necessary). The application has to be approved by a special council formed in each village, which in turn transmits it to ASUDEEC for final approval and funding. If the application is approved, the group is to pay an application fee of 500 CFA francs (or approximately US\$ 1), which is meant to cover the paperwork and thus goes to ASUDEEC and the council. The solidarity bond between all group members is the only guarantee required. More specifically, in the advent of one member of the group not being able to pay back, the group takes full responsibility for her credit. A maximum of 15 000 francs (US\$ 30) is lent to new participants, while previous participants can request up to 50 000 francs (US\$ 100). A fixed interest rate of 10 percent is applied, half of which is to cover the management costs and the other half is shared between the women's groups (for group needs) and the council (for community expenditures).

With the support of Heifer-Netherlands, our activities started with a loan fund capital of one and a half million francs (or US\$ 3000) in 2000, reaching 33 women in only 2 groups. Eight years later we were working with 2003 women in 67 groups, in three different regions of the country. The 2003 women benefitted from loans totalling 130 million francs (almost US\$ 275 000). Group members have been using this money to start and run small businesses, including street restaurants, trading agricultural products or selling local beer. These small businesses keep them busy earning an income all day long, particularly during the 7-8 month dry season. With the income raised they buy food and medicines for their families, and they also send their children to school. In Gampela, for instance, a village about 20 km from Ouagadougou, women used to spend long days standing in the sun, separating the gravel and sand in the soil, which they would sell to buy food. The loans meant that they could start activities from which they can earn a better income, and which are also more environmentally friendly.

Perhaps more importantly, by receiving and efficiently managing their loans, many women have earned respect from their husbands, and thus feel empowered. When asked if the micro credit project was helping them, one woman made us all laugh: "This is not a question for us: in fact you should ask our husbands. Before this project, many of us used to stay at home. But when my husband is there, we are fighting all the time. Now, when I am in the house and he calls me in some disrespectful way, I just let him burn up a little bit, and then I tell him to wait. 'Can't you hold on? I am counting my money!' All of us can confirm it: our husbands

know that we are their saviours, and the heat is over in many households." Many similar stories have been recorded.

Trying out an innovative approach

On top of the very positive results, we can also say that practically all women pay their debts: all loans have been reimbursed on time and redistributed almost immediately. However, some important weaknesses made us think we had to improve our work, to make it more efficient and sustainable. This became necessary as we experienced increasing demand for credit (and most women started asking for larger sums of money), while our own resources did not change. We noticed that the 5 percent interest rate which went back to ASUDEEC was not enough to cover all our management costs, while at the same time we realised that the whole system could not be sustainable if it continued being highly dependent on foreign donors. Above all, ASUDEEC had no legal authority to operate in the area of microfinance, so immediate change was necessary.

In addition to these considerations, we also felt that the implementation of our vision was incomplete. Farmers need more than money in order to truly be entrepreneurs, and many of these requirements need to be satisfied beforehand so that when credit arrives, it can be effective. A broader perspective is necessary, focusing on those aspects which can be tackled. Farmers, for example, need access to markets, but ASUDEEC cannot build roads. We could, however, train farmers so that they develop marketing capacities, and we could also help them develop storing facilities and thus wait for the appropriate time to sell. We realised that, in this way, credit can be much more effective.

After extensive consideration, ASUDEEC decided to create the ASUDEEC Farmers' Savings and Credit Mutual (MECRA). We believe that as income raising projects help the poor to meet their basic needs, they no longer need to use the credit funds for these needs (and be unable to reimburse the loan later). MECRA is expected to form a strong and long-lasting partnership with ASUDEEC, sharing both the office and the field facilities to minimise operational costs. As a result, MECRA will apply interest rates that will be lower than those applied by ordinary finance institutions. By prioritising women and farmers who have been successful with subsidised projects, MECRA will also reduce risks, and the credit funds will be used to contribute to real development instead of subsistence alone. Being a legal institution, MECRA is in a better position to raise funds for rural finance activities.

MECRA was officially registered as an independent microfinance institution in September 2008. It started to operate in 2009 with a Governing Board, a Credit Committee and an Internal Audit Committee, following official standards. Because most of the farmers adhering to MECRA are illiterate, a convention ties MECRA and ASUDEEC together, engaging the latter to serve as a technical and financial partner. The collaboration between the two organisations bears important advantages: ASUDEEC assists MECRA in selecting trustworthy credit applicants; orients the latter toward more interesting (and profitable) options, and also trains them in various areas, helping them make better use of the funds and of their profits.

This close collaboration is seen as critical for reducing risks. It will allow both organisations to assess their joint impacts at the family and community levels. While this concept seems to be unique in Burkina Faso, and is still in its early stages, our challenge is now to show that it works.

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Sipili is ready for business

Mr George Kamau has succeeded in setting up a small business in Sipili, a remote village in Kenya. Noting the need for farmers to buy and sell their produce locally, he opened a small premises where he also sells organic farm inputs and other goods. He has also been working with the Arid Lands Information Network (ALIN), which has opened an information centre in Sipili. Together, these efforts have benefited the community in general: they can buy and sell basic goods locally and are better informed of prices and marketing opportunities further afield.

Josphat Wachira

Mr George Kamau is a farmer living in Sipili, in the Rift Valley province, Kenya. As this is a semi-arid area, where rain comes rarely, he plants short-duration maize, which takes between three and six months to grow. He is one of the villagers who farms quite successfully. However, to try to sell his produce and do some shopping for his family, he needed to go to the town of Nyahururu, about 60 km away from Sipili. To overcome this hindrance, Mr Kamau, together with his wife, started trying to sell some of their farm produce to the local people. At first it was difficult, but later they started doing some business, and opened a small premises. Mr Kamau is also a project officer with the Tree is Life Trust, and is trained in organic farming, which is widely practised in this area. Through this, he realised that there was a market for organic farming inputs, and he came up with the idea of selling organic fertilizers and similar products locally.



When farmers are able to sell their produce locally, they don't have to go to great lengths to reach their buyers.

During the months of April and September, when everyone is working on their farm, business is slow. He and his family also concentrate on their farm. After this period and with the harvest

at hand, Mr Kamau is ready to go back to his trading business. As he used the income of his business to invest in the farm, he sells the farm produce so he can add other stock to the business, ready for the festive season. And since organic farming inputs are not sold throughout the year, Mr Kamau has set aside a space in his business premises for selling other goods which will help supplement his income, such as cooking pots, stoves, and basic domestic supplies.

At first, selling their farming produce was a big issue for the farmers of Sipili. As they were not able to take their produce to the market, businessmen or middlemen would come and buy their produce. This meant the farmers would have to accept the low prices offered, and make a loss. One effort to combat this was made with the support of the Catholic church. The farmers built food reserves, where they stored cereals during the high season and sold them during the low season. This helped the farmers of Sipili to earn a living and make some profits. Recently, business in Sipili has been on the increase. Various farmers' efforts were noticed by the Arid Lands Information Network (ALIN), a national NGO promoting exchange of information on sustainable development. Mr Kamau helped to start a local group of ALIN in Sipili. This local group supported them in opening an information centre, including a telecentre, to help the farmers market their farm produce through mobile phones. The centre is open to everyone and is free. Internet services and e-mail are available. The centre also helps farmers sell their products. They do this by giving them the prices of goods in the markets even far way from Sipili. This means they have the information needed to avoid the brokers and middlemen who, in the past, took advantage of the farmers' lack of access to markets and information. This has helped to increase trading, business and farming in Sipili.

Today Mr Kamau is a happy farmer and businessman. He now has a staff of three workers. With the help of his wife, the yearly pattern is that when the planting season is approaching, he sells short duration seeds and organic fertilizers. When planting starts, he closes the business and attends to his farm. He then only opens the shop in the evenings and weekends, until the harvests. After the harvest, when there is no work on the farm, he opens the business daily. From September to March, due to increased trading opportunities, most people in Sipili have some money for their own well-being, and also for preparing for the next planting season.

A major factor contributing to Mr Kamau's success with his small business was that he was creative and noticed that there was a market for organic farm inputs in Sipili. His achievement was to be the first to introduce these inputs and other products cheap enough for farmers to buy. By increasing the range of goods bought and sold, his efforts have also benefited the community, as people no longer need to travel far (costing time and money) to buy their necessities.

Josphat Wachira. Tree is Life Trust, Catholic Diocese of Nyahururu, P.O. Box 1206, 20300, Nyahururu, Kenya. E-mail: kairungi2009@yahoo.com

ALIN has recently joined the LEISA Network. See the editorial on p. 4.



Biochar for environmental management: Science and technology by Johannes Lehmann and Stephen Joseph (eds.), 2009.

ISBN 978-1-84407-658-1. Earthscan, Dunstan House, 14a St Cross Street, London, EC1N 8XA, U.K.

This is a detailed and comprehensive book, covering the characteristics and many aspects related to biochar, and looking at the many advantages which its management brings. Biochar is the carbon-rich product obtained when biomass is heated in a closed container, with little or no available air (in a way that mirrors the production of charcoal). This is a relatively new concept, specifically referring to a material which, when applied to the soil, can improve its properties. The detailed description of its physical, chemical and biological properties leads to an analysis of its multiple advantages: as a soil amendment, as a tool to manage waste, to produce energy, and even to mitigate climate change. While some chapters may be more easily understood by soil scientists, chapters looking at the many advantages of biochar provide interesting reading to researchers and scientists in general.

Standard bearers: Horticultural exports and private standards in Africa by Adeline Borot de Battisti, James MacGregor and Andrew Graffham

(eds.), 2008. ISBN 978-1-84369-710-7. International Institute for Environment and Development, IIED, 3 Endsleigh Street, London WC1H 0DD, U.K.

This book is one of the results of a project that, for three years, worked with food retailers, importers, standard-setting bodies, traders and African horticultural producers. Its objective was to explore the ways in which small-scale producers can participate in international horticultural supply chains, especially when taking into account the many different standards governing these processes. The different papers which make up this book look at how producers comply with norms and regulations, especially looking at GLOBALGAP (the set of standards previously known as EUREPGAP). The various authors describe the supply chain going from sub-Saharan Africa to the U.K., the options available to non-certified producers and the impact achieved by GLOBALGAP, and also look at the costs and risks of such chains (in terms of, for example, "food miles"). They all show the importance of having donors, governments, farmers and the private sector working together if farmers in developing countries are to benefit from trade.

Farmer First Revisited: Innovation for agricultural research and development by Ian Scoones and John Thompson, 2009. ISBN 978-1-85339-682-3.

Practical Action Publishing Ltd. Schumacher Centre for Technology and Development, Bourton on Dunsmore, Rugby, Warwickshire CV23 9QZ, U.K.

Back in 1987, the Farmer First workshop, held at the Institute of Development Studies, IDS, brought together a number of "pioneers" from all over the world, all of them interested in participatory approaches to agriculture. Much has changed since then. Quoting Robert Chambers, Farmer First "became a movement", but many challenges still remain. This book is a collection of all the papers presented at the Farmer First Revisited workshop, which took place 15 months ago. This aimed to look at the achievements and failures seen in the past 20 years, and at the same time tried to assess the current situation. Covering experiences from all over the world, the papers look at innovation systems, networks and partnerships, extension and education, assessments and evaluations. Resulting in a broad and detailed overview, this is very interesting reading for all development practitioners.

Course on agribusiness management for producers' associations by

Pilar Santacoloma, Alexandra Rottger and Florence Tartanac (eds.), 2009. FAO Training Materials for Agricultural Management, Marketing and Finance 8. Rural Infrastructure and Agro-Industries Division, FAO, Rome, Italy.

Most of the problems which small-scale farmers face are not found in the actual production process, but rather in the way they run their farm as a business unit. Aimed at the leaders and managers of producers' associations, this is an easy-to-follow manual, covering subjects such as the organisation of farmers and the formation of an association, the various planning processes, quality issues, and also post-harvest and marketing. It includes detailed examples from Latin America (looking at, for example, cocoa production in

Colombia, or vegetables in Mexico), a facilitator's guide, and a complete section on business management for small-scale agro-industries.

The impact of Fair Trade by Ruerd Ruben (ed.),

2008. ISBN 978-90-8686-083-8. Wageningen Academic Publishers, P.O. Box 220, 6700 AE Wageningen, the Netherlands.

All those involved in the development of the global Fair Trade movement can be very proud of the results achieved: after 20 years of sustained growth, it is now estimated that more than 600 producer organisations, in 55 countries, are benefiting from it. Even more surprising, annual sales are estimated at 1.6 billion euros. But while these figures are impressive, they only give a partial view. What is the impact at the household level? Does Fair Trade strengthen local organisations? And how does it contribute to sustainable development? This book tries to answer these questions, focusing on different case studies (bananas in Peru, coffee in Costa Rica, herbs in Kenya), and comparing the results of producers who are part of the Fair Trade chain with those of "conventional" farmers. With ample statistical evidence, these studies confirm the many benefits of Fair Trade. As a whole, this book is of interest to a wide public. It provides a very comprehensive base for a broader (and necessary) analysis, focusing on issues such as the relationship of Fair Trade with certified organic production, the need to "mainstream" it, or the need to further develop local markets.

Knowledge to policy: Making the most of development research

by Fred Carden, 2009. ISBN 978-81-7829-930-3. SAGE Publications / International Development Research Centre.

P.O. Box 8500, Ottawa, Ontario, Canada K1G 3H9.

While it can be easy to conclude that all researchers are interested in contributing to the existing body of knowledge, we can also say that one of the major objectives of those involved in social studies and development research is to influence public policy and decision making. Many organisations are carrying out specific research, and many others are funding their work. Not all, however, can say that they have been effective in influencing governments, or in generating changes in the local, regional or national administrations of developing countries. Looking in detail at 23 case studies, from Asia, Africa and Latin America, the author shows how research can contribute to better governance. Considering common difficulties found (related to, for example, frequent staff turnover or a lack of autonomy), he also points to the many factors that minimise the effect of social research and its influence in terms of policy and governance. Clearly pointing at what works, and at what does not, this is a very interesting book for those wanting to help policy makers make better choices.



Livelihoods diversification and enterprise development: An initial exploration of concepts and issues

by Patrizio Warren, 2002. LSP Working Paper 4, Livelihoods diversification and enterprise development sub-programme, Livelihood Support programme, FAO.

This paper, downloadable from the FAO website, looks both at agricultural intensification and rural livelihood diversification as logical responses to the difficulties which farmers face. From this introduction it goes on to compare wage labour with the establishment of rural enterprises, showing the important role of the latter as a pathway to livelihood diversification. Rural enterprise development, however, needs farmers (or outsiders) to invest money and entails higher risks, from which the author concludes that this is an option suited for better-off farmers, and not for the poorest. Though brief (and written back in 2002), this is an interesting analysis, which might have benefited from some real-life examples.

Chain-wide learning for inclusive agrifood market development: A guide to multi-stakeholder processes for linking small-scale producers to modern markets

by Sonja Vermeulen, Jim Woodhill, Felicity Proctor and Rik Delnoye, 2008. ISBN 978-90-8504-964-7. International Institute for Environment and Development (IIED) and Wageningen University and Research Centre, Wageningen, the Netherlands.

All over the world, the relationship between food producers, retailers and consumers is changing, and the emergence of “modern” markets seems inevitable. Analysing the link between small-scale farmers and the national and international markets is therefore a logical thing to do. Considering that these links need to be strengthened if we are interested in reducing poverty in rural areas (or in not letting poverty levels increase), the authors provide a methodology that can help create strong relationships. This method follows a six-step approach which includes mapping all actors involved and the existing flow of products, identifying those factors which may influence change, and exploring possible future scenarios. The guide finishes with a series of tips for facilitating workshops which include all the persons and institutions involved in the commercialisation processes.



Growing opportunity: Entrepreneurial solutions to insoluble problems

by Maggie Brenneke et al., 2007. SustainAbility / The Skoll Foundation. SustainAbility, 20-22 Bedford Row, London WC1R 4EB, U.K.

This document summarises the results of the first of a series of annual surveys, in which the authors explore the potentials of entrepreneurial solutions to the main challenges the world is currently facing (climate change, widespread poverty,

etc.). Although it does not focus on agriculture nor solely on rural areas, this document is very interesting to read. Considering that an entrepreneur is anyone who “through the practical exploitation of new ideas, establishes new ventures to deliver goods and services currently not supplied by existing markets”, the authors show how entrepreneurs see themselves, describe the difficulties they face (in particular raising start-up money), and show some of the paths followed to solve them. They also show the importance of establishing partnerships with large corporations as a way of scaling up processes. By focusing in detail on health and energy issues, the authors conclude that social entrepreneurship can lead to effective change, in ways that neither governments nor established businesses can.

Market approaches that work for development: How the private sector can contribute to poverty reduction

by Urs Heierli, 2008. Employment and Income Division, Swiss Agency for Development and Cooperation, Eigerstrasse 73, CH-3003, Berne, Switzerland. E-mail: info@deza.admin.ch Electronic copies are downloadable from www.poverty.ch

This publication is part of the “poverty alleviation as a business” series that was launched in 2000. The author shows how a combination of market forces and public policies can have very positive results in creating wealth in a sustainable way. With detailed case studies, he looks at supply chains, value chains, and also at the processes by which traditional industries (such as brick-making) are transformed or “upgraded”. Resulting from the author’s interest in stimulating the private initiative of rural people, this is a very interesting analysis of the “enabling environment” required to foster rural entrepreneurship, and thus help rural people improve their own livelihoods. Advocating market approaches (though clearly going against a “naïve or romantic plea for liberal laissez-faire”), he looks at the reasons why markets work or fail. He also considers the role of development agencies, especially in relation to the private sector.

Origin-based products: Lessons for pro-poor market development

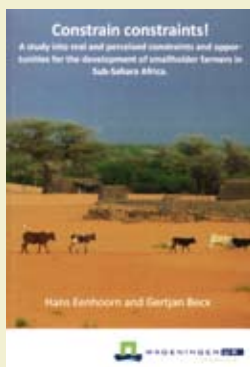
by Petra van de Kop, Denis Sautier and Astrid Gerz (eds.), 2006. ISBN 90-6832-1668. Bulletin 372, Royal Tropical Institute, P.O. Box 95001, 1090 HA Amsterdam, the Netherlands.

For more than three years now, origin-based marketing has been supported by European Union regulations, all of which aim to “maintain rural vitality”. Can regional identities and origin-based labelling help to develop marketing options for small scale farmers in developing countries? By putting together examples from Peru, South Africa, Costa Rica and France, the editors show the advantages of these products, as opposed to global brands. Each case shows different aspects (such as the strategies followed, the use of local resources, or the importance of official recognition), from which the editors map the major opportunities and challenges. This is interesting reading for all those involved in marketing niche products.

Constrain constraints! A study into real and perceived constraints and opportunities for the development of smallholder farmers in sub-Saharan Africa

by Hans Eenhorn and Gertjan Bex, 2009. Wageningen University, the Netherlands.

Presented in a public lecture held in February, this book summarises the results of research carried out for more than a year, mainly in Ghana. The authors’ main interest was to look for the reasons which keep farmers from taking “a more entrepreneurial attitude” and thus leaving subsistence farming. They identified a series of constraints, ranging from the risks and uncertainties which small-scale farmers regularly face, to aspects linked to culture and religion. This is an interesting overview of the main limitations to rural entrepreneurship in developing countries, although it presents conclusions with which not everyone



might agree (such as the need to concentrate intervention efforts on “the wealthier and smarter”, or the fact that “many millions will have to give up farming... because they are too poor, their farms too small...”). Some interesting points raised include the need for rules, regulations and a general “enabling environment”, as well as the fact that, in spite of the many constraints, farmers are capable of innovating and improving their livelihoods.

On page 31, Gertjan Bex talks about constraints in connection to value chains.

Living countryside: Rural development processes in Europe

by Jan Douwe van der Ploeg, Ann Long and Jo Banks (eds.), 2002. Elsevier Bedrijfsinformatie BV, Doetinchem, the Netherlands.

Beautifully presented, the editors bring together an interesting collection of articles. All of them show “the impressive heterogeneity of current rural development processes in Europe, covering small scale initiatives in agritourism, crop diversification or marketing”. The result of a large scale research programme, this book includes contributions from Ireland, Germany, Wales and the Netherlands. They all show the different ways in which the European countryside is changing, the entrepreneurial spirit of its farmers, as well as the many benefits this is bringing in terms of rural development.



Malawi's green gold: Challenges and opportunities for small and medium forest enterprises in reducing poverty

by Patrick Kambewa and Henry Utila, 2008. ISBN 978-1-84369-719-0. Small and Medium Forestry Enterprise Series No. 24. Chancellor College, Forest Research Institute of Malawi / International Institute for Environment and Development, IIED, U.K.

The development of small and medium forest enterprises in Malawi comes as no surprise if we consider that 85 percent of the population live in the rural areas, and depend on the forests for their livelihoods. This publication looks at the programmes recently implemented by the national government, and also at the policies aimed at fostering rural enterprises, illustrating the results achieved with several case studies (covering timber production, the manufacture of cane furniture, fruit juice production, and wood carving). These results help identify the main challenges facing the development of rural entrepreneurship, as well as the opportunities which should be taken into account and which are equally valid in other countries and contexts. As in so many other cases, the authors are able to show how “given appropriate skills and production systems, access to raw materials and other inputs, people are able to help themselves and raise their standards of living”.

Horticultural chain management for Eastern and Southern Africa

by Jane Lanigan (ed.), 2008. ISBN 978-0-85092-858-7. Commonwealth Secretariat, London, U.K. and Food and Agriculture Organization of the United Nations, FAO, Rome, Italy.

Many extension agents are currently working with farmers, helping them produce high quality vegetables, and helping them sell these products on the national and international markets. This two-volume manual is aimed at these field practitioners, providing them with theoretical and practical information (looking at, for example, how to assess fruit maturity, or how to maintain quality during cold storage). A strong emphasis is given to quality, determining ways to assure it, and analysing the many factors involved in it. Clear and straightforward, this manual can help trainers organise their workshops in a logical and complete way. The different sections include references and links to online sources.



Beyond agriculture – making markets work for the poor by F.R. Almond and S.D. Hainsworth (eds.), 2005. Proceedings of an international seminar: Crop Post-Harvest Programme, Natural Resources International Limited, and Practical Action, U.K.

The international seminar from which this book derived took place in London in 2005, bringing together practitioners, policy makers and researchers. All of them looked at the possibilities small scale farmers have in accessing markets, and at the likelihood of these markets actually “working” for poor people. The discussions among participants followed four theme papers, all of which are included in this publication (covering linkages and trust, information needs, the role of producers’ organisations, and the need to help producers meet the standards demanded by buyers). The section written by Jon Hellin, Alison Griffith and Mike Albu describes the Market Map, as an interesting

tool for understanding how markets work in the rural areas, and how best to respond to them. Researchers and development practitioners can benefit from a tool which helps them focus on processes and institutions, competencies and relationships; all of which is then referred to as “market literacy”.

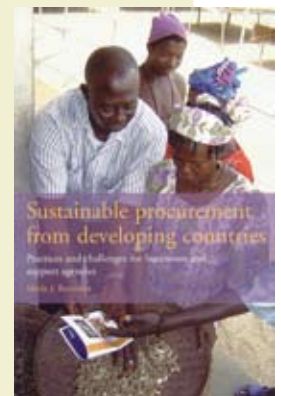
Addressing poverty through local economic and enterprise development: A review of conceptual approaches and practice

by Junior Davis and Catherine Rylance, 2005. Working Paper 3, Enterprise, Trade and Finance group, Natural Resources Institute, University of Greenwich at Medway, Central Avenue, Chatham Maritime, Kent, ME4 4TB, U.K. Aimed at academics and researchers, this document looks at the different aspects which need to be considered when fostering local economic and enterprise development. It starts with an historical review, looking at the different approaches followed, finding common elements (such as the need to enhance competitiveness) and also looking at the current limitations (such as those coming from a rigid division between urban and rural livelihoods). This leads the authors to show the importance of an integrated approach which “incorporates the institutional framework, governance and stakeholders, market access and linkages”. These ideas are illustrated with different examples from South Africa, Bangladesh and from within the E.U. They all show the advantages to be gained from a favourable environment.

Sustainable procurement from developing countries: Practices and challenges for businesses and support agencies

by Marije J. Boomsma, 2008. ISBN 978-90-6832-745-8. Bulletin 385, Development Policy & Practice. Royal Tropical Institute, KIT, Amsterdam, the Netherlands.

Many projects have been implemented with the objective of linking small-scale farmers to international markets, focusing on the steps these farmers must take in order to succeed. This book covers the same aim, though focusing on the role of the companies who buy the products. By looking at three specific cases of products reaching Europe (ginger from Sierra Leone, mangoes from Mali and citrus from South Africa), the author analyses the way in which large multinational companies make sure that they are supplied with products coming from sustainable agriculture farms. This takes into account the growing interest which large companies are showing for social and environmental concerns, and for what is known as corporate social responsibility in general. The result is a very interesting analysis of the “other side” of the chain.



The SEED Initiative

www.seedinit.org

The SEED Initiative aims to support entrepreneurs and partnerships for sustainable development. In their own words: "The SEED Initiative inspires, supports and researches exceptional, entrepreneurial, nascent, multi-stakeholder partnerships for locally-led sustainable development." The SEED Awards is an annual global scheme providing recognition to promising enterprises. Award winners then receive various support packages through the other three activities. Support includes access to technical assistance or developing business plans. The website itself has lots of information, such as papers summarising critical factors for success in new ventures, and tips for developing successful partnerships. In the near future, new tools and online resources for entrepreneurial partnerships will also be available on the site. We highlight one award winning project on p. 22.

RuralInvest

www.fao.org/tc/tci/ruralinvest_en.asp

RuralInvest is a toolkit developed by FAO. It aims to provide support for preparing successful rural development projects. The toolkit is made up of training courses, manuals and custom developed software. The manuals and software are currently available in English, French and Spanish. Russian, Turkish and Portuguese are in preparation. There are various modules to choose from, and the website is clear and easy to use. The toolkit is aimed at projects, organisations and agencies rather than individuals. This is reflected in the costs associated with the training courses, which must be completed before the software can be downloaded. Visit the website to register your interest or contact FAO directly for further information via the e-mail address above.

Rural Finance Learning Centre

www.ruralfinance.org

This website is dedicated to providing access to the best materials for capacity building in rural finance. Managed by rural finance specialists in FAO, the content of the site is freely available to all. If you register you will receive the Rural Finance Update each month and can suggest resources to the editors. There is an impressive range of capacity building materials available such as a reference library, training and study materials, online videos, and distance learning opportunities. All are clearly labelled and the site is easy to navigate.

Farm Concern International

www.familyconcern.net

Farm Concern International is a market development agency aiming to enhance economic growth among poor communities. With a focus on sub-Saharan and Eastern Africa, they offer technical advice, and implement market oriented programmes. Their implementation approach is based on "The Commercial Villages Approach", a model aimed at commercialising villages across sub-Saharan Africa and establishing market linkages with formal, semi-formal and informal buyers. The website provides information on this approach and discusses marketing and business options. Reports from previous projects are also available.

International Development Enterprises

www.ideorg.org

This is an international non-profit organisation, which, through following a market-based approach, has enabled millions of poor farmers to permanently escape poverty. IDE provides market access, training and water-control technologies. The website clearly outlines the principles by which they work, and also has a variety of success stories and further information on working with farmers to improve productivity sustainably, and get produce to market. They use water as an entry point, believing that a lack of control over water is a constraint facing a large majority of farmers. Hand pumps, water filters, and health information become the starting point for improving agricultural production and increasing market participation. IDE works in Africa and Asia.

TechnoServe

www.technoserve.org

TechnoServe programmes focus on developing entrepreneurs, building businesses and industries, and improving the business environment. With the byline "Business solutions to poverty" all their work revolves around helping people identify and capitalise on good business opportunities. Believing in a "hand-up" rather than a "hand-out", they work in Africa, India and South and Central America. They work in the agriculture sector as well as the tourism and alternative energy sectors. The website describes their work, with case studies, but also information about many practices, including improving the business environment and developing entrepreneurs.

KickStart

www.kickstart.org

KickStart was founded by two development professionals with long-term working experience in Africa. Their experiences led them to develop a different way of looking at development, which they have outlined on the website, and developed into a five-step process. They believe that encouraging the entrepreneurial spirit is a longer term solution to poverty than giving things away. They develop, launch and promote simple money-making tools that poor entrepreneurs could use to create their own profitable businesses. They believe that it is more effective to sell these tools than give them away, and have the figures to prove it on the website. Based in the U.S., they also have offices in Kenya, Mali and Tanzania. The website is clear, easy to read and provides lots of thought-provoking information about development practice, as well as descriptions of tools they develop, and success stories to date.

Ashoka

www.ashoka.org

Ashoka supports and encourages what they call social entrepreneurs – "individuals with innovative solutions to society's most pressing social problems". They support economic development ideas, but also work in the fields of environment, health and human rights for example. Ashoka supports individual social entrepreneurs, promotes group entrepreneurship, and also works at the level of building the infrastructure to facilitate the spread of social innovation globally. The first individuals were recognised in 1981, known as Ashoka Fellows. The organisation and its Fellows work in 60 countries on five continents. The website provides information about the types of work carried out by the social entrepreneurs, how to nominate a Fellow and what support they provide.

Changemakers

www.changemakers.net

This website provides resources needed to help everyone become a changemaker. It presents stories looking at the principles of successful social innovation from around the world. It describes itself as an open source community, bringing new social innovations to light and then collaborating to refine and implement these solutions. For example, you can enter your innovation into the themed collaborative competitions, and you can become a member, so that you can comment on other innovations, and discuss your own ideas. You can also use the library to access a wide variety of material on social change, with topics ranging from governance to health, to HIV/AIDS and arts and culture. It is a source of inspiration for anyone interested in social entrepreneurship. Changemakers is an initiative of Ashoka.

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UN: Agriculture is part of the solution

The UN Commission on Sustainable Development has come to an agreement that places agriculture and rural development at the heart of the sustainable development agenda. The final document, as well as a 'Shared Vision' that were produced by the Commission, "can set the scene for change", according to Gerda Verburg, chair of the Commission.

It took the members of the seventeenth session of the Commission on Sustainable Development (CSD17) two weeks to come to a "Shared Vision" at the United Nations headquarters in New York, last May. The result is encouraging to small-scale farmers worldwide, and to agriculture in general. As Gerda Verburg, chair and the Netherlands' minister of Agriculture, Nature and Food Quality, said: "We have neglected agriculture too much and for too many years." She called for agriculture to be included in the climate change negotiations, saying it is fundamental if goals on how to stop the impact of climate change are to be met. According to Verburg, we need to start thinking differently when it comes to climate change and poverty: "We need to shift away from the idea that agriculture is the problem, to the idea that agriculture is part of the solution."



A 'word cloud', highlighting the words and concepts most frequently appearing in the final document of the 17th meeting of the UN Commission on Sustainable Development.

Other topics discussed at the meeting included the need for an ecosystems approach, advancing the international water agenda in relation to agriculture, and the need for a vigorous response to desertification based on a global drought index.

Farmers at the centre

The outcome of the meeting was to a large extent influenced by the many participants at the Commission meeting (see box). One of them was IFAP, the International Federation of Agricultural Producers. Neil Sorensen represented the IFAP-secretariat in New York. "Before the meeting took off, we were afraid there wasn't going to be an outcome at all," he says. "But it seemed that they really wanted to make a difference. As if a global shift



In his statement at the 17th meeting of the Commission on Sustainable Development, Ajay Vasheek, president of the International Federation of Agricultural Producers (IFAP), said he found it reassuring that governments are moving away from highlighting problems to looking at possible solutions and tangible plans.

in thinking is actually taking place." Sorensen considers the meeting successful for farmers. It gives due recognition to the importance of agriculture for sustainable development and food security, and puts farmers at the centre of agricultural policies. The section on Africa gives even more attention to farmers as key actors, according to IFAP. It suggests integrating farmers and local entrepreneurs into agricultural supply chains through affordable credits, access to insurance, participation of farmers' organisations in decision making and access to extension services. "They integrated in the final document all of the priorities for action," says Sorensen. These priorities were created by major groups and delivered to the participating governments last October. They included a need to put knowledge into action, through scaling up successful approaches, and the need to work on "knowledge partnerships," to make such approaches easily accessible to policy makers and practitioners.

Wide range of actions

The Commission calls for a wide range of actions for implementation, including efforts to increase investments in agriculture of developing countries, in particular for small-holder farmers in developing countries. It also called for an increase in the share of government budgets devoted to agriculture. Capacity building, through providing targeted and timely technical assistance to farmers –especially small-scale farmers– is central in the text, as is promotion of equitable access to land and clear and transparent land tenure. The fact that the Commission has stated emphatically the crucial role agriculture should play in climate change negotiations, is expected to be put forward at the upcoming climate change negotiations in the Copenhagen Climate Conference this December.

The Commission on Sustainable Development has shown it is very much in favour of a different approach to addressing problems. But it cannot make actual changes. "That is up to individual governments," as Neil Sorensen says. "They play a decisive role in turning the statement of the Commission into real, tangible, sustainable change." (PR)

The UN Commission on Sustainable Development

The United Nations' Commission on Sustainable Development (CSD) consists of 53 members: 13 African states, 11 Asian states, 6 Eastern European states, 10 Latin America and Caribbean states, 13 Western European and other states. Its goals are poverty eradication, food security and sustainable natural resource management. In this 17th session, held from May 4 to May 15 in New York at the United Nations headquarters, priority themes were agriculture, rural development, land, drought, desertification and sustainable development in Africa. Close to a thousand people participated: more than forty ministers, representatives from farmers' organisations, indigenous peoples, trade unions and local communities.